

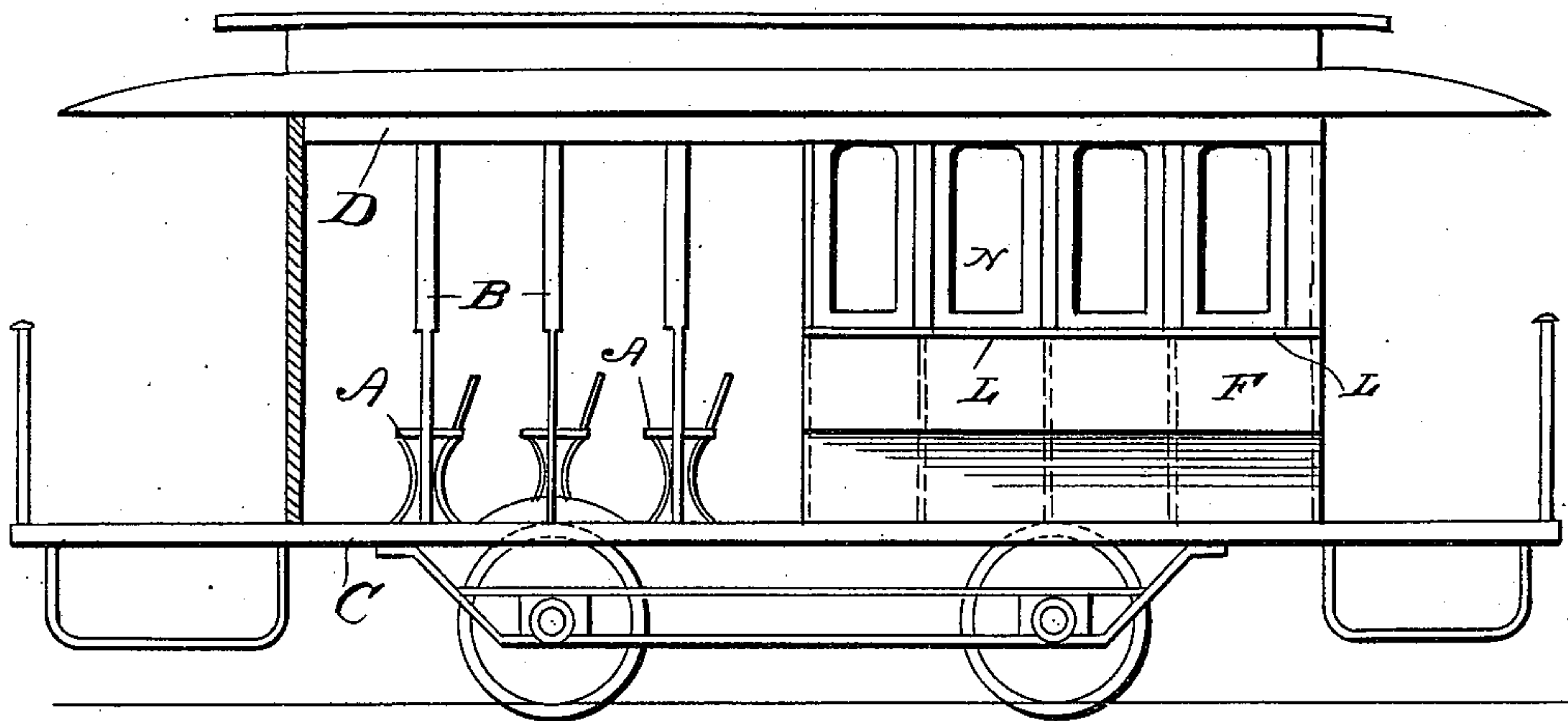
(No Model.)

