No. 688,180. Patented Dec. 3, 1901.

P. M. KLING.

STREET CAR.

(Application filed Jan. 7, 1901.)

(No Model.)

Fig. I.

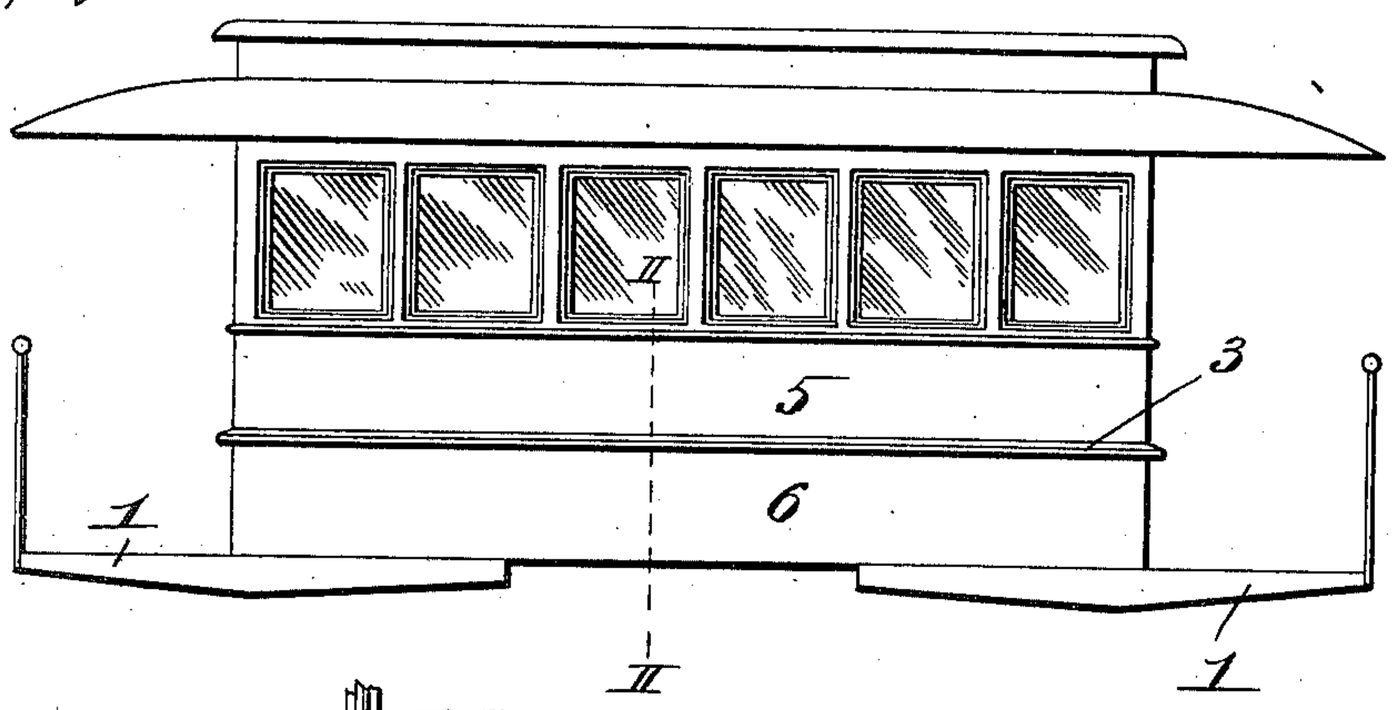
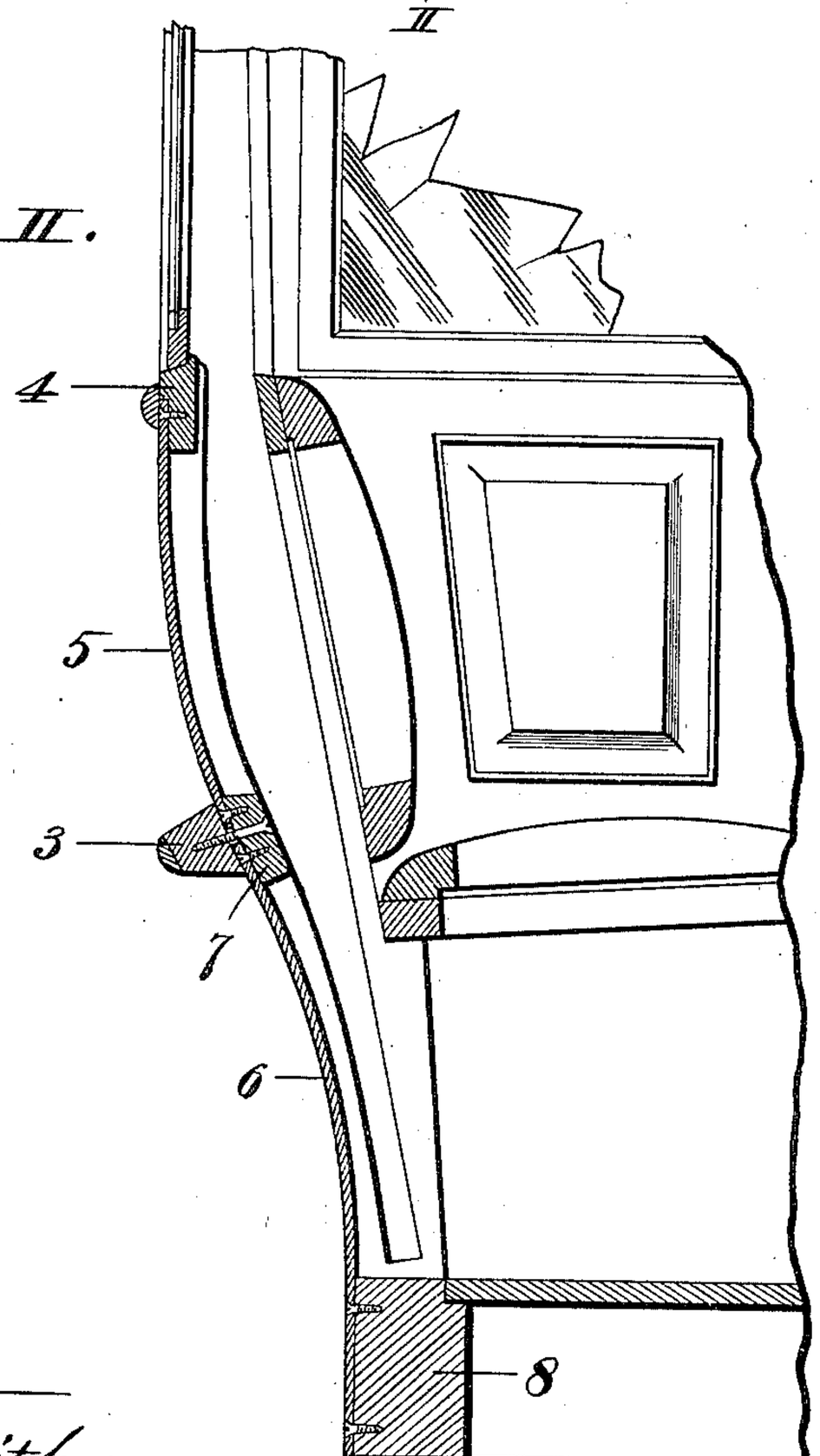


