

C. KLEYMEIER.

CAR FENDER.

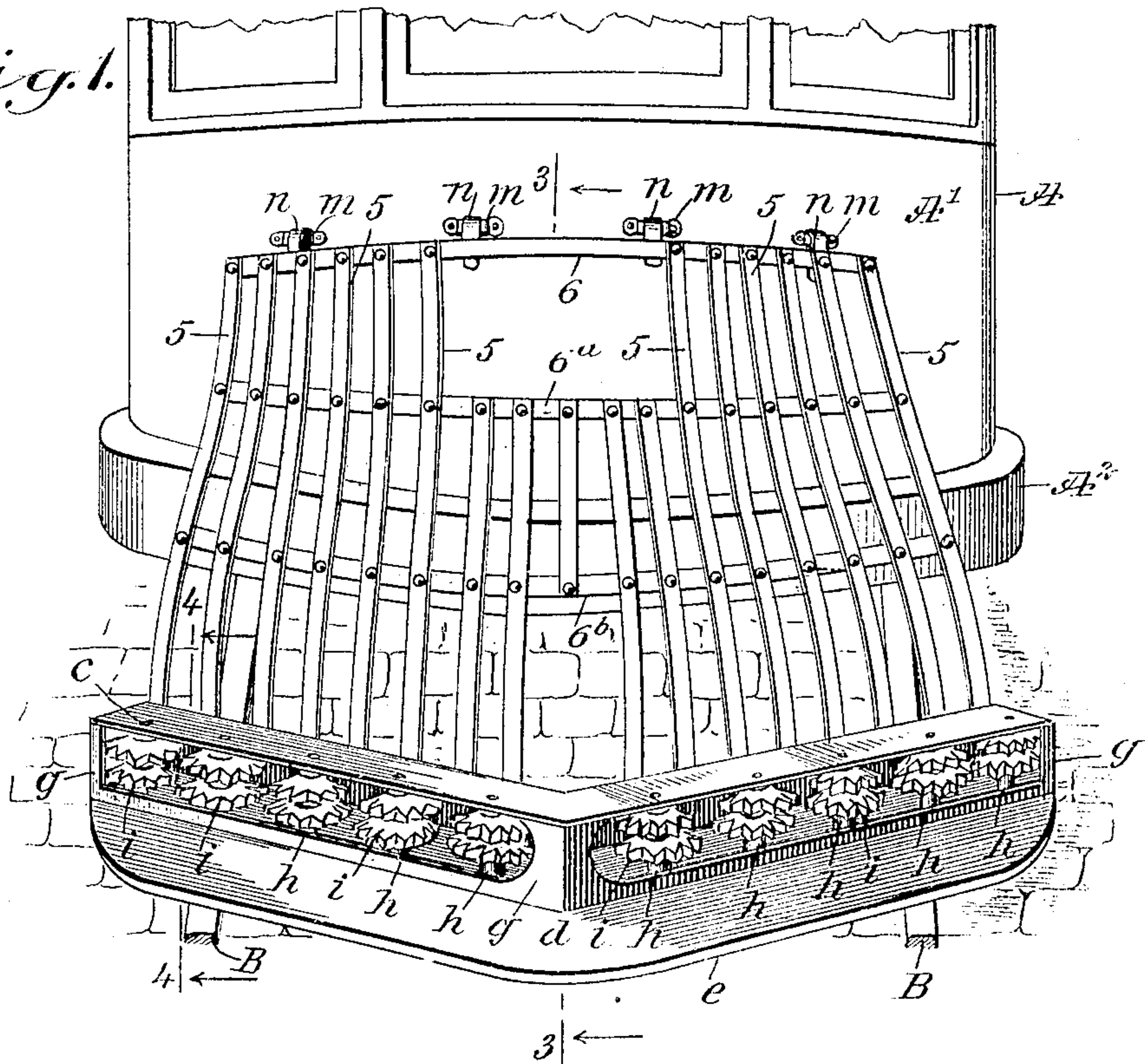
