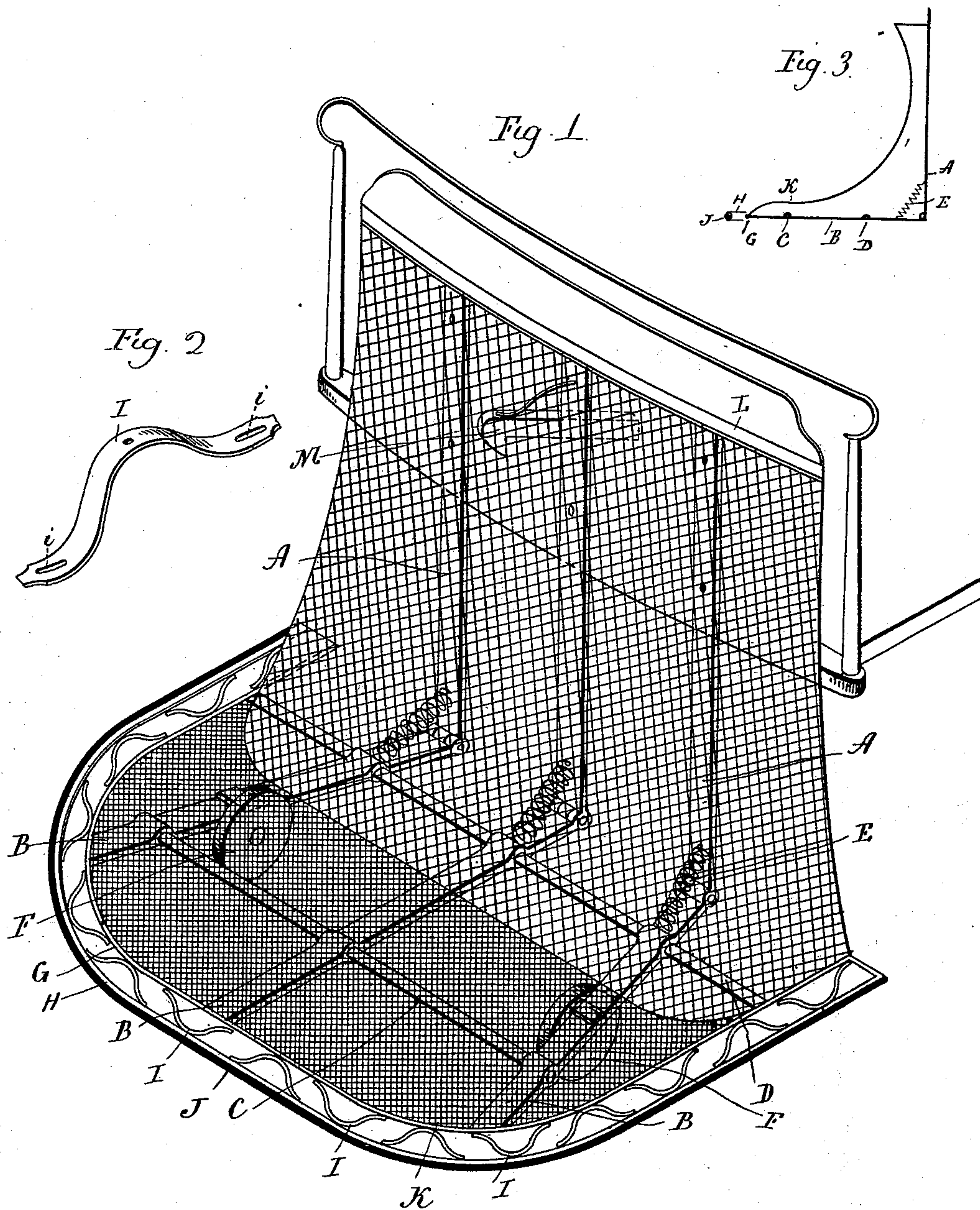


(No Model.)

J. H. MACDONALD.
STREET CAR FENDER.

No. 557,336.

Patented Mar. 31, 1896.



Witnesses
J. St. Shumway
Lillian D. Kellogg

James H. MacDonald,
Inventor.
By *Ally E. Seymour*

UNITED STATES PATENT OFFICE.

JAMES H. MACDONALD, OF NEW HAVEN, CONNECTICUT.

STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 557,336, dated March 31, 1896.

Application filed July 22, 1895. Serial No. 556,695. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. MACDONALD, of New Haven, in the county of New Haven and State of Connecticut, have invented a
5 new Improvement in Fenders for Street-Railway Cars; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and
10 exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a car-fender fixed to the dashboard of a car; Fig. 2, a perspective view of one of the springs detached;
15 Fig. 3, a sectional view, on a reduced scale, to illustrate the engagement of the net with the bars of the fender.

This invention relates to an improvement
20 in fenders for street-railway cars, the object being to produce a simple device the outer end of which may be readily turned up and secured to the dashboard of the car, and one having a yielding rim which will prevent seri-
25 ous injury to a person being struck; and it consists in the construction as hereinafter described, and particularly recited in the claim.

The frame of the fender consists of three
30 vertical bars A, secured at their upper ends to the outer face of the dash and to the lower ends of which are pivoted arms B. These arms are connected by transverse rods C D. Between the bars A and arms B springs E are
35 arranged, the tendency of which is to throw the arms B downward. The outer arms B are provided with rollers or wheels F, to support the outer ends slightly above the track. The rim consists of a strip G and a concavo-
40 convex band H. Between the strip G and band H a series of springs I is arranged, each of bow shape and formed with a slot *i* in each end, as shown in Fig. 3. The bows of these springs are alternately riveted to the
45 strip G and band H and turned in reverse

directions, the slotted ends being engaged with studs on the strip and band, so that as the band is forced inward against the strip the springs will yield. Around the band H a
50 tubular or cushion tire J is secured. From the strip G a wire-netting K extends inward, so as to partially cover the arms B, and from this wire-netting a corded netting extends upward to a bar L, secured to the dash near
55 the upper rail thereof. This netting will naturally offset from the bar B, but to give it proper curvature it is connected at various points therewith, so that when the fender is in the down position the net is properly
60 curved to form a basket, as shown in Fig. 3.

In the front of the dash a spring-hook M is secured, projecting through the net and adapted to engage the band H, so that when the fender is not desired it may be folded and
65 held in the up position, it being understood that if desired cords may be secured to the band for raising it from the platform, or it may be otherwise folded.

I claim—

The herein-described fender for street-rail-
70 way cars, consisting of vertical bars secured to the dashboard and depending therefrom, arms hinged to said bars, supporting-rollers secured to said arms, a strip also secured to
75 said arms, a cushioned band extending parallel with said strips and secured thereto by alternately-arranged bowed springs, said springs formed with slots in their ends to permit a sliding movement thereof, and a net
80 secured to said strip and extending inward and upward to the dash, substantially as described.

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

JAMES H. MACDONALD.

Witnesses:

WILLIAM F. MURPHY,
TIMOTHY J. KELLY.