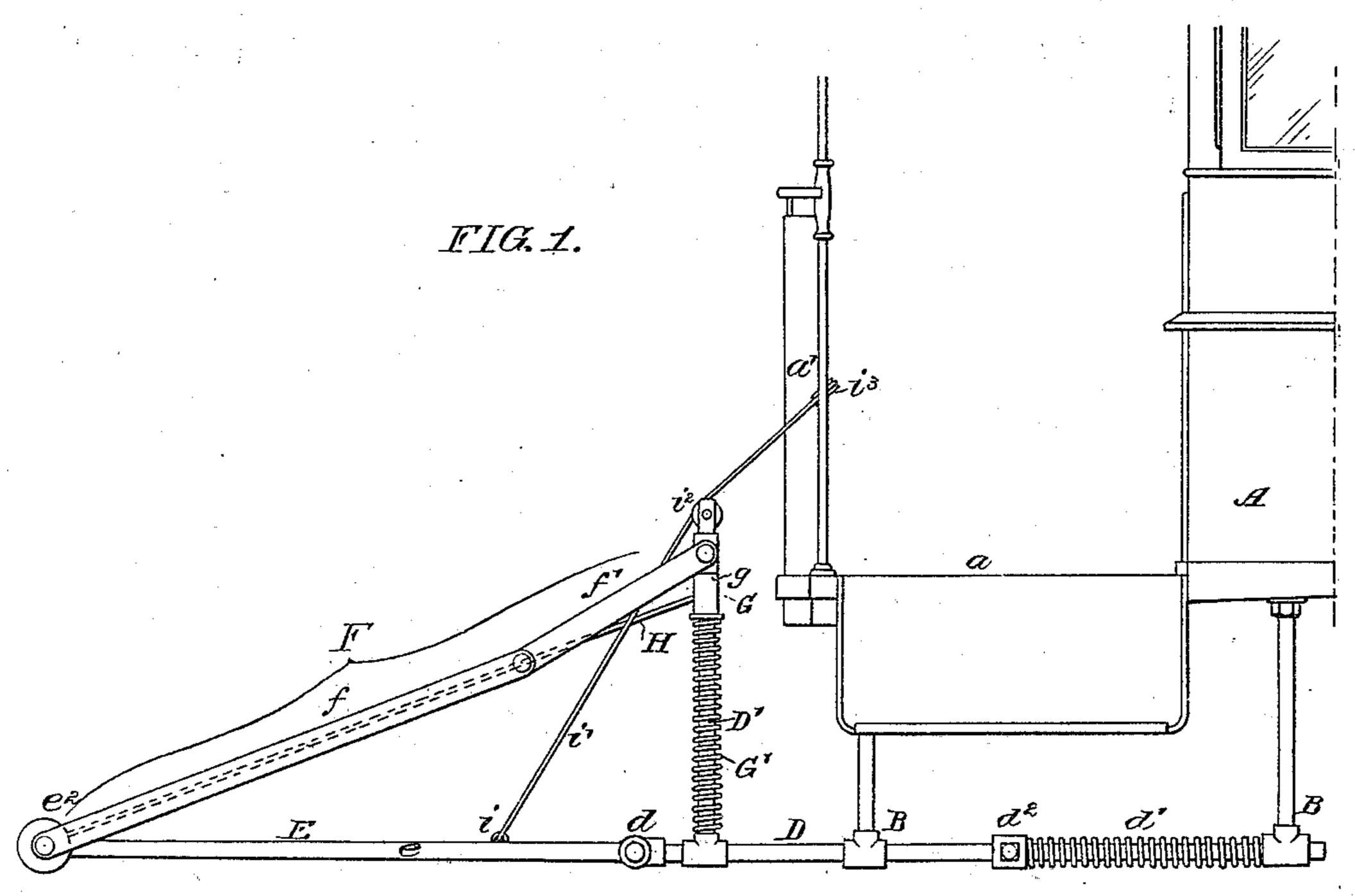