L. WIELAND.  
TRAMWAY CAR.

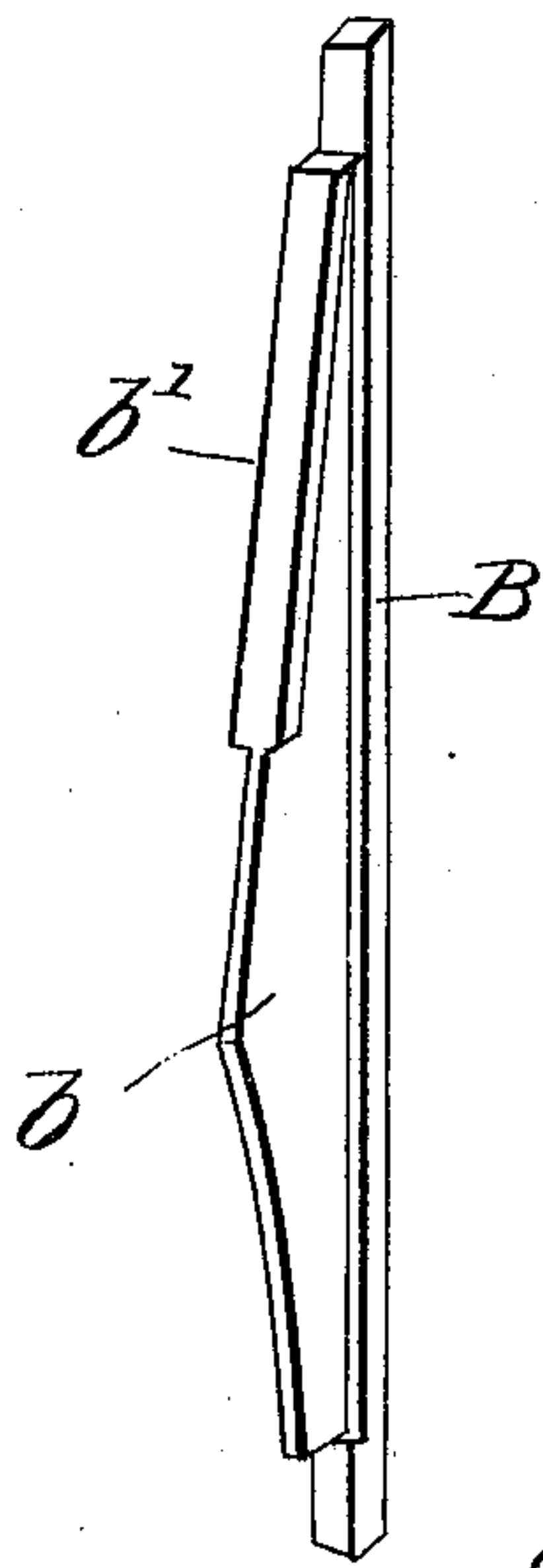
No. 560,385.

Patented May 19, 1896.

