

No. 638,699.

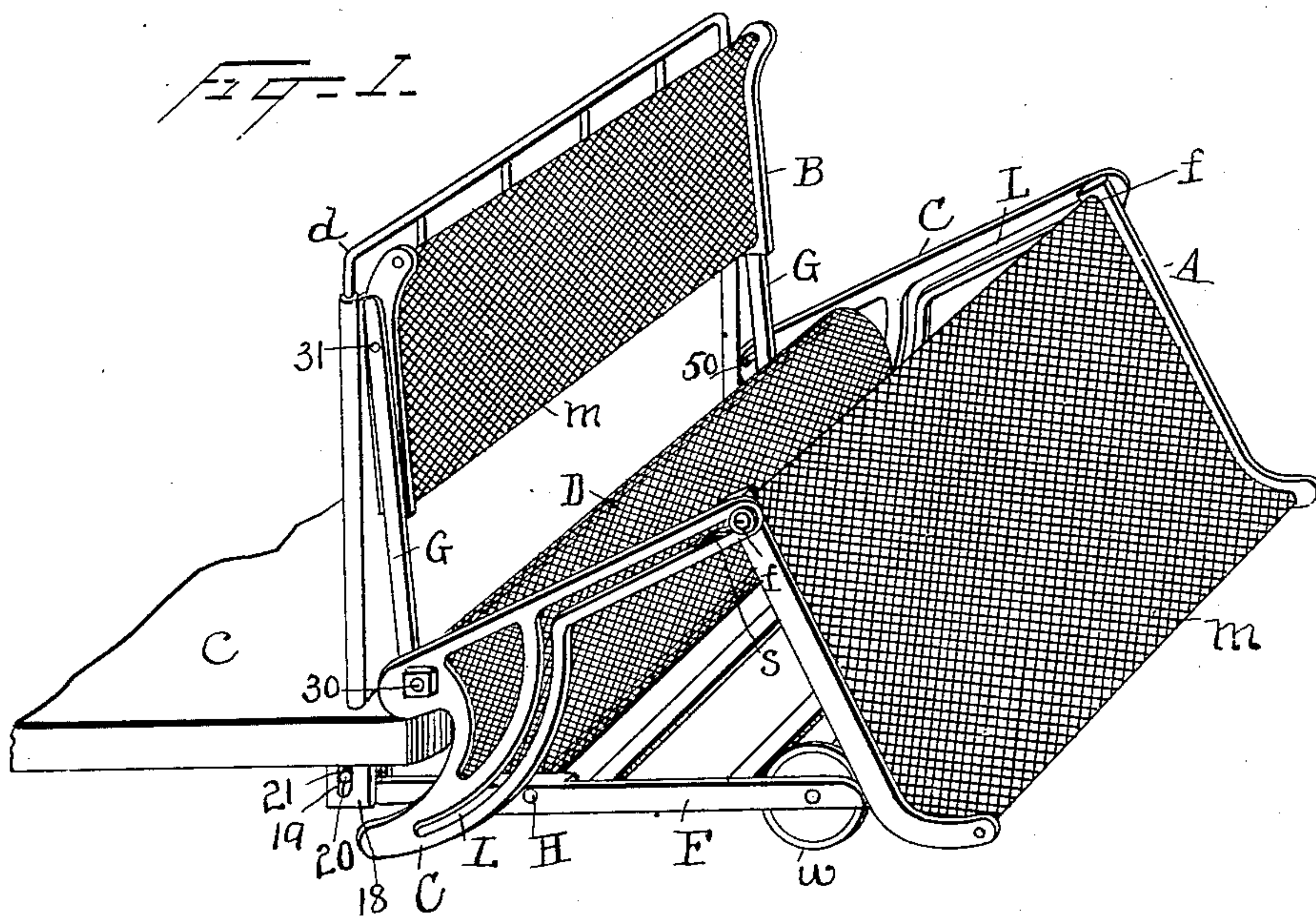
Patented Dec. 12, 1899.