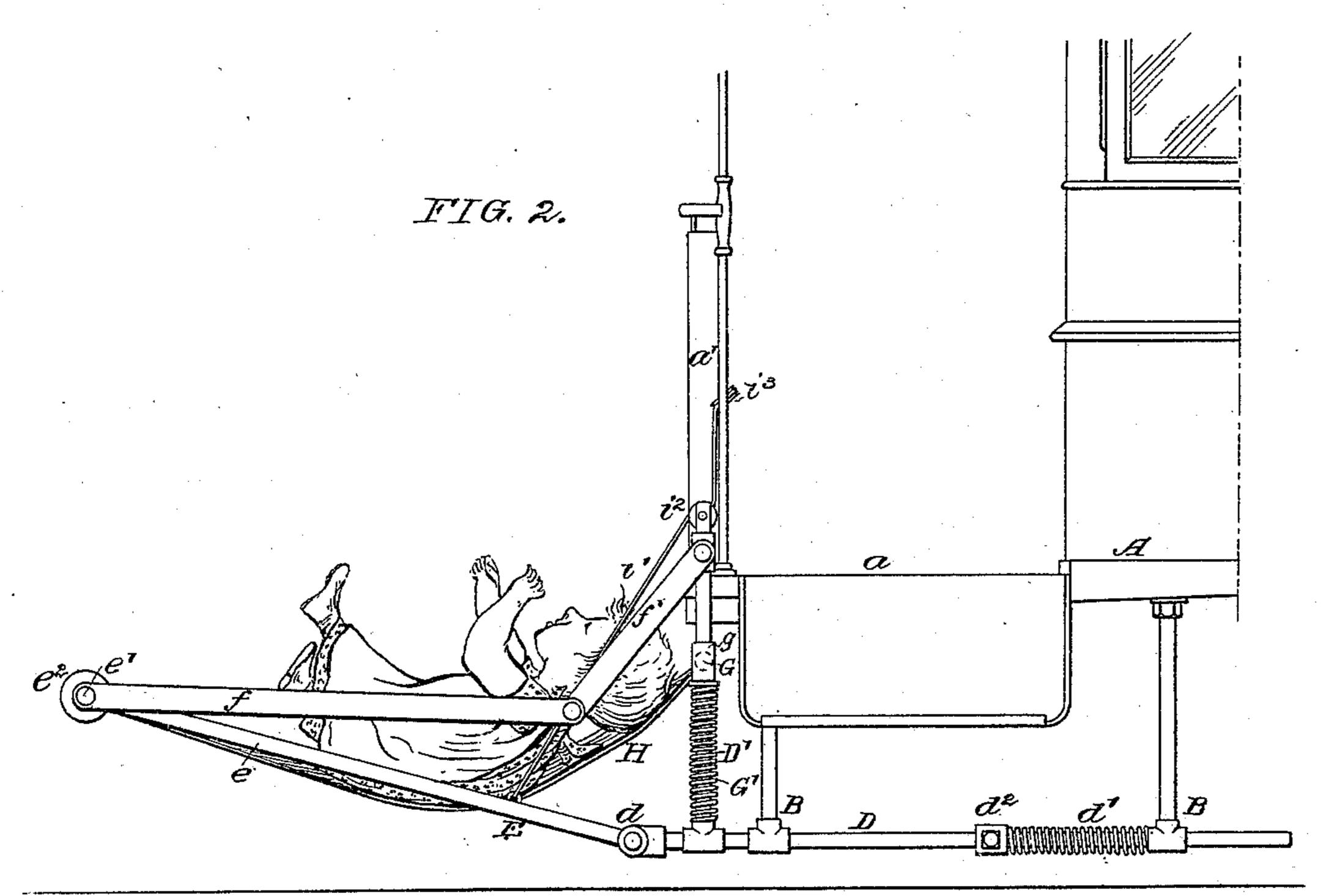
S. ELLISON. CAR FENDER.

