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PATENTED MAR. 20, 1906.

B. LEV.

SPRING BUFFER FOR CAR FENDERS.

APPLICATION FILED JULY 15, 1904.

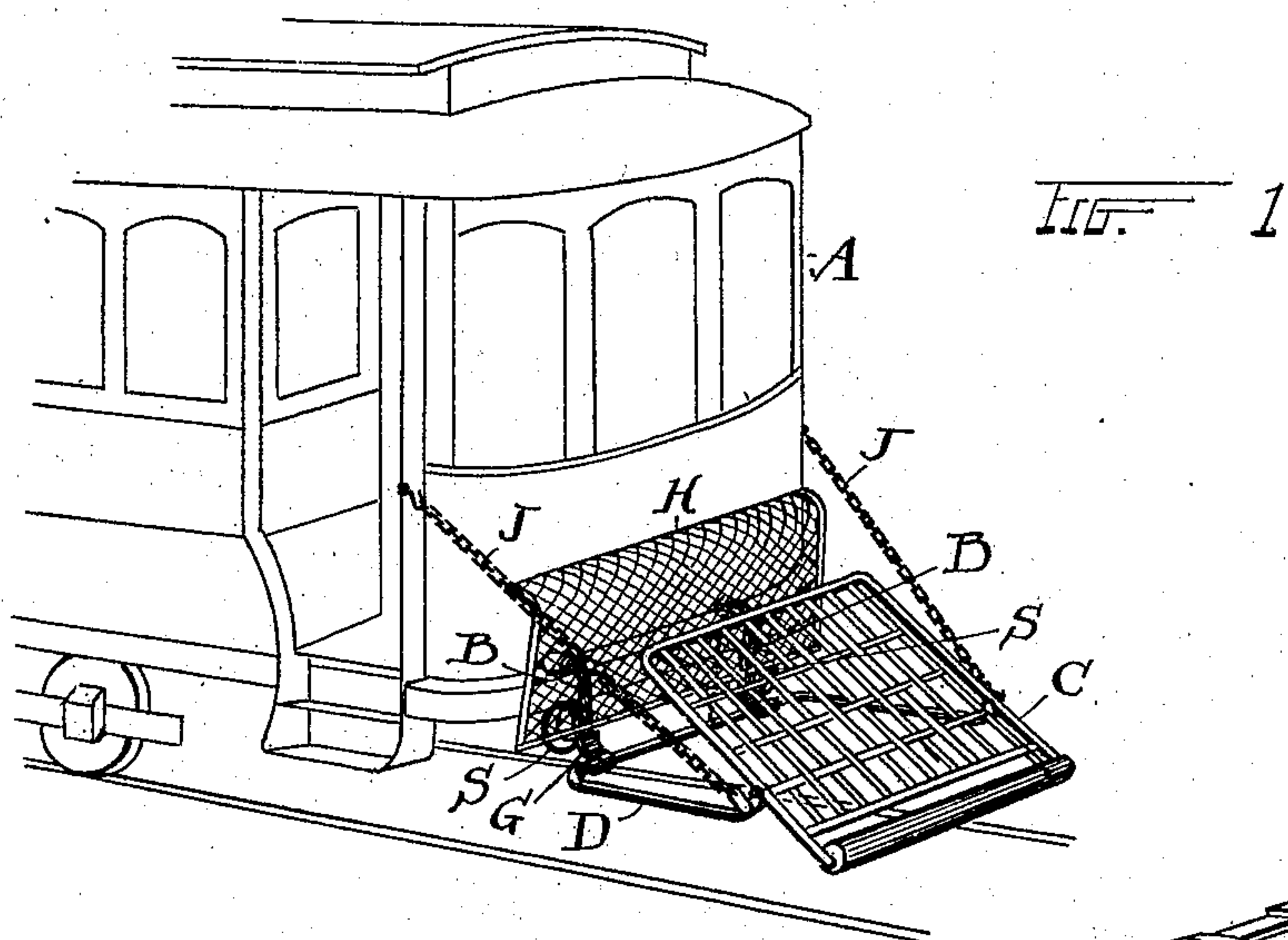


FIG. 3.

