

(No Model.)

G. H. MODEMANN.
CAR FENDER.

No. 543,775.

Patented July 30, 1895.

Fig. 1.

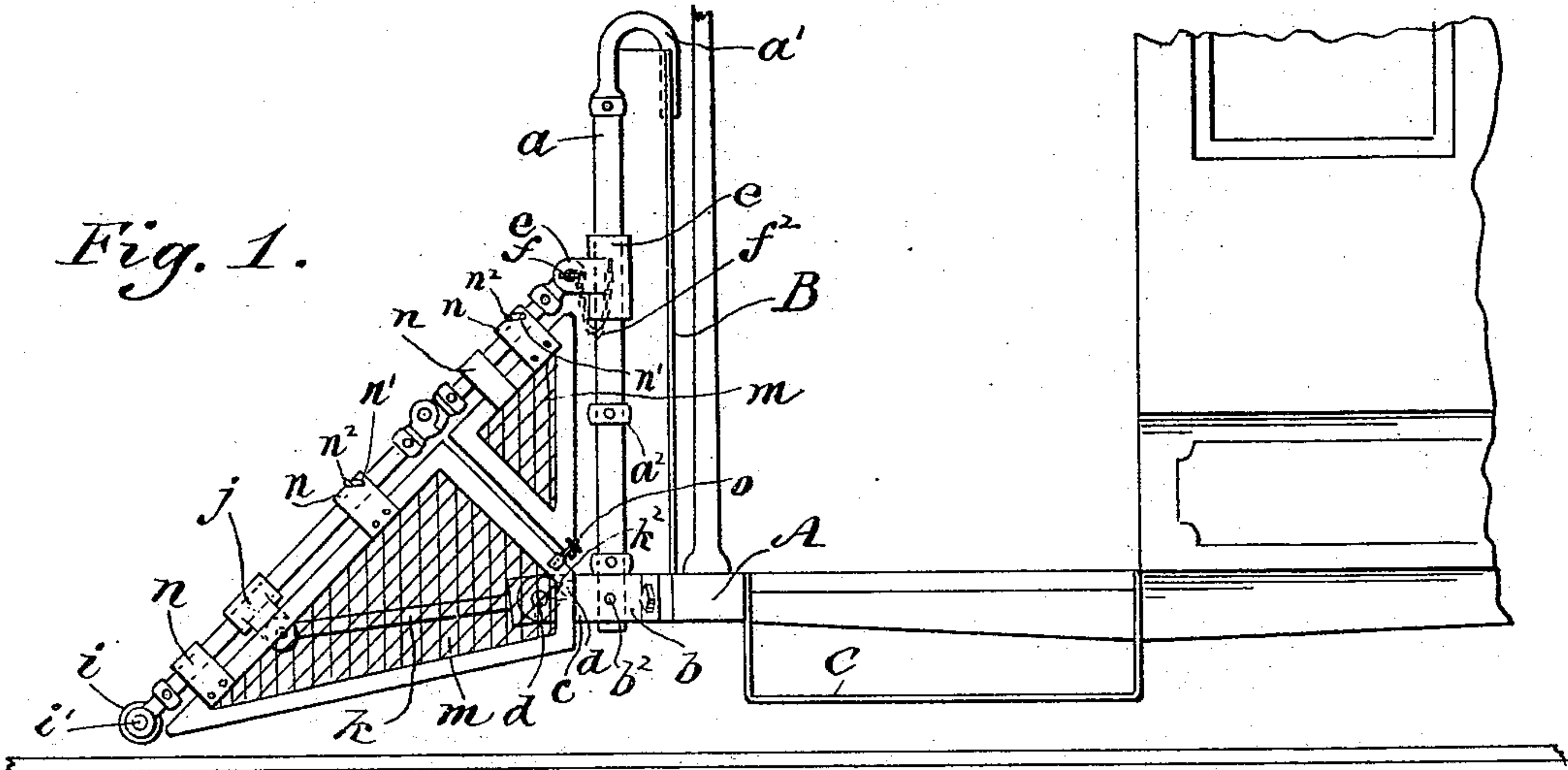


Fig. 2.

