

(No Model.)

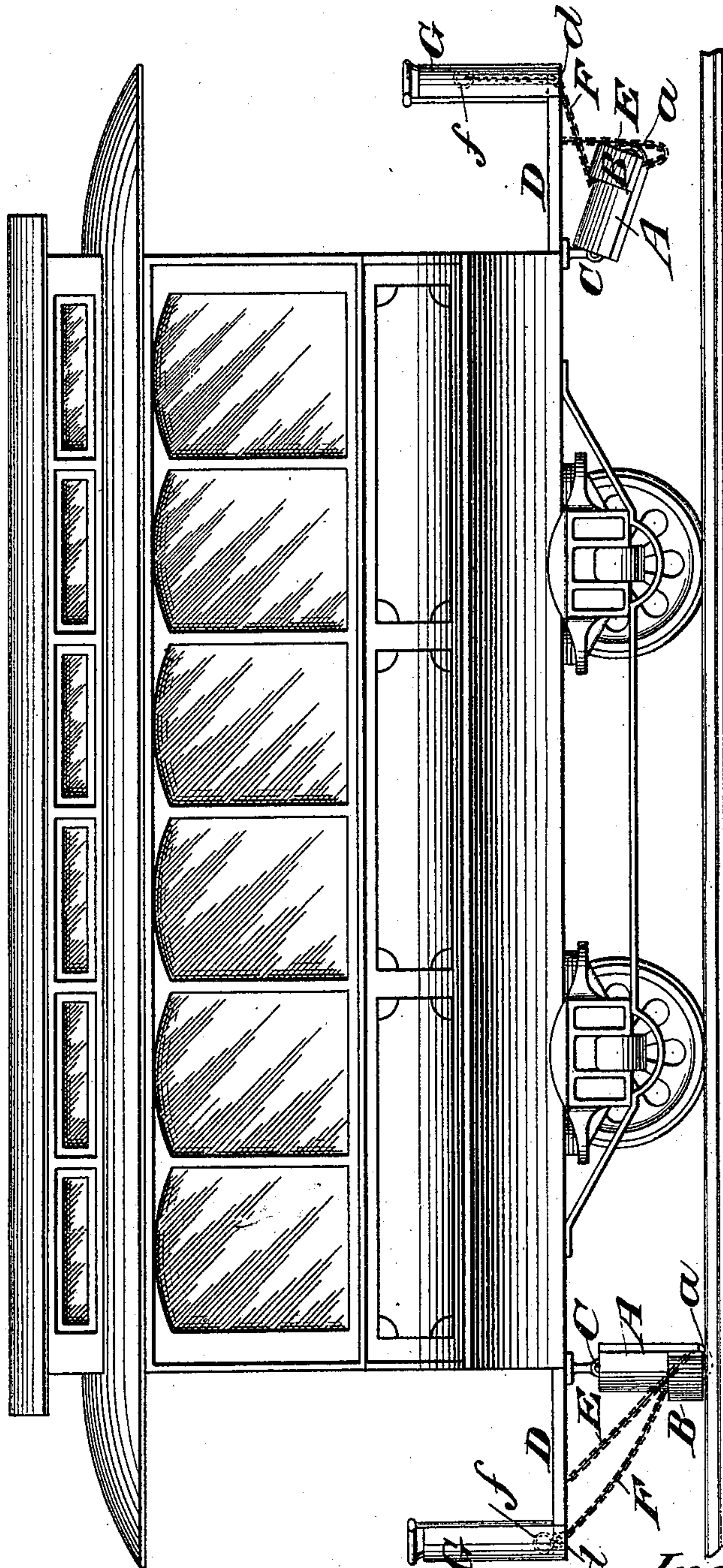
2 Sheets—Sheet 1.

J. SIMONS.
SAFETY GUARD FOR CARS.

No. 485,598.

Patented Nov. 1, 1892.

Fig. 1.



Witnesses:-
D. H. Hayworth
R. B. Lward.