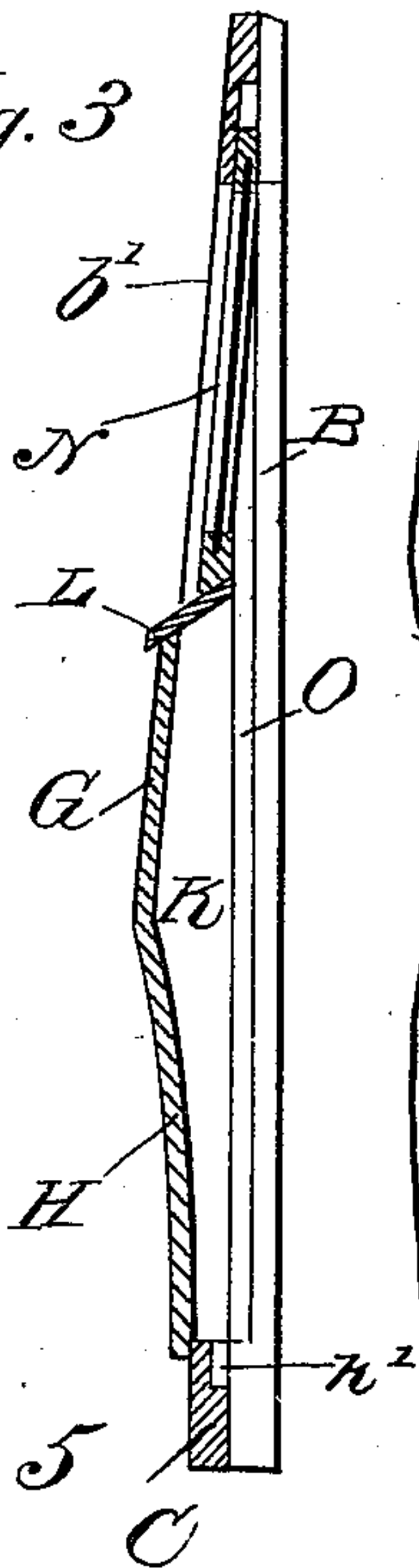
*Fig. 1*



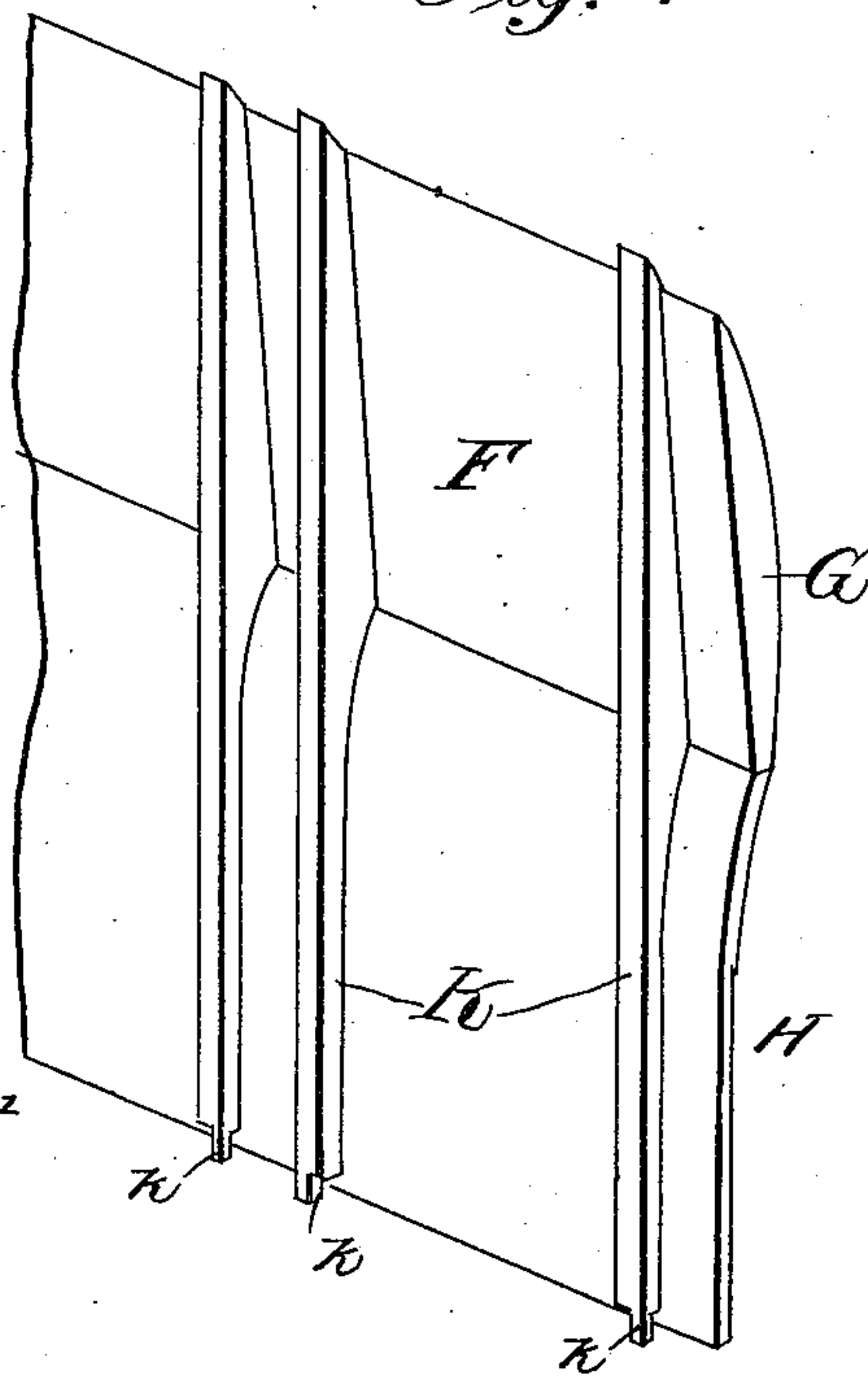
*Fig. 2*



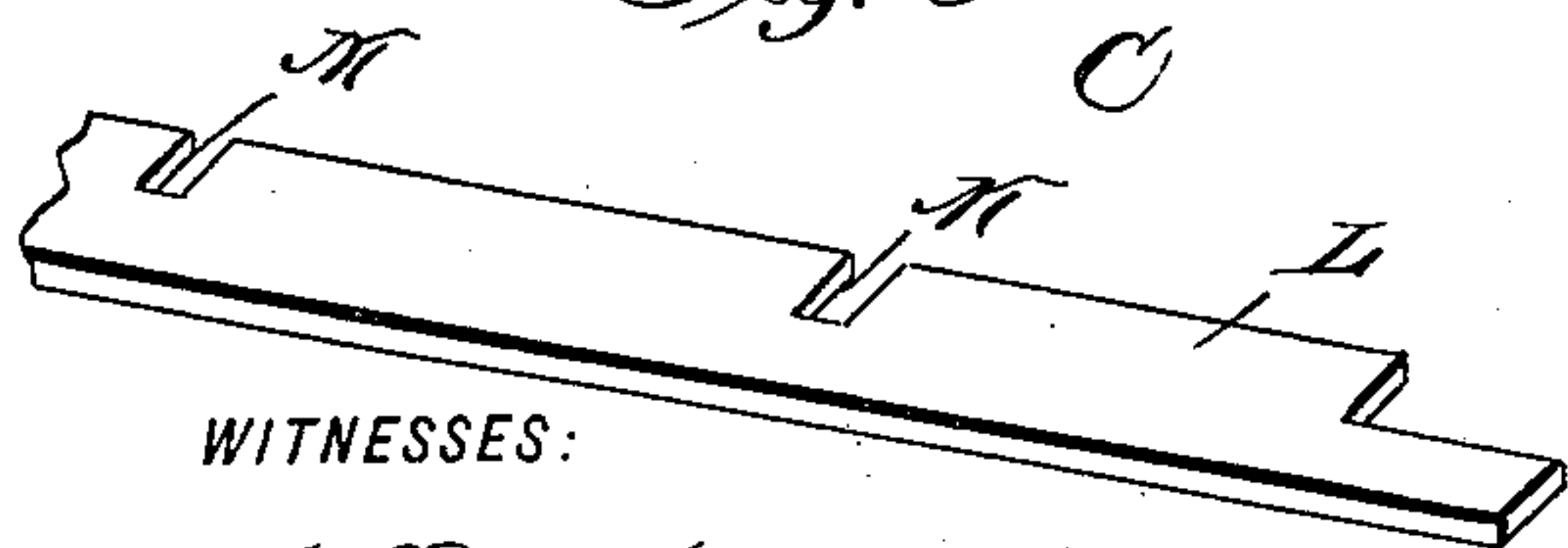
*Fig. 3*



*Fig. 4*



*Fig. 5*



WITNESSES:

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INVENTOR

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# UNITED STATES PATENT OFFICE.

LEWIS WIELAND, OF JERSEY CITY, NEW JERSEY.

## TRAMWAY-CAR.

SPECIFICATION forming part of Letters Patent No. 560,385, dated May 19, 1896.