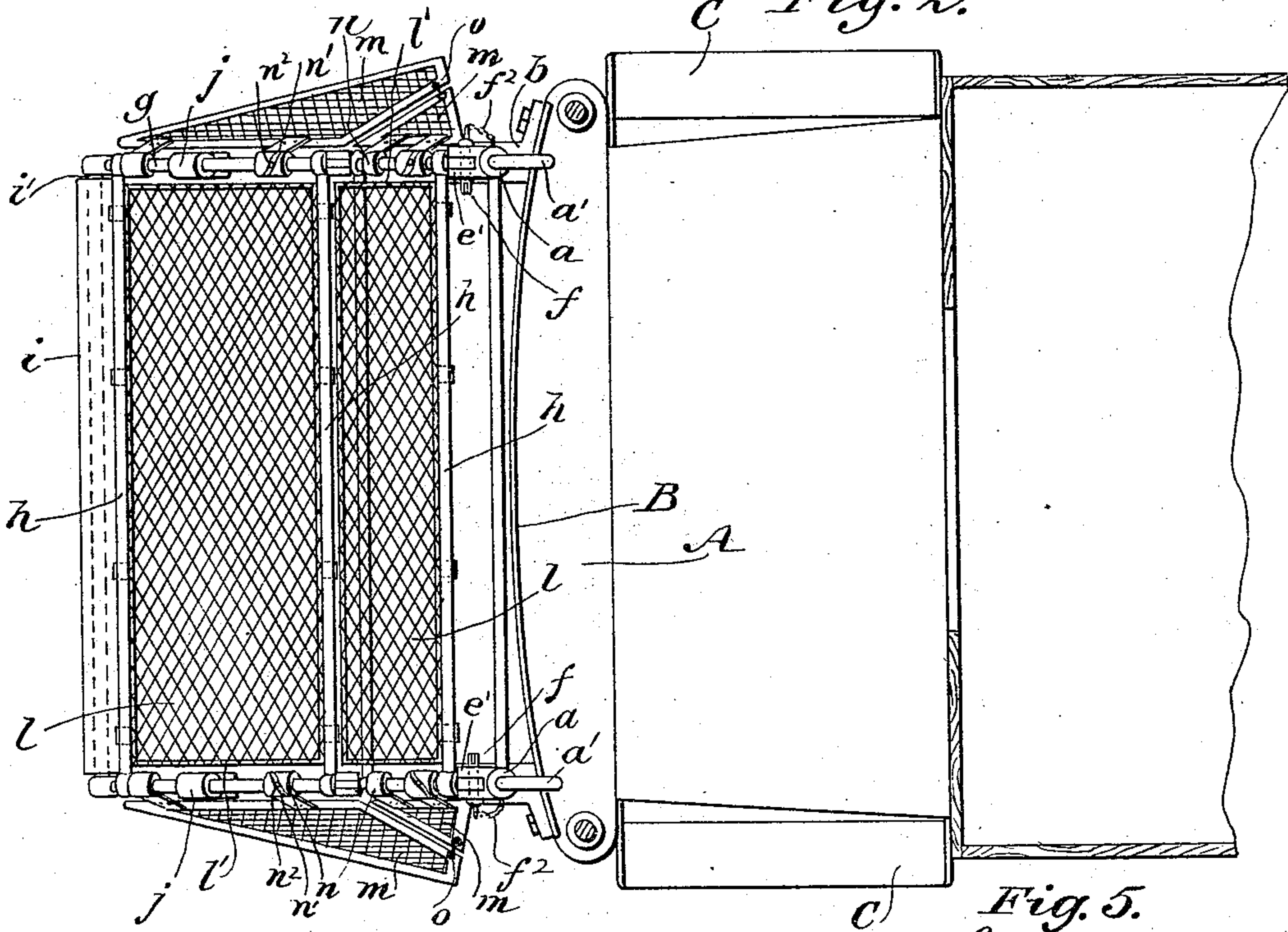


Fig. 3.