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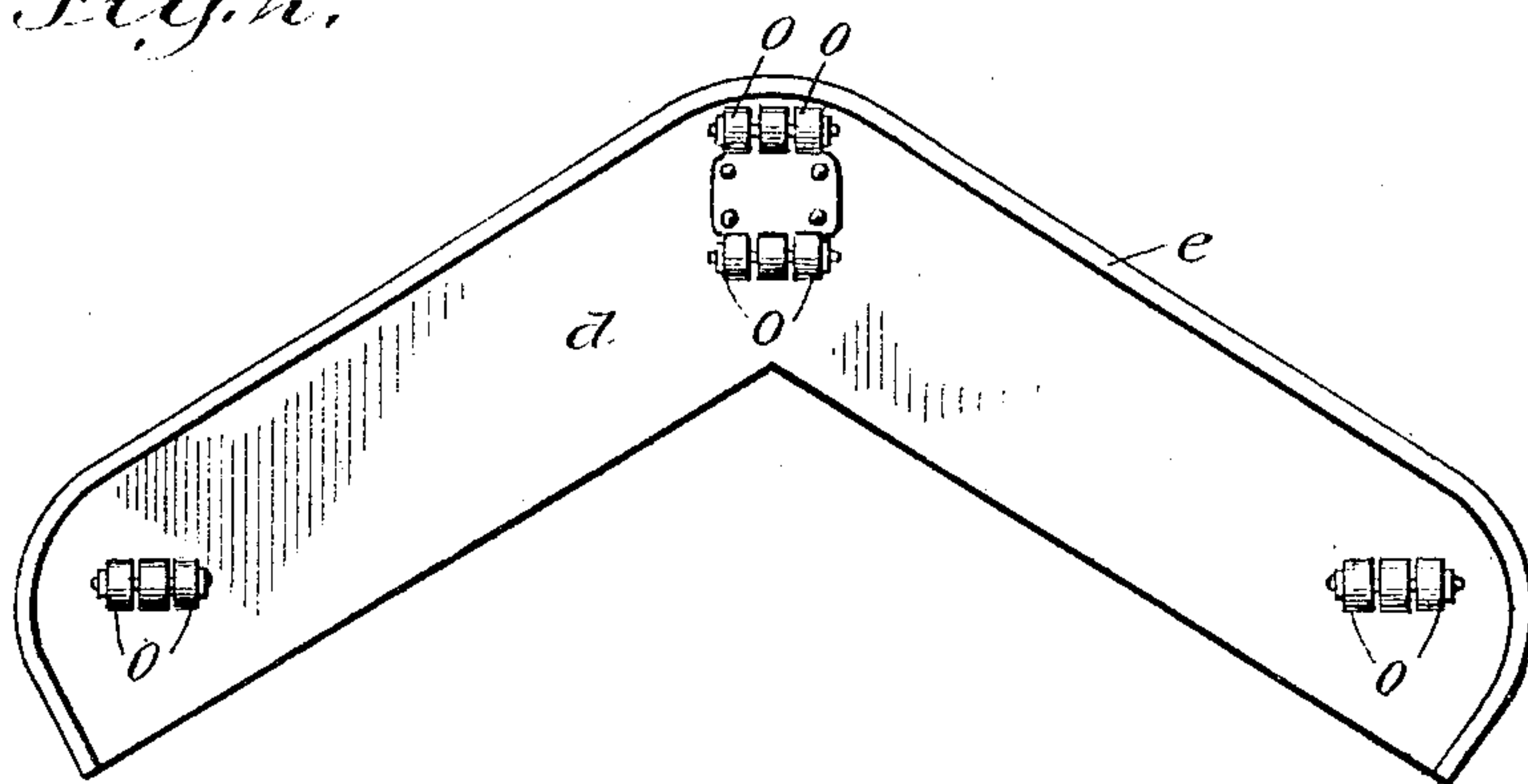
Patented Nov. 24, 1908.