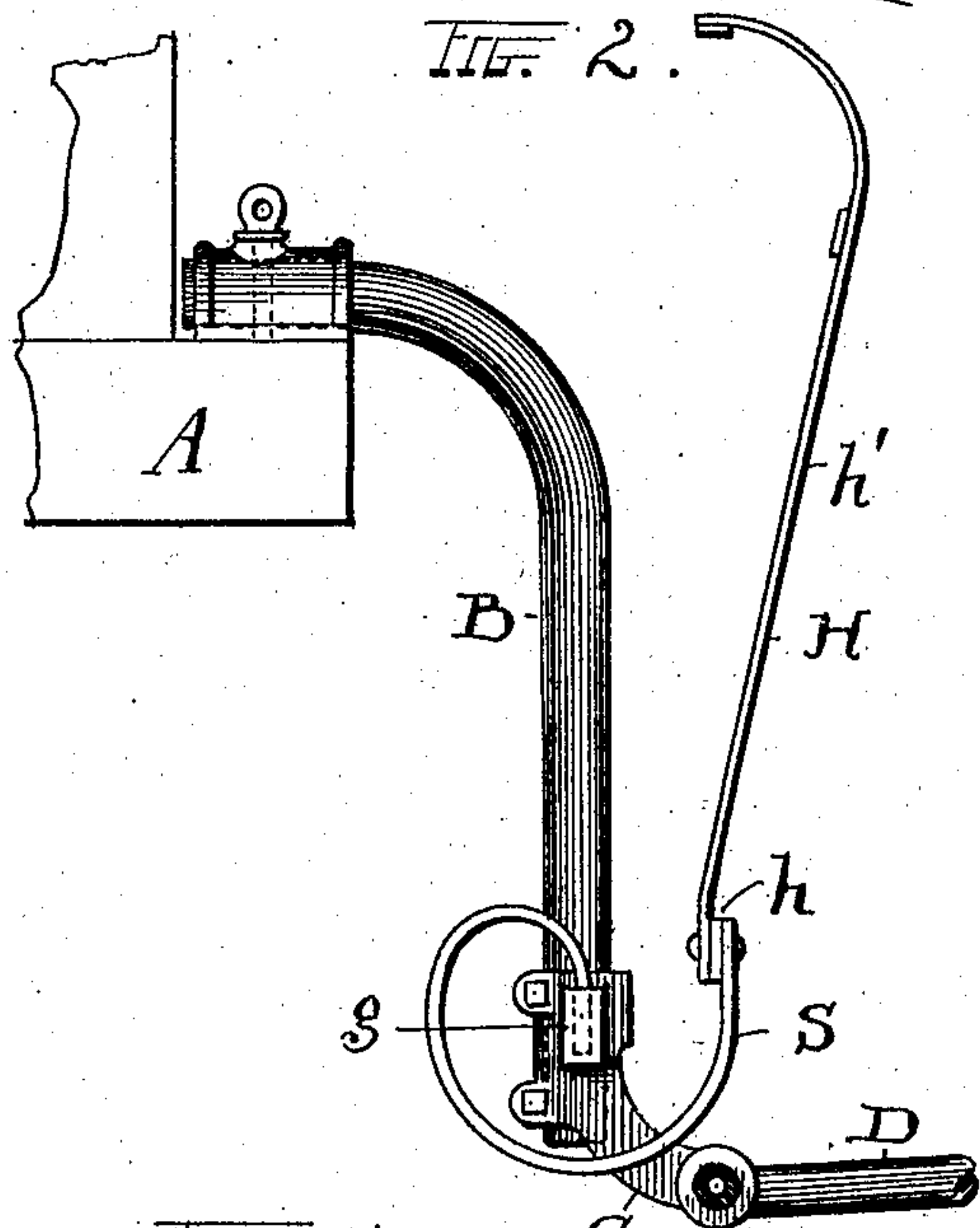