Inventor:-
Julius Simons
by attorneys
Brown & Dewand

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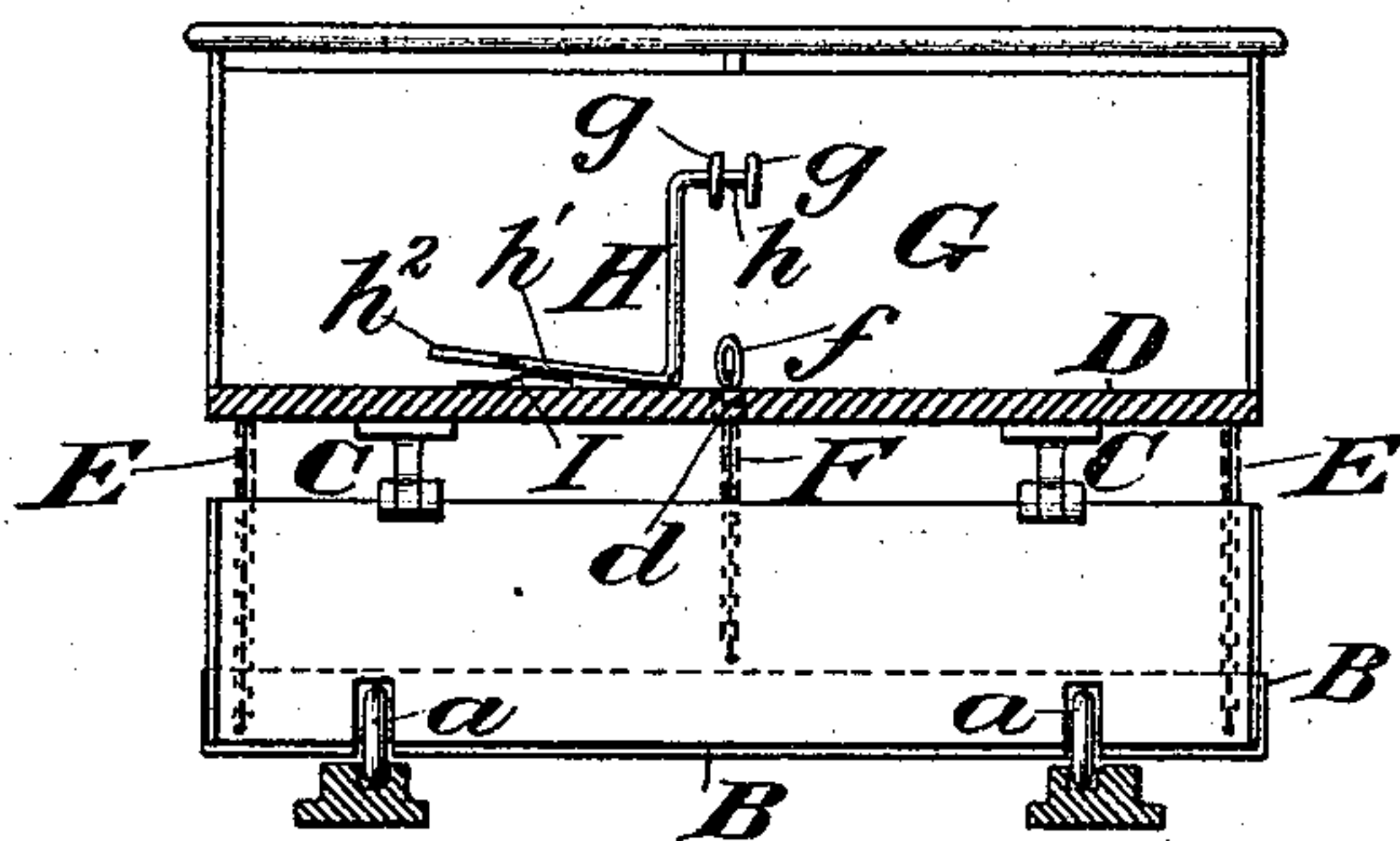
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Fig. 2.



Witnesses:-
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Inventor:-
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UNITED STATES PATENT OFFICE.

JULIUS SIMONS, OF NEW YORK, N. Y.

SAFETY-GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 485,598, dated November 1, 1892.

Application filed October 22, 1891. Serial No. 409,480. (No model.)

To all whom it may concern:

Be it known that I, JULIUS SIMONS, of New York, in the county and State of New York, have invented a new and useful Improvement in Safety-Guards for Cars, of which the following is a specification.