J. J. BUCKLEY.
CAR FENDER.

(Application filed June 26, 1899.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES

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INVENTOR

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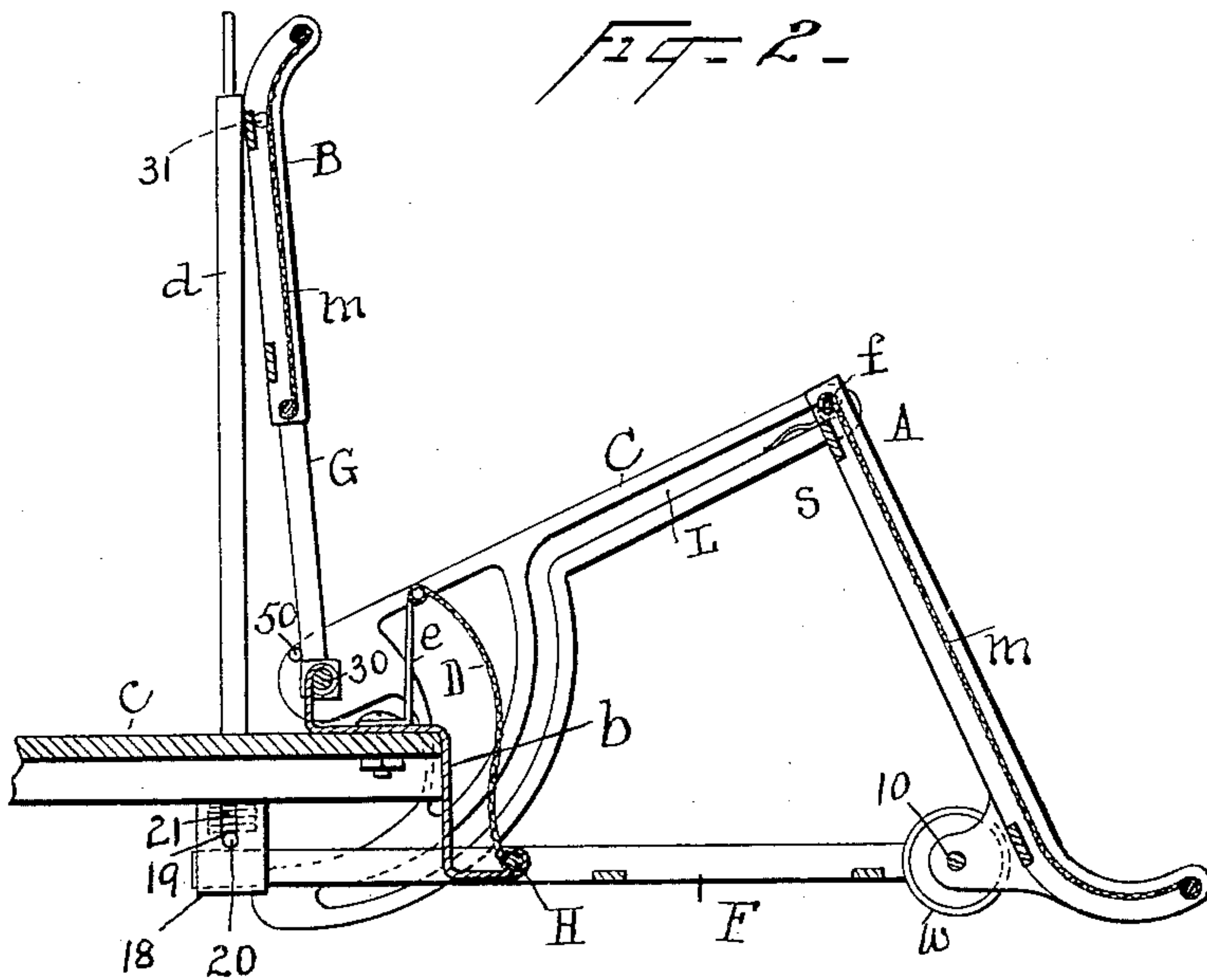
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WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN J. BUCKLEY, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO
HENRY RITTER, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 638,699, dated December 12, 1899.

Application filed June 26, 1899. Serial No. 721,804. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. BUCKLEY, a citizen of the United States, residing in the city of New York, county and State of New York, have made certain new and useful Improvements in Fenders for Cars, of which the following is a specification.

The object of my invention is to provide means to catch and hold a person or a movable obstacle encountered by a moving car, and to thus obviate the possibility of further damage.

I provide a fender comprising two movable frames, each covered with a yielding surface, such as iron or steel netting. The main part, section, or frame normally rests at an angle of forty-five degrees with respect to the street surface. The second part, section, or frame is located in a substantially vertical position. Means are provided of such a character that when an obstacle is encountered the first-named frame is tripped and takes a horizontal position, and in its movement it trips the second-named frame, which falls upon it, and the person or obstacle is caught and held between the two sections.