WITNESSES:

John H. Daemen

Edgar J. Tate

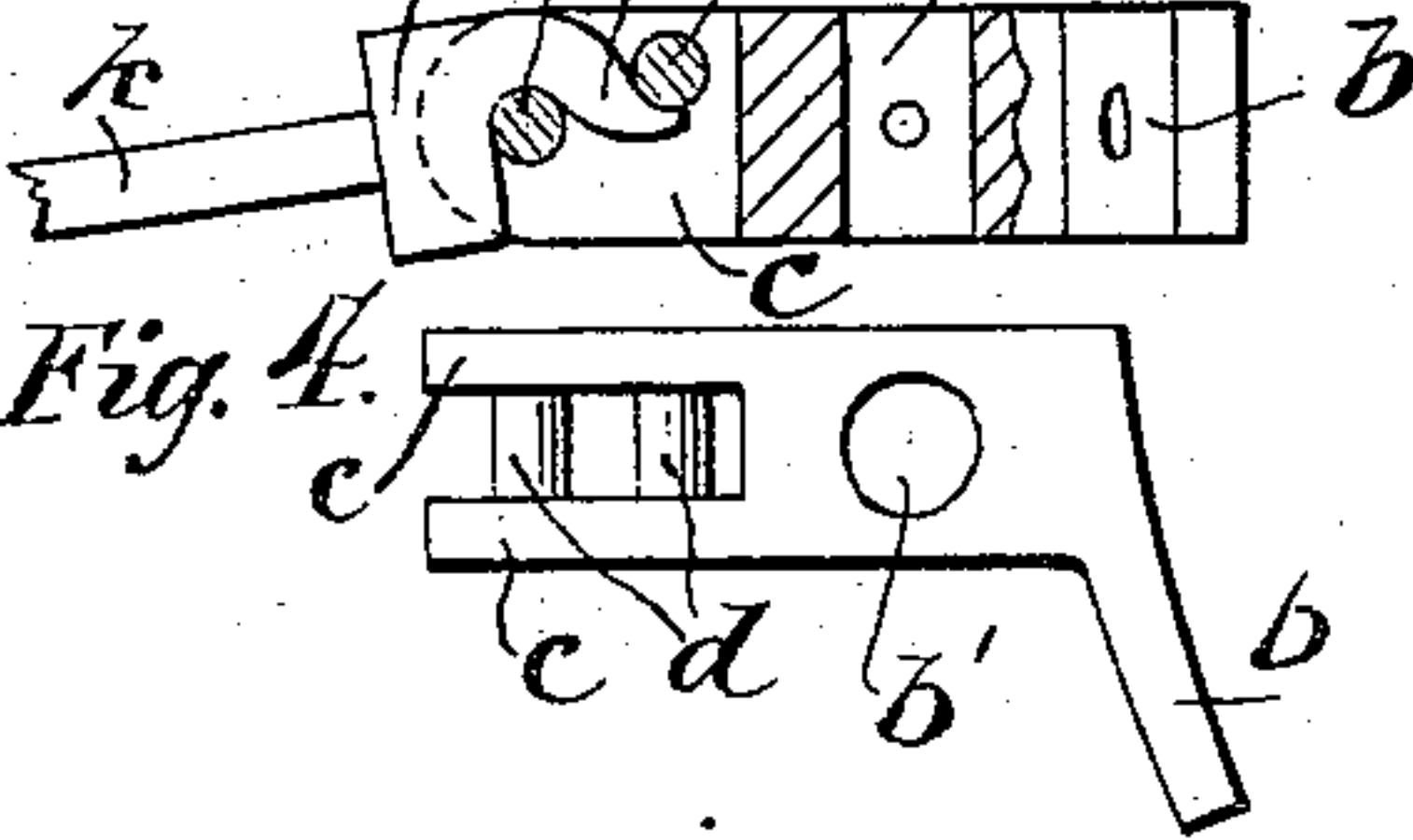


Fig. 4.

Fig. 5.



INVENTOR

George H. Modemann

BY Edgar Tate & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

GEORGE H. MODEMANN, OF NEW YORK, N. Y.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 543,775, dated July 30, 1895.

Application filed July 2, 1894. Serial No. 516,333. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. MODEMANN, a citizen of the United States, and a resident of New York, 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 in all the figures.

This invention relates to fenders for street-railway cars and other vehicles, the object being to provide means whereby a passer-by recklessly or inadvertently venturing in front of a rapidly-moving car may be automatically caught up and be prevented from falling beneath the wheels of the vehicle, all possible injury to life or limb when the fender strikes the pedestrian being also avoided.