No. 553,155.

Patented Jan. 14, 1896.





Witnesses: L. Loodwin

Inventor:
Steele Ellison
by his Attorneys

Howson & Howson

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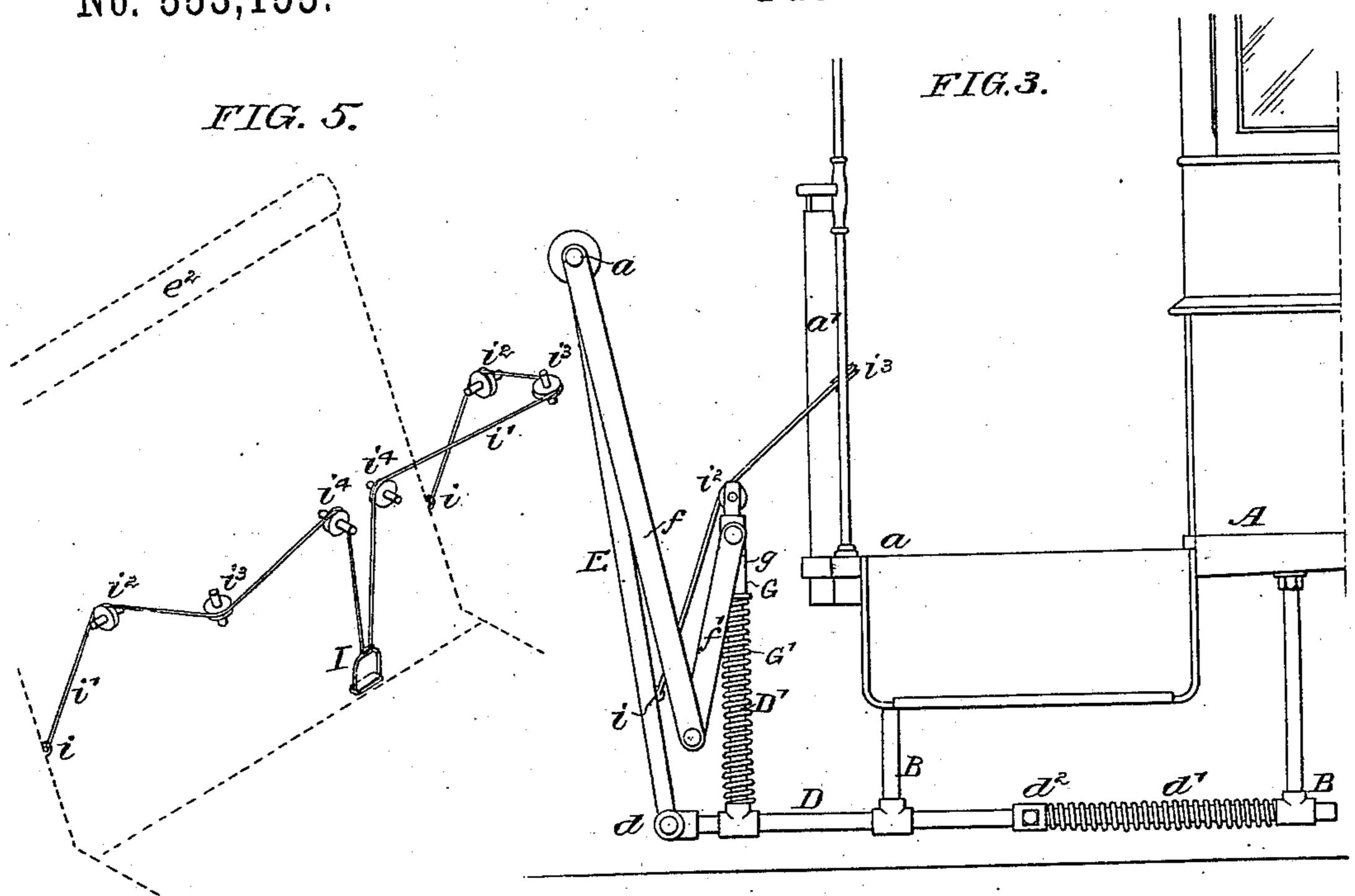
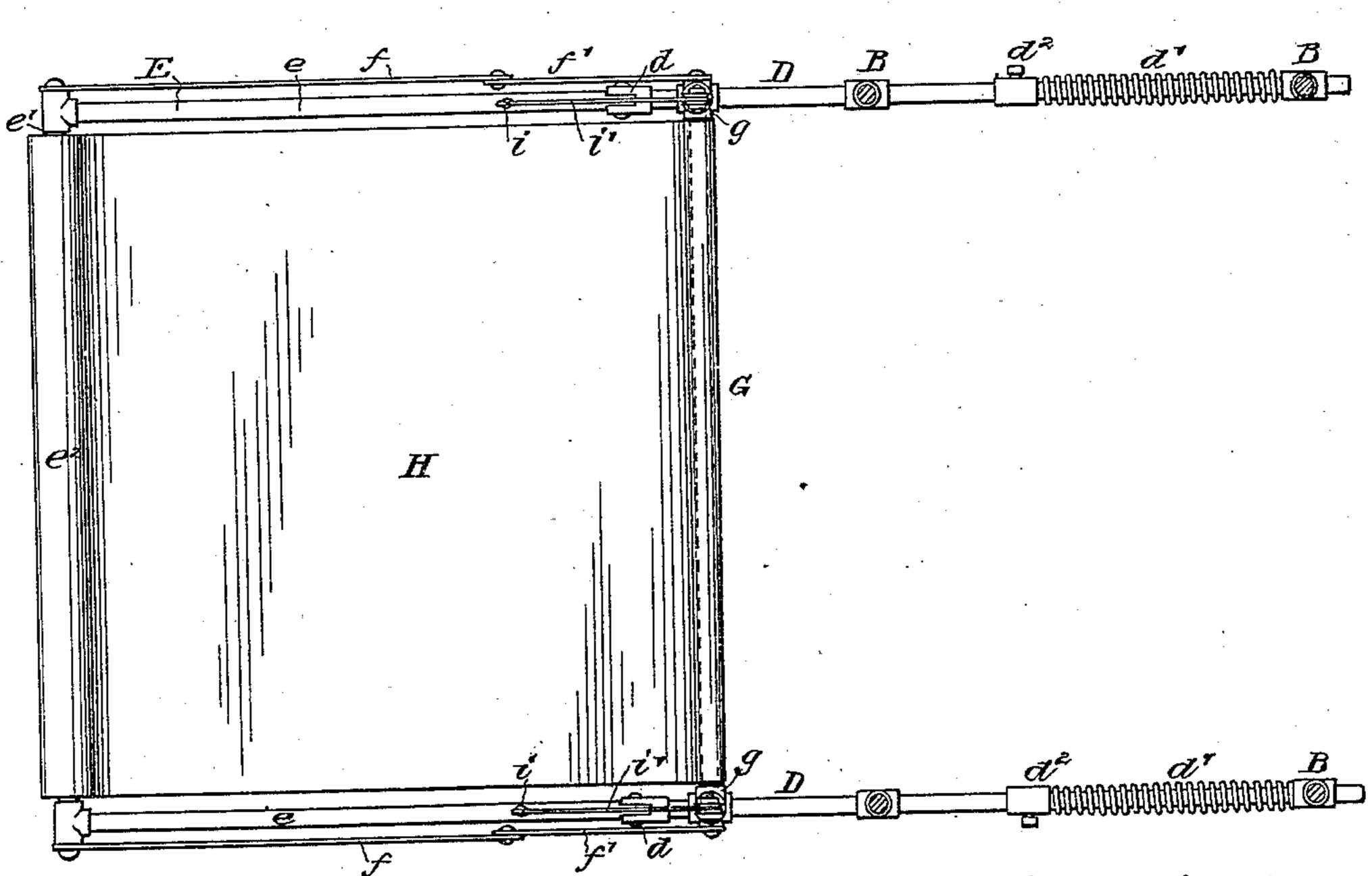


