No. 704,166. Patented July 8, 1902.

C. ZIMMERMAN.

STREET CAR FENDER.

(Application filed Feb. 19, 1902.)

(No Model.)

Fig. 1.

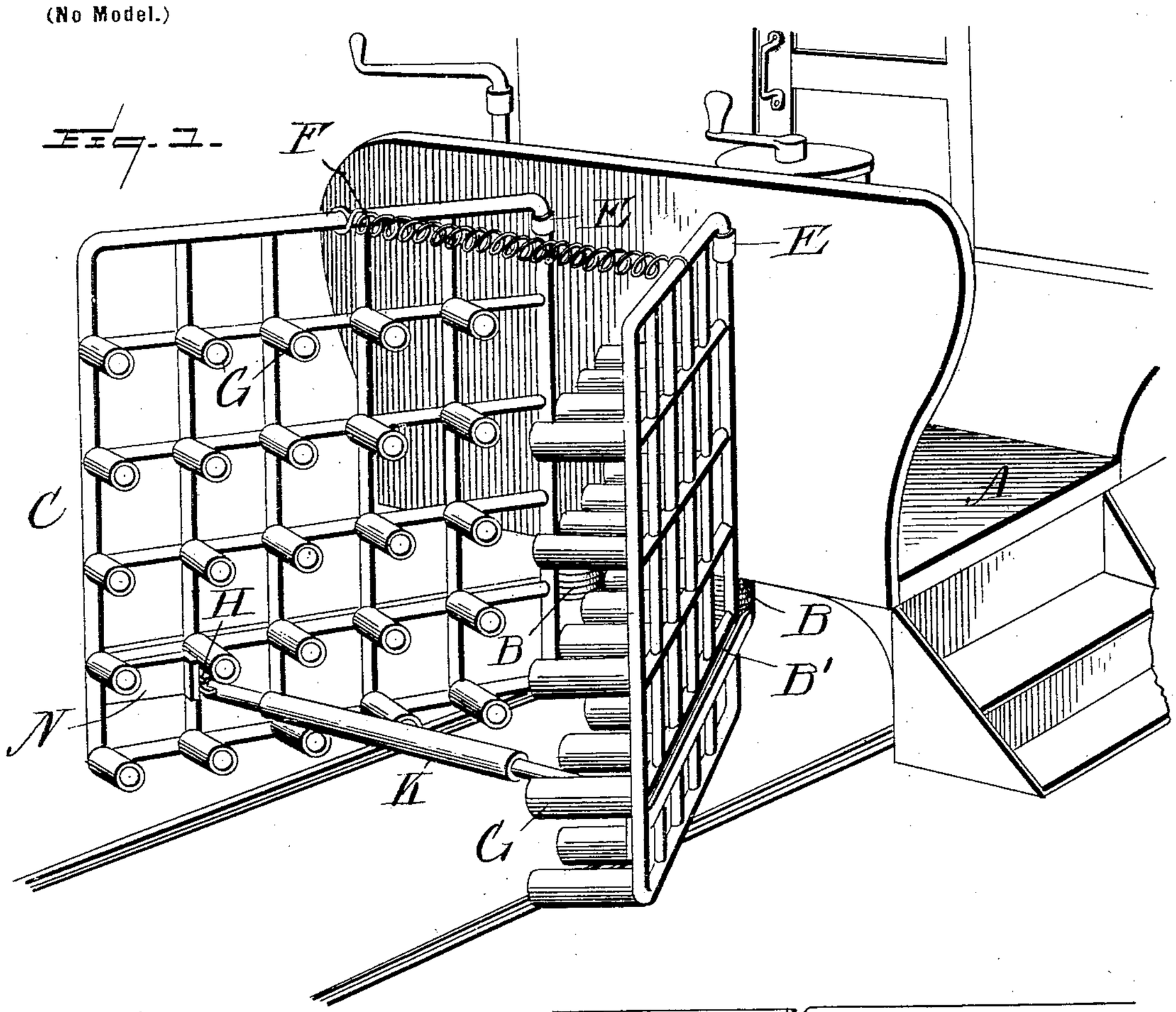
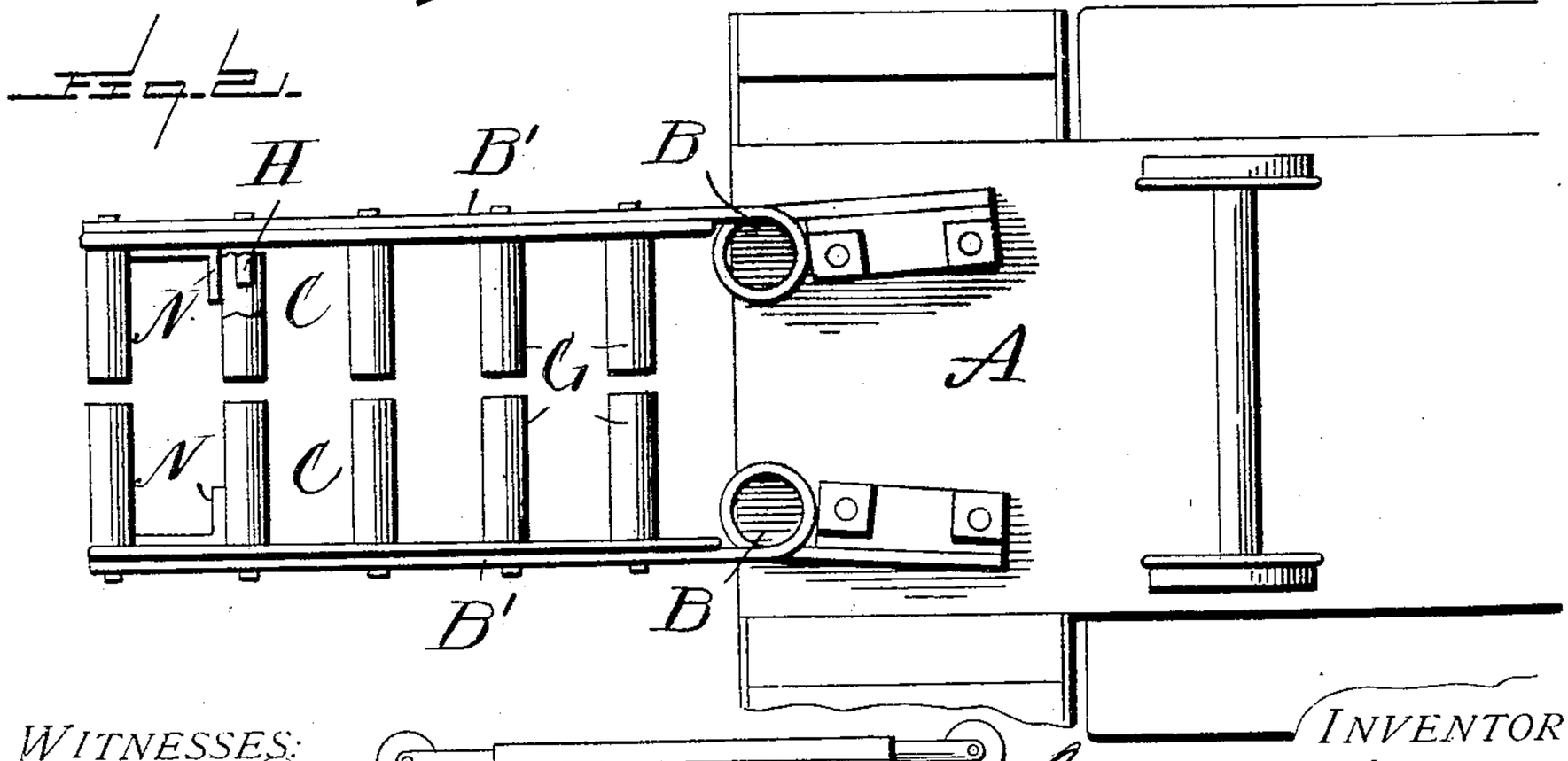