The present invention is an improvement upon that for which I have already made application for Letters Patent of the United States, which said application was filed December 14, 1893, Serial No. 493,631; and it consists in certain changes of construction whereby the fender is enabled to ride over small obstructions upon the track, is removable from the car, and may be folded against the dashboard, when not in use.

In the drawings, Figure 1 is a side elevation of the forward end of a car provided with a car-fender embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a sectional view of one of the supporting-braces which are secured to the car and of the fender-rod resting therein. Fig. 4 is a plan view of the same. Fig. 5 is a perspective view of the pin which secures the fender at the top.

In the practice of my invention, I construct a frame consisting of the vertical rods *a*, provided at their upper ends with the hooks *a'*, and extending perpendicularly downward to and slightly below the level of the car-platform A. The hooks *a'* rest upon the top of the dashboard B, and the lower ends of the rods *a* enter openings *b'* in the angular braces *b*, which are secured to each side of the platform in front of the car-dashboard B. The rods *a* are secured to the said braces by means of the pins *b²* passing therethrough. These braces have projecting forwardly therefrom

the arms *c*, parallel to each other and intervened by the pins *d*, the rear one of which is mounted slightly above the other. Sliding upon the rods *a* are sleeves *e*, having formed thereon lugs *e'*, apertured horizontally to receive a pin *f*, which said pin has a jointed section *f'* at the end thereof, and is attached by means of a chain *f²* to the sleeves. Between the lugs *e'* are inserted the toggle-bars *g* at each side of the car, pivoted in the lugs by means of the pin *f*. These toggle-bars are connected at the top, the center, and the lower end by means of cross-bars *h*, and at the bottom have journaled therein a rubber roller *i*, the journal or shaft *i'* of which extends longitudinally through the center thereof, as indicated by dotted lines in Fig. 2.

Sliding upon the lower end of the toggle-bars *g* are sleeves *j*, to which are pivoted the supporting-bars *k*, having formed upon the rear end thereof a head *k'*, branching off from which is a curved lug *k²* tapering toward a point. This lug *k²* is slipped between the pins *d*, and the bars *k* being dropped the same are thereby held in a substantially horizontal position.

Intervening the two upper sections of the toggle-bars *g* and again between the two lower sections of the said bars are stretched wire-nettings *l*, which said nettings are mounted upon frames *l'*, secured to the several cross-rods *h*. To each bar of the two toggles is secured a side guard or wing *m* of approximately triangular shape and pivotally attached to the bar by means of loops *n*, the upper of these wings being of less size than the lower, and the center of each being formed of wire-netting similar to the body of the device. The wings are secured together at the end by means of a joint or catch *o*. One or more of the loops *n* have formed therein semi-spiral or eccentric grooves *n'*, which receive therein a pin *n²* mounted upon the periphery of the toggle-bar *g*, thereby insuring the raising of the wings *m* as the loops *n* are turned by the collapse of the bar.

The operation of the device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings. The fender being normally in the position shown in Fig. 1 and coming in contact with a person standing upon the track, the

latter, being struck at or above the ankles by the roller *i*, is tripped up and gently deposited in the center of the fender, the toggle-bars collapsing beneath his weight and the fender assuming a right-angled form, the sleeves *e* sliding downwardly upon the rods *a* till they rest upon the shoulders *a*² thereon. The upper sections of the toggle-bars will be folded against the front of the dashboard *B*, and the lower sections will rest in alignment with the supporting-bars *k*, the same thereby forming a seat for the person struck and deposited therein. Furthermore, by the pivoting of the loop *j* to the said rod the fender will rest appreciably above the track, any dragging thereof being consequently avoided. At the same time the guard-wings *m* are spread out by the movement of the toggle-bars, this being facilitated by the eccentric grooves *n*¹ in the loops *n* and the guide-pin *n*² upon the toggle-bar, the said wings serving to catch the pedestrian should he be thrown to one side, thus preventing his falling beneath the platform and wheels of the car. It will be observed that the fastening *o* will prevent either of the said wings from falling or being pushed inwardly upon the fender proper as they are extended, and also will serve to hold the said wings obliquely outwardly when the fender is in the position shown in the drawings, the same thereby guiding or forcing the pedestrian so far to either side of the fender as to prevent his contact with the car-steps *C* should he be near the side, and therefore not collapse the fender.