2 SHEETS—SHEET 1.

*Fig. 1.*



*Fig. 2.*



WITNESSES

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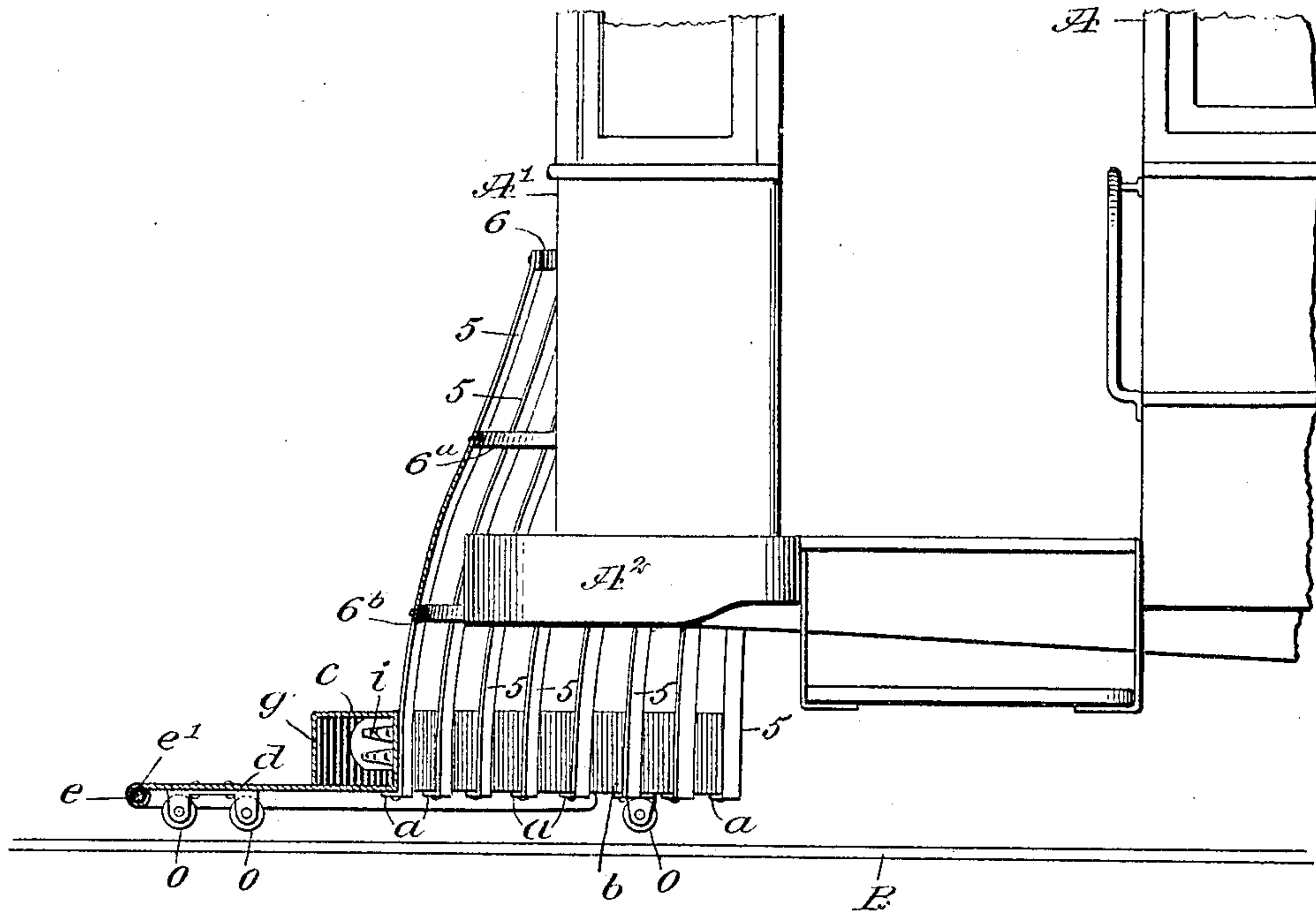