The accompanying drawings illustrate my invention.

Figure 1 is a perspective view of my improved fender applied to a car-platform. Fig. 2 is a cross-section showing the supporting and tripping devices.

A is a frame composed of four members arranged in two parallel pairs. It is covered with a network of a yielding material *m*, such as wire-netting. F is a rectangular frame supported on brackets *b*, fixed to the car-platform *c*. Frame F is hinged to the brackets *b* by means of a rod, like H. The advanced edge of frame F, which is substantially horizontal, carries rubber-covered rollers *w*, normally out of contact with the street. Upon the opposite side of the supporting pivot or hinge of this frame F there is a cushioning device consisting of a dependent compression-spring 21, located above a pin 20, fixed to the frame F. This pin travels in a guide 19 in a dependent bracket 18. Pressure on the free or advanced edge of the frame F compresses the spring 21 and brings the rollers *w* into contact with the track or the

street surface. B is a second frame similarly covered with wire-netting *m*. Frame B is substantially rectangular, composed of four members arranged in two pairs, the side members of B and also of frame A being curved, substantially as shown. The frame B is pivoted at 31, Fig. 1, to two parallel arms G, hinged on the cross-bolt 30. This bolt 30 is located in such a position that the arms G are enabled to lean against the dashboard *d*, inclining slightly to the rear of the perpendicular, and thus supporting the frame B in a substantially vertical position.

The frame A is hinged at 10 and supported at an angle, as shown, in such a manner that upon encountering a person or object it falls to a horizontal position, resting upon the frame F. The means for supporting the frame A and for tipping or tilting the frame B so that it drops upon A consists of two parallel guides. Each guide C is pivoted on the cross-bolt 30 and is provided with a slot, groove, or track L. A rod *f*, forming a member of the frame A, projects into the track L in the guides C. The free and unobstructed movement of the rod in track L is normally obstructed by yielding springs, like *s*. Fixed to points in each guide C at the rear of the cross-bolt 30 are pins 50 in position to engage the vertical arms G and to carry them forward upon the movement of the guide C.

D is an elastic wire-netting buffer of curved outline extending from the vertical brackets *e* to the brackets *b*, fixed to the car-platform *c*.

It is to be noticed that the frame A is normally and yieldingly supported in the position shown in the drawings. The frame B is normally in the position shown. Upon encountering an obstacle pressure upon the frame A overcomes the resistance of the springs *s* in guide-slot L, while the rod *f* slides along in the track or slot L. The guides C and the frame A now assume a horizontal and depressed position. The pins 50 upon the movement of the guides C engage and trip the vertical arms G or carry them forward, and the gravity of the frame B then causes said frame to fall upon the frame A. It results from this that any obstacle coming into contact with the frame A is caught and held by the frame B falling or closing upon it.

What I claim, and desire to secure by Letters Patent, is—

1. A car-fender comprising a hinged frame or section covered with a yielding or elastic material and normally supported at an acute angle with respect to the surface of the track; a second similarly-covered hinged frame supported in a substantially vertical position; guide-pieces hinged to the car, a traveling connection between the first-named frame and said guide-pieces and a tripping connection between said guide-pieces and the second-named frame, substantially as described.

2. A car-fender comprising two parts or sections each covered with a flexible holding medium; pivoted guide-pieces each containing a track or groove; projections from one of said frames sliding in the tracks or grooves and normally holding said frame at an angle with respect to the line of movement; means for supporting the second frame in a substantially perpendicular position and engaging points carried by the guide-frames to tilt or trip said sections, substantially as described.

3. A car-fender comprising two frames sup-

ported upon hinges or pivots and one or more hinged guides including a track or slot; pins in the first frame engaging said slot and pins or projections on said guides in position to engage the second frame substantially as described.

4. The combination in a car-fender of a frame covered with an elastic material or network, a second frame similarly covered, hinges or pivots for said frames, hinged guides having a sliding and continuous mechanical connection with one frame and a temporary tripping engagement with the second frame substantially as described.

5. The combination in a car-fender of the frames A and B, hinges for each frame, suitable supporting devices connected to the car and hinged guides connecting said frames including a sliding engagement with one frame and a striking engagement with the other frame substantially as described.

JOHN J. BUCKLEY.

Witnesses:

HENRY RITTER,
ANNA M. DONLEVY.