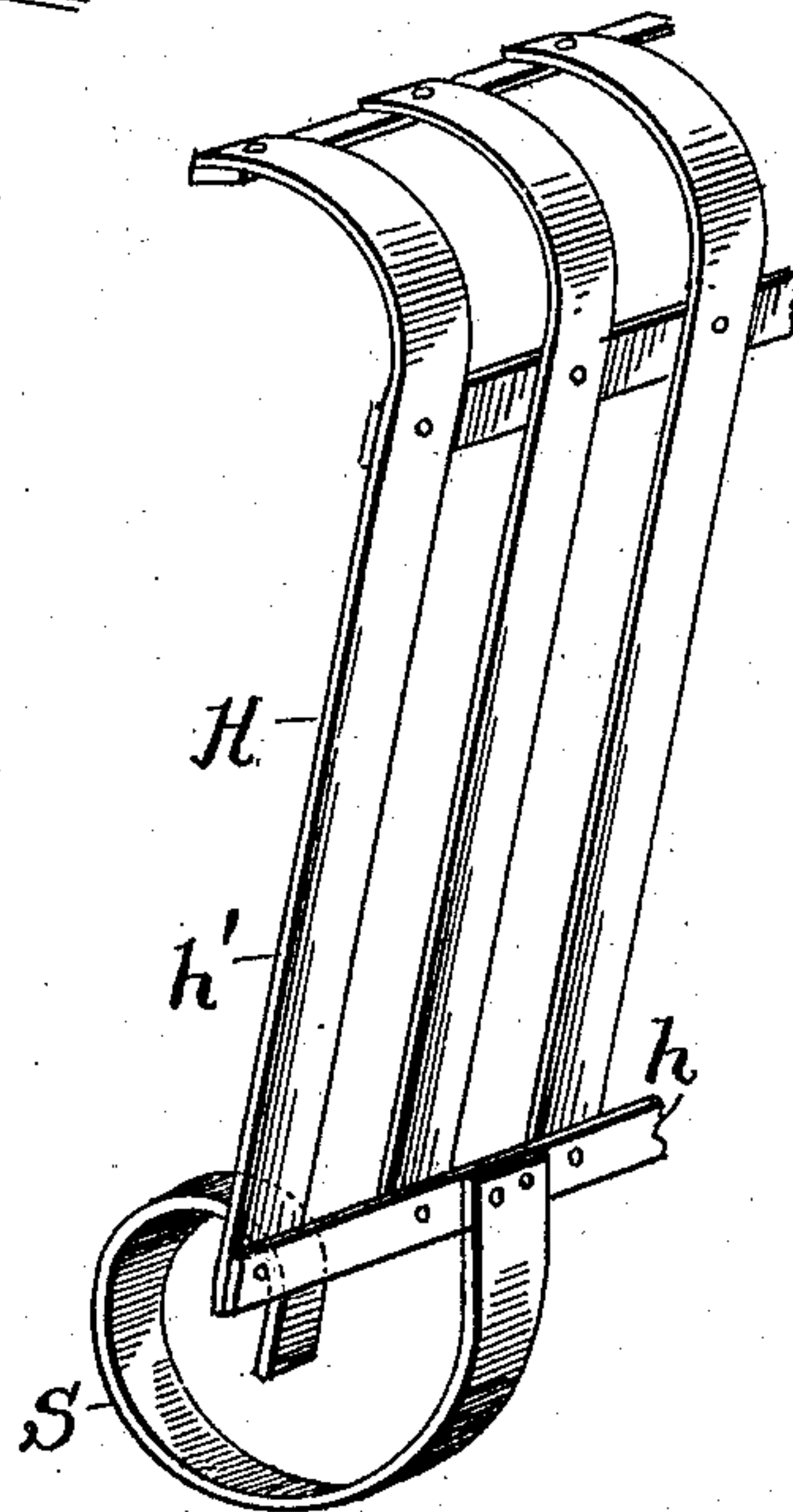