My invention relates to an improvement in safety-guards for cars, and is more especially adapted for use upon cable and electric cars, one object being to provide a guard which may be raised away from the track and held in such position until needed as a guard for the wheels of the car, when it may be lowered onto the track and held in such position until raised by the operator, and when in the lowered position will effectually prevent anything upon the track from coming in contact with the wheels of the car.

A further object is to provide a safety-guard which will have an elastic cushion secured thereto in such a position as to decrease the shock to a person or object being struck by the guard.

A still further object is to provide a guard that may be used upon electric cars, which will effectually prevent the passage of the electric current through any object which may be upon the track and in contact with the guard at the same time.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 is a side view of a car having two of my improved safety-guards attached thereto, one of the guards being shown held in its raised position away from the track and the other guard being shown in its lowered position upon the track. Fig. 2 is a vertical sectional view looking toward the end of the car.

A designates the curved guard-piece, which may be made of any suitable insulating material, preferably of wood. An elastic cushion B, of rubber or analogous material is secured in any convenient manner along the outside surface of the guard-piece near its bottom and extends a slight distance below the same, as shown.

The guard-piece A is situated below the car-platform and is allowed a swinging movement toward and away from the track by

means of a hinged connection C with the car-platform D. The top of the guard-piece is spaced a sufficient distance from the platform to allow of the brake-rods passing through the space thus formed. Chains, E secured to the car-platform and to the guard-piece, limit the latter's movement in a downward direction.

For operating the guard-piece I provide a chain F, having its lower end secured to the guard-piece and extending up through an opening *d* in the car-platform and provided at its upper end with a loop *f*, which loop is longer than the opening *d* to prevent it passing therethrough.

G is the dash-board, and has eyes *g* secured thereon, through which a bent part *h* of the upper arm of a lever H passes. When the loop *f* of the operating-chain F is secured between the said eyes by the bent part *h*, the guard is held in its raised position away from the track. The lever H is pivoted on the dash-board near the platform and has a lower arm *h'*, provided at its end with a foot-piece *h²*. The said arm *h'* is held normally away from the platform by means of a spring I. When the carman wishes to drop the guard for any reason, he places his foot upon the foot-piece of the lever and depresses the same. This will withdraw the bent part from the eyes *g* far enough to release the loop *f* of the operating-chain, when the guard will fall of its own weight until stopped by the chains E.

Small wheels *a* are mounted in the guard-piece A in such position as to enable them to run in the grooves of the track when the guard is in its lowered position. By this means I am enabled to hold the guard-piece from any tendency to lateral displacement and also steady the same in a great measure.

When the guard is down, the elastic strip B on the outside of the guard-piece will act as a cushion when striking any person or object, thereby preventing serious injury. The elastic cushions when worn on the lower edge may be reversed and when completely worn out may be replaced by new ones at a small cost.

The guard-piece being constructed of wood or other suitable insulating material for use with electric cars, it will be seen that any per-

son or animal that should happen to fall on the track and come in contact with the guard-piece would not receive an electric shock, which would be the case if the guard-piece were not made of an insulating material.

What I claim is—

1. In a safety-guard for cars, the combination, with a curved guard-piece hinged to the car-platform, so as to have a swinging movement toward and away from the track, of chains for limiting the movement of the guard-piece, an insulating-cushion secured to the convex side of the guard-piece at its bottom and extending below the bottom of the guard-piece, and a chain for operating the guard-piece, substantially as set forth.

2. In a safety-guard for cars, the combination, with a curved guard-piece of wood or analogous material secured to the car so as to have a swinging movement toward and

away from the track, of a rubber cushion secured to the guard-piece, wheels mounted in the guard-piece and in position to engage in the grooves along which the flanges of the car-wheels are intended to travel when the guard is in its lowered position, and a chain for operating the guard-piece, substantially as set forth.

3. In a safety-guard for cars, the combination, with the curved guard-piece hinged to the car-platform and having an elastic cushion secured thereto, of a lever secured to the car and a chain adapted to engage one arm of the lever when in its raised position, substantially as set forth.

JULIUS SIMONS.

Witnesses:

DAVID ALLEN,
FRANK W. PARSLOU.