FIG.4.



Witnesses: H. D. Goodwar F. W. Dommer Inventor: Steele Ellison by his Attorneys Howson & Howson

United States Patent Office.

STEELE ELLISON, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 553,155, dated January 14, 1896.

Application filed October 28, 1895. Serial No. 567,165. (No model.)

To all whom it may concern:

Be it known that I, Steele Ellison, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain 5 Improvements in Car-Fenders, of which the

following is a specification.

The object of my invention is to construct a fender especially applicable for use in connection with motor-driven cars in such man-10 ner that it will readily pick up a person that is on the track and which is further adapted to yield sufficiently and thus prevent in a great measure any injury to the person picked up.

A further object of the invention is to so ar-15 range the parts of the fender that when the body falls upon the same the forward end of the fender will be raised and thus prevent the

body from rolling out.

Referring to the accompanying drawings, 20 Figure 1 is a side view of my improved fender attached to a car, the fender being in the operative position. Fig. 2 is a view showing the fender in the position it assumes after it has picked up a person. Fig. 3 is a view 25 showing the fender raised against the dasher of the car. Fig. 4 is a plan view of the fender, and Fig. 5 is a diagram view showing the arrangement of the lifting-cords.

A is the body of the car, a the platform, and

30 a' the dasher.

Depending from the body of the car are the hangers B B, and adapted to these hangers at each side of the car are carrying-bars D, to which are pivoted at d the side bars e e35 of the frame E, which consists of these side bars and the cross-bar e. This cross-bar e' is covered with yielding material, such as rubber, forming a cushion e^2 , as shown. On the bars D are springs d', confined between the 40 rear hanger B and a collar d^2 , secured to each bar, so that if the fender should strike a body or other obstruction on the track the springs will yield, thereby reducing the shock to a minimum. Secured to the forward end of the 45 bars D are vertical standards D', one at each side, and the outer end of the frame E is connected to these standards by the jointed rod F, consisting of the links ff' at each side, which form a supporting member as well as 50 a side guard for the fender.

Extending from one standard D to the

other is a bar G, having at each end a head g, adapted to slide vertically upon the said standard, the bar being supported normally by the springs G' on the standards in the po- 55

sition shown in Fig. 1.

Secured to the bar G and extending to the forward end of the frame E is an apron H, which is of sufficient strength to support the weight of a person falling onto the same. 60 This apron may be made of any suitable fabric, but preferably of wire-netting, which should be pliable or elastic enough to conform to the shape of the person to a certain degree.

When a person falls onto the apron, the 65 springs G' and d' will give downwardly and rearwardly respectively, thus breaking the shock of the fall to a considerable extent. The frame E will tilt, as shown in Fig. 2, in proportion to the depression of the springs G' 70 and thus retain the person upon the apron.

In order to readily raise the frame Eagainst the dasher of the car, I connect said frame at i i to cords or chains i', which pass around pulleys i², mounted on top of the standards 75 D', and around pulleys i^3 i^4 on the dasher of the car to a stirrup I within easy reach of the operator, so that the operator by placing his foot upon the stirrup and bearing his weight upon the same can raise the frame E to the 80 position shown in Fig. 3.

I prefer to make the frame of my improved fender of tubing, and the construction is therefore comparatively inexpensive.

As may be seen on reference to the draw- 85 ings, the fender is adapted to yield both longitudinally and vertically, thereby lessening the shock when striking a person, and is further adapted to retain the body when once picked up.

I claim as my invention—

1. The combination of a car fender, a car, the hangers B thereon, the bars D D adapted to said hangers, a frame E pivoted to said bars, standards D' projecting from said bars, 95 a cross bar G adapted to slide on the standards, springs on the standards supporting the said bar G, with an apron extending from the bar G to the forward end of the frame E, substantially as specified.

2. The combination of a car fender, a car, the hangers B, the bars mounted in said

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hangers, springs on said bars, standards D' projecting upward from each bar, a frame E pivoted to the bars, links ff' connecting the outer end of the frame with the standards, a cross bar Gadapted to slide on the standards, springs on the standards adapted to support the said bar and an apron extending from the outer end of the frame to the said bar G, substantially as described.

3. The combination of a car fender, the bars D supported by the car, the frame E pivoted to the bars, standards, springs on said standards, a cross bar G mounted on the

springs adapted to slide on the standards, connecting links ff', with a lifting cord i' 15 attached to the frame E and extending over the pulleys to a stirrup mounted on the platform of a car within easy reach of the operator, substantially as described.

In testimony whereof I have signed my 20 name to this specification in the presence of

two subscribing witnesses.

STEELE ELLISON.

Witnesses:

FRANK E. BECKTOLD, Jos. H. KLEIN.