FIG. 4



WITNESSES:

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BENJAMIN LEV, OF CLEVELAND, OHIO, ASSIGNOR TO ECLIPSE RAILWAY SUPPLY CO., OF KANSAS CITY, MISSOURI, A CORPORATION OF DELAWARE.

SPRING-BUFFER FOR CAR-FENDERS.

No. 815,921.

Specification of Letters Patent.

Patented March 20, 1906.

Application filed July 15, 1904. Serial No. 216,726.

To all whom it may concern:

Be it known that I, BENJAMIN LEV, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Spring - Buffers for Car-Fenders; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to spring-buffers for car-fenders; and the invention consists in the construction and arrangement of parts substantially as shown and described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the car with my improved fender mechanism thereon. Fig. 2 is a side elevation of the immediate front of the car-body and a side elevation of my invention with part of the fender broken away. Fig. 3 is a perspective view of one end of the spring or buffer frame; and Fig. 4 is a plan view, partly in section, of the support therefor from the hanger.

The invention as thus shown appertains to the style of fender in which there is a pivoted carrier adapted to pick up and convey persons who happen to come in the path of a moving car and might otherwise be seriously injured or killed and in connection with which there is ordinarily used a spring-frame or series of springs across the front of the car at the rear of said carrier and usually separate or apart therefrom. Heretofore such spring-frames or springs have been rigid, or practically so, at their bottom, so that at this point, at least, there was little or no real spring action, and hence very little or no cushioning protection to the person who was thrown against this part of the device, and since accidents are liable to occur when cars are running at a very high speed and the impact against the springs is very severe I have conceived an improvement in the buffer which is intended to equalize its resiliency and provide something like a uniform spring action to the same over its entire surface, whether a spring-frame of usual construction be employed or a frame that is practically rigid. This is accomplished by employing a set of

spring-supports which in themselves have resiliency enough to afford all the spring action that may be necessary.

To these ends A represents a car; B, a set of suitable hangers or fender-supports attached in any suitable way; C, the usual pivoted or tilting carrier, and D a supporting-frame or side supports or braces upon which the carrier is pivoted at its front.

G represents socket-brackets adjustably clamped on the lower ends of hangers B and upon which carrying supporting-frame D is pivoted.

S represents two fairly heavy steel springs fixed at one end to the lower cross bar or slat *h* of the buffer-frame or buffer H and at the other end seated from the top downward in suitable keepers, sockets, or openings *g* in the sides of the said brackets G. The said springs S are purposely made of a size, weight, and length and of such curvature as to serve both as a sufficient support for the buffer or frame H and to give all the spring or cushioning effect that is required to protect a person who is thrown violently across the carrier against the said buffer, the object in any event being to prevent injury to the person in contact with the buffer and to so cushion the blow that it will be absorbed in the spring and not inflict injury to the person. This effect is obtained by or through the springs S, carrying frame H, and said frame may be made rigid or of rigid material or more or less springy or flexible, as heretofore, and hence may be provided with slats *h'*, suitably connected or of wires or wire mesh or other material and in any suitable form. The springs S are adapted to be lifted bodily out of their sockets or seats and removed with the frame H when for any reason it becomes desirable or necessary to take said parts away, as when the fender is shifted from one end of the car to the other in cars that are run back and forth upon the same track without turning around. Set-screws or other means may be employed to fasten said springs in their seats. Cords or chains J support said mechanism from the car, as usual.

By the term "hangers" as used herein I have reference generically to any suitable support on or extending from the car or car-truck forward or downward therefrom to such position

as to enable the buffer or buffer-frame to rest thereon.

What I claim is—

1. In car-fenders, a new article of manufacture consisting of a buffer-frame and springs fixed to the bottom of said frame and constructed to be removably engaged upon supports.
2. In car-fenders, a buffer constructed to stand across the front of a car, hangers to support the same, and springs supporting said buffer from said hangers.
3. In car-fenders, supports adapted to be connected with a car, a buffer-frame and springs fixed thereto and removably seated upon the said supports.
4. In car-fenders, suitable hangers provided with brackets at their lower ends, a buf-

fer-frame and supporting-springs for said frame engaged on said hangers.

5. In car-fenders, a set of hangers and bracket-supports adjustably clamped thereon, in combination with a buffer-frame and spring-supports therefor seated on the sides of said brackets.

6. In car-fenders, suitable hangers and brackets adjustably clamped thereon and provided with seats at their sides, in combination with a buffer-frame and supports therefor engaged on said seats.

In testimony whereof I sign this specification in the presence of two witnesses.

BENJAMIN LEV.

Witnesses:

R. B. MOSER,
C. A. SELL.