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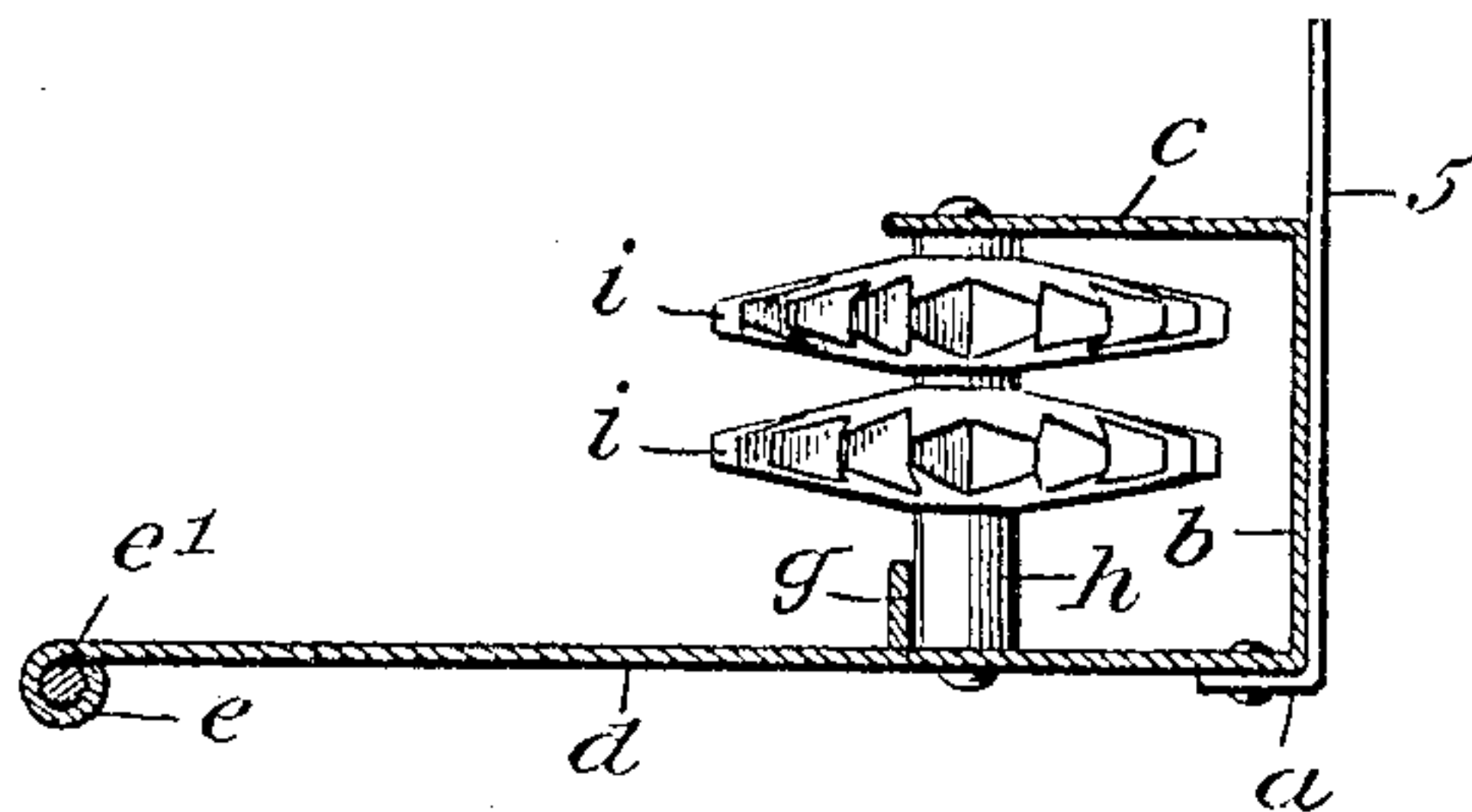
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2 SHEETS—SHEET 2.