Fig. 2.



WITNESSES:

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STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 704,166, dated July 8, 1902.

Application filed February 19, 1902. Serial No. 94,806. (No model.)

To all whom it may concern:

Be it known that I, CASPER ZIMMERMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Street-Car Fenders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in fenders for street-cars; and it consists in the provision of two vertically-disposed and laterally-swinging jaws, which are spring-actuated and mounted in front of the platform of a car, the inner surfaces of the jaws being provided with short flexible buffers, which are horizontally disposed and designed to serve as gripping means, whereby should a person come between the jaws, causing the jaws to close, such person will be held by the jaws and prevented from serious accident incident to coming into contact with the car or truck wheels.

The invention relates, further, in connection with the spring-actuated jaws, of means for holding the jaws distended, consisting of a cross-piece having an antifriction-wheel journaled at each end thereof, which cross-piece is held horizontally with the wheels bearing against notched lugs on the inner faces of the jaws, and when an obstruction comes into contact with said cross-piece the latter under the influence of a slight pressure will be thrown by the impact of the obstruction from between the jaws, allowing the latter to spring together or against the obstruction and securely hold same until the jaws are released.

The invention consists, further, in various details of construction and arrangement of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings—

Figure 1 is a perspective view of the end of a car, showing my improved fender attached thereto, said fender being shown with its jaws held open. Fig. 2 is a top plan view showing the jaws of the fender closed. Fig. 3 is a detail view of the cross-piece used to hold the jaws open.

Reference now being had to the details of the drawings by letter, A designates the platform of a car, and B B designate two springs, which may be either flexible bars or coiled springs, as may be found best adapted for the purpose. The springs B B are fastened at any convenient location, preferably to the under side of the platform, and have arms B′, which are fastened to the jaws C. Each jaw C has its inner edge pivotally connected to the dashboard, as at E, and has a lateral swinging play. The two jaws are mounted similarly and in vertical planes and normally when closed are in parallel relation. An auxiliary spring F is fastened to the upper ends of said jaws and coöperates with the springs fastened to the lower portions of the jaws for the purpose of throwing the jaws closed and holding same in a closed relation. Projecting from the inner adjacent faces of the jaws are rows of flexible buffers G, horizontally disposed and provided as teeth to grasp a person or other obstruction which might come between the jaws and hold same from coming into contact with the truck or wheels of the car. On the inner face of each jaw is a notched lug H, preferably at a location near the lower edges of the jaws, and K designates a cross piece or bar having an antifriction-wheel L pivotally mounted at each end thereof. This bar is provided for the purpose of holding the jaws distended, as shown in Fig. 1, by the antifriction-wheels carried thereby engaging one in each of the notched lugs H. Adjacent to each notched lug is a guard-plate N, against which an antifriction-wheel bears to prevent the ends of the bar carrying the wheels from being displaced under a pressure from the springs which actuate the jaws. In operation the jaws are separated and held open by means of said bar, the wheels carried by which are inserted one in each notched lug on the inner face of a jaw, with the antifriction-wheels bearing against the guard-plates N, as shown. When an obstruction contacts

with said bar, the latter is thrown from engagement with said notched lugs, and the jaws, acting under the influence of the springs fastened to said jaws, will cause the latter to quickly swing toward each other and grasp the object and hold same suspended from the ground. The flexible fingers or buffers, while yielding when the jaws come into contact with an obstruction, are sufficiently rigid to grasp and hold the obstruction until the jaws are released.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. A car-fender, comprising two vertically-disposed jaws pivotally mounted at the end of a car, buffers on the adjacent faces of the jaws, springs for normally holding the jaws closed, a bar having antifriction-wheels, pivoted one at each end of said bar, notched lugs, one mounted on each inner face of a jaw and adjacent to the lower edges thereof, a guard-plate adjacent to each notched lug, said antifriction-wheels designed to be held in said notched lugs and to contact with said guard-plates under pressure of the spring-actuated jaws, as set forth.

2. In combination with the platform and dashboard of a car, springs secured to the under face of the platform, vertically-mounted jaws having pivotal connection with the dashboard, the lower portions of said jaws fastened to said springs, a horizontally-disposed spring connecting the upper edges of the two jaws, flexible buffers on the adjacent faces of the jaws, a bar having antifriction-wheels pivotally mounted at the ends of said bar, notched lugs on the inner faces of the jaws, and designed to receive the antifriction-wheels, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

CASPER ZIMMERMAN.

Witnesses:

MICHAEL KEVIL,

WILLIAM D. COOK.