When the cars are stalled in the car-house or when for any other reason the fenders are not desired to be used, the same may be detached from the car by removing the pins *f*, which secure the toggle-bars *g* to the lugs *e*¹ upon the sleeves *e*, and then raising the supporting-bars *k*, in order that the rear ends thereof may be slipped out from engagement with the pins *d* upon the braces *b*. Thereupon nothing will remain secured to the car except the rods *a* and the braces *b*. The fender may also be folded against the dashboard by detaching the bars *k* and raising the sleeves *e* upon the rods *a*, whereupon the fender will hang downwardly from the said sleeves in alignment with the dashboard; or, again, the bars may be detached and the sleeves *e* permitted to fall upon the shoulders *a*², whereupon the upper sections of the toggle-bars will rest against the dashboard, and the lower sections may then be folded upwardly upon the same.

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

1. A fender for street railway cars and other vehicles, consisting of a frame adapted to be secured to the front of a car, a collapsible fender-body slidably mounted upon the said frame, having intervening supporting material and provided with extensible wings at either side thereof, and one or more bars piv-

oted to the lower end of the fender body and hinged to the supporting frame in such manner as to be removable therefrom, substantially as shown and described.

2. A fender for street railway cars or other vehicles, consisting of a frame adapted to be attached to the front of a car, toggle-bars removably mounted upon the said frame and sliding thereon, a supporting material intervening the upper sections of the bars and the same intervening the lower sections, sleeves sliding upon the lower ends of the bars, and bars pivoted thereto and hinged to the fender frame in such manner as to be removable therefrom, substantially as shown and described.

3. A fender for street railway cars or other vehicles, adapted to collapse beneath the weight of a body to form a seat or repository therefor, the said fender being provided with extensible wings at either side thereof, and the said wings being secured together by a jointed catch or fastening whereby the wings are prevented from flying inwardly, and held obliquely outward to guard the car steps, substantially as shown and described.

4. A fender for street railway cars or other vehicles, adapted to collapse beneath the weight of a body to form a seat or repository therefor, wings secured to the frame at each side by means of loops thereon, the said loops having eccentric slots therein, and pins upon the frame beneath the loops and working in the said slots, substantially as shown and described.

5. In a fender for street railway cars or other vehicles, the combination, with a frame comprising vertical rods, having a fender-body slidably mounted thereon, angle braces secured to the car in which said rods are removably inserted, and pins ranging across the said angle braces, of one or more supporting bars secured to the fender, the said bars having at the rear thereof a head provided with a curved lug adapted to rest upon one of the pins and engage beneath the other, whereby the said bars are pivoted to the frame and removable therefrom, substantially as shown and described.

6. A fender for street railway cars or other vehicles, consisting of a frame comprising rods adapted to be attached to the front of a car, angle braces secured to the platform having openings therein in which the rods rest, sleeves sliding upon the said rods, having lugs thereon, a fender frame supported in front of the car, pins passing through the lugs on the sleeves and the fender frame, removable therefrom and attached to the said sleeve, and supporting bars pivoted to the braces and detachable therefrom, substantially as shown and described.

7. A fender for street railway cars or other vehicles, consisting of a frame comprising vertical rods having hooks thereon adapted to engage with the dash board, angle braces secured to the platform having openings

therein in which the rods rest, arms project-
ing forwardly from the brace, pins interven-
ing the arms, a shoulder upon the rod, a sleeve
sliding thereon above the shoulder and hav-
5 ing lugs mounted thereon, toggle-bars at
either side of the device resting between the
lugs, a pin extending through the lugs and
the toggle-bars, removable therefrom and at-
tached to the sleeve, sleeves sliding upon the
o lower section of the toggle-bars, supporting
bars pivoted to the said sleeves and having
curved projections at the rear engaging with
the pins upon the braces in such manner as
to be pivoted thereto and removable there-
5 from, a roller journaled in the lower end of

the toggle-bars, supporting material interven-
ing the upper and lower sections of the said
bars, wings mounted upon the said bars by
means of loops having eccentric slots therein,
pins upon the bars working in the said slots, 20
and a fastening securing the wings together,
substantially as shown and described.

In testimony that I claim the foregoing as
my invention I have signed my name in pres-
ence of two witnesses.

GEORGE H. MODEMANN.

Witnesses:

LAMPSON S. HARRISON,
MARGARET H. BRESNAN.