*Fig. 3.*



*Fig. 4.*



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# UNITED STATES PATENT OFFICE.

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## CAR-FENDER.

No. 904,965.

Specification of Letters Patent.

Patented Nov. 24, 1908.

Application filed March 31, 1908. Serial No. 424,431.

*To all whom it may concern:*

Be it known that I, CLEMENS KLEYMEIER, a citizen of the United States, and a resident of Covington, in the county of Kenton and State of Kentucky, have invented a new and Improved Car-Fender, of which the following is a full, clear, and exact description.

The purpose of this invention is to provide novel details of construction for a street car fender, which render the device strong, durable, compact and convenient for placing upon or removing from a car; the fender, when in position for service, being adapted to positively guard against accidents, and when in operation, gently but positively removing laterally from the track a person or object that is picked up by the fender, and without injury to the person or object.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevational view, showing the improved fender mounted for service on a car; Fig. 2 is a reversed plan view of the fender-apron, showing rolling supports thereon; Fig. 3 is a side view of the end portion of a street car and a sectional side view of the improved fender mounted thereon, the section being taken substantially on the line 3—3 in Fig. 1, and Fig. 4 is a transverse sectional view of details of the fender, substantially on the line 4—4 in Fig. 4.

In the drawings that represent the construction and application of the improved fender upon a street car, A indicates the body of such a car provided with the usual vestibule, of which A' is the front wall. The upper portion of the improved car fender is formed of a plurality of substantially vertical metal bars 5, secured at spaced intervals upon three or more horizontal bars 6, 6<sup>a</sup>, 6<sup>b</sup>, that are respectively located at the upper ends of the vertical bars and at proper distances of separation lower down on said bars.

The upright bars are preferably curved, as shown, to give them forward projection and clearance from the bumper A<sup>2</sup>, that is a forward extension of the car bottom frame, and, as represented in Fig. 1, a suitable space

is afforded at the transverse center of the fender, between the horizontal bars 6, 6<sup>a</sup>, 6<sup>b</sup>, to admit the passage of a car coupling bar forwardly from the car body when this is necessary, and likewise a pusher-bar, as may be desired. The outward and downward curvature of the vertical fender bars 5 gives a graceful appearance to the fender, and disposes the lower ends of said bars in two equal series, that incline laterally and rearwardly in two rows, that diverge at an obtuse angle from each other. The lower ends of the fender bars 5 are each bent forwardly at a right angle, and upon said extension or base flanges *a* a metal frame is mounted and secured.

The box-like fender frame, which is a leading feature of the invention, as shown in Fig. 3, but more clearly in Fig. 4, consists of a skeleton structure having a back plate *b* bent at an obtuse angle, that conforms with that of the two series of vertical bars 5. Upon the upper edge of the angular back plate *b* a top plate *c* is located, which may be formed integral therewith or be secured thereto, as may be preferred.

A flat apron *d* is formed or secured at its rear edge portion upon the lower edge of the angular back plate *b*, and thence extends forward in a horizontal plane, said apron being disposed parallel with the top plate *c*. The obtuse angular form of the apron *d* is shown in Fig. 1, and more clearly in Fig. 4, its forward edge being reinforced by the formation thereon of a tubular hem *e*, wherein a stiffening rod *e'* is inserted, said edge being rounded, as appears in Figs. 3 and 4 of the drawings.

A guard-wall *g* is erected on the apron *d* at a proper distance forward from the back plate *b* and parallel therewith, this guard-plate being cut away to afford longitudinal openings therein, which extend from points near the angular center of the guard-wall to points near the outer ends thereof.

In the space between the apron *d* and top-plate *c* a plurality of spaced shafts *h* are journaled in perforations in said plate and apron, and upon said shafts toothed wheels *i* are mounted and secured in pairs, the teeth of said wheels being preferably V-shaped and slightly projected exterior of the guard-wall *g*. Each spaced row of shafts *h* extends from near the angular center of the guard-wall *g* to points near the outer ends thereof, and the wheels *i* on said shafts are



of such a diameter, as will afford necessary clearance between the peripheries of pairs of wheels on adjacent shafts, as is clearly shown in Fig. 1.