Application filed October 11, 1895. Serial No. 565,398. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS WIELAND, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Tramway-Cars, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to tramway-cars; and the object thereof is to provide a car which may be converted into an open car, when desired, or into one with closed sides when the same shall be necessary; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of a car constructed according to my invention, and Figs. 2, 3, 4, and 5 represent details of the construction.

In the practice of my invention I provide a car of the general form shown in Fig. 1, and said car is provided with the usual seats A, and the sides thereof are composed of vertical standards B and detachable side sections which are adapted to be connected therewith.

The detachable sides consist of separate sections, which are adapted to be connected with the standards B, and said sections may be so formed as to occupy a single space between the standards B or so as to cover a number of said spaces and of vertical window-frames, one of which is placed between each of the standards B and which when in position rest upon or are supported by the detachable side pieces.

The side frame of the car is composed of a bottom sill C and a top plate D, and the detachable frames which constitute the lower portion of the side of the car are shown at F. These detachable frames consist of plates G and H, or these plates G and H may be formed integral, if desired, and they are secured to vertical braces K. When these detachable side pieces F are formed so as to occupy but one of the spaces between the vertical stand-

ards B of the frame of the car, they are provided at each end or near each end with one of said braces K; but when formed so as to overlap one of the vertical standards B they are also provided centrally with two of said vertical braces, one of which is arranged on each side of the lower portion of said vertical standard.

The lower ends of the braces K, which are secured to the detachable section F or form part thereof, are provided with projections or tenons *k*, which are adapted to enter corresponding holes or mortises *k'* in the sill C, and in placing said detachable sections in position said projections or tenons are placed in said holes or mortises, and after being pressed into position against the standards B are screwed thereto or otherwise held in place. The said vertical standards B are of the form shown in Fig. 2, and each has formed on or secured to the back thereof a plate or flange *b*, the upper end of which is provided with a transverse flange *b'*, which extends at each side slightly beyond the flange *b*, and these cross-flanges *b'* on the outer upper sides of the flanges *b* form frames, in which the windows move and in which they are supported.

When the detachable sections F are secured in place, a horizontal plate or sill L is placed across the tops thereof, and said horizontal sill or plate L is provided with notches or recesses M, into which the standards B enter, and the frames N of the windows are adapted to rest on this sill when raised to the highest position or closed, as shown in Fig. 3.

The arrangement of the detachable sections F is such that when in position there is a vertical slot O between each of the standards B, or the inner sides thereof, and said detachable sections and these vertical slots serve as ways for the frames N of the windows. Whenever it is desired to open the windows, the frames N are raised off of the sill L and drawn inwardly and dropped into said slots or ways, as will be readily understood, and when it is desired to close the windows they are again raised into the position shown in Fig. 3, and the bottoms thereof shoved outwardly and against the vertical flanges *b'*, so that the lower sides thereof rest upon the sill L. It will be understood that these vertical slots O



are formed by the inner portions of the standards B and the braces K of the detachable sections, and between these parts the window-frames are free to move.

5 My invention is not limited to the exact form, construction, and arrangement of parts shown and described, and I therefore reserve the right to make all such alterations therein and modifications thereof as fairly come  
10 within the scope of the invention.

Having fully described my invention, I claim and desire to secure by Letters Patent—

15 The combination, in a car, the sides of which are composed of a bottom sill, a top sill or plate, vertical standards and sections as F, together with movable window-frames, said sections and window-frames being arranged between the standards and the former being  
20 provided with vertical braces, the top and

bottom of the sections having tenons adapted to engage mortises in the bottom sill, said section being adapted to be secured within guideways or slots formed within the standards, said windows also being adapted to 25 slide within said guideways, the lower portion of said ways being extended outwardly forming a shoulder, or flanges *b'* whereby when the window is raised, the lower portion may be forced outwardly to engage or rest 30 upon said shoulders, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 10th 35 day of October, 1895.

LEWIS WIELAND.

Witnesses:

C. GERST,  
K. ENSLIE.