5 Upon the front of the wall A' of the car body a plurality of spaced bracket loops *m* are secured, at a proper height from the bottom of said wall and in a horizontal plane, and upon the top horizontal bar 6 of the car  
10 fender a corresponding series of hooks *n* is secured, that may be hooked into respective loops *m* for the pendent attachment of the car fender upon the front end wall of the car, as indicated in Fig. 1.

15 As shown in Fig. 3, the relative position of the fender when pendent on the car body is such that the apron *d* will be disposed parallel with and near to the track-rails B of the railroad.

20 On the lower side of the apron *d* three sets of rollers *o* are secured free to rotate on said apron, these rollers having sufficient clearance from the rails and road-bed to permit them to work freely and support the car  
25 fender while the car is moving and oscillates on its springs.

It will be seen that a person or small child that is by accident struck by the front edge of the apron *d* will fall toward the wheels *i*,  
30 and these will, by their contact with the clothing of a child or adult that may be partially dragging on the ground, turn in a direction to gently push the person clear of the car body and the wheels thereof, thus preventing a serious accident. The guard wall  
35 *g* will prevent the clothing of a person struck by the fender from getting entangled with the journals of the wheels *i*. Furthermore, as the apron *d* is located near to the road-bed, it will be obvious that neither the body  
40 or limbs of a child or adult can pass beneath the edge of the apron, which will in most cases aid in pushing the prostrated body off of the track.

45 Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A car fender, embodying a plurality of substantially upright fender-bars, horizontal  
50 bars on which the fender-bars are spaced and secured, a box-like frame secured on the lower ends of the fender-bars, an apron projected forward from the box-like frame, shafts journaled in the top and bottom walls  
55 of said frame, and wheels secured on said shafts, the peripheries of the wheels projecting through an opening in said box-like frame.

60 2. A car fender, embodying a plurality of fender bars, a plurality of horizontal bars on which the fender bars are spaced and se-

cured and from which said fender bars are curved outward and downward, said depending fender bars each having a foot flange projected forward from its lower end, a box-  
65 like frame of substantially V-shape and secured horizontally on the foot flanges, an apron extended forwardly from the lower side of the box-like frame, a plurality of shafts spaced apart and journaled at their  
70 ends in the top and bottom walls of the box-like frame, and wheels having angular teeth that extend outward through an opening in the front wall of the box-like frame.

3. In a car fender of the character de-  
75 scribed, the box-like frame therefor, comprising an upright back plate, a top plate, a bottom plate that projects forward and forms an apron, an open front wall extended upright between the apron and the top plate,  
80 a plurality of shafts spaced apart and journaled in the bottom plate and top plate, and wheels on the shafts, having angular teeth on their peripheries, that project through the open front plate of the box-like frame. 85

4. In a car fender, a frame having its bottom extended beyond its top to form a forwardly projecting apron, and a plurality of wheels loosely mounted in the frame on vertical  
90 axes with their peripheries projecting beyond the top of the frame.

5. In a car fender, a box-like frame having an opening in its front wall and provided with a forwardly projecting apron, and a plurality of wheels loosely mounted in  
95 the box-like frame, the peripheries of the wheels projecting through the opening of the front wall of the said frame.

6. In a car fender, a substantially V-shaped box-like frame having an opening in its  
100 front wall and provided with a forwardly projecting apron corresponding in shape to that of the frame, and a plurality of wheels mounted on vertical shafts in the frame with their peripheries projecting through the  
105 opening of the front wall of the said frame.

7. In a car fender, a substantially V-shaped box-like frame having an opening in its front wall and provided with a forwardly  
110 projecting apron corresponding in shape to that of the frame, a plurality of vertical shafts mounted in the frame, and a plurality of wheels mounted on each shaft and having their peripheries projecting through the  
115 opening of the front wall of the frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLEMENS KLEYMEIER.

Witnesses:

Jos. J. MOSER,  
B. LEMKER.