Fig. II.



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PETER M. KLING, OF ELIZABETH, NEW JERSEY.

STREET-CAR.

SPECIFICATION forming part of Letters Patent No. 688,180, dated December 3, 1901.

Application filed January 7, 1901. Serial No. 42,301. (No model.)

To all whom it may concern:

Be it known that I, PETER M. KLING, a citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Street-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Heretofore it has been the practice in building street-cars to employ an inner and an outer truss extending lengthwise of the car for the purpose of adding strength and rigidity to the framework. The object of my invention is to dispense with the use of these trusses without altering or changing the appearance of the car, while at the same time the cost of the car is reduced. I have discovered that the use of these trusses can be dispensed with and the car made sufficiently strong and rigid by employing metal panels for the sides of the car instead of using wood panels, as heretofore.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a side view of a street-car embodying my invention. Fig. II is an enlarged detail vertical section taken on the line II II, Fig. I.

Referring to the drawings, 1 represents the platforms of the car; 3, the fender-rail; 4, the belt-rail band; 5, the upper outside panel; 6, the lower outside panel; 7, the panel-furring, and 8 one of the outside sills of the car-body. The panel 5 is formed so as to be convex on its outer surface, and the panel 6 is formed so as to be concave on its outer surface, as usual. Heretofore these panels have been made of wood, which thus necessitated the use of outer and inner trusses in order to strengthen and support the framework of the car-body. As stated, I have discovered that by making these panels of metal they sufficiently strengthen and support the body without the use of trusses, and by thus dispensing with the trusses the cost of the car is reduced, while its appearance is maintained. The panels may be attached to the belt-rail band, to the panel-furring, and to the sill by means of screws, as shown, or they may be otherwise connected.

My invention may be carried into effect with very light cars by making one of the panels of metal, while the other panel is made of wood, as heretofore.

Each panel is made of a continuous sheet of metal that extends from end to end of the car-body, and while I have shown the panels as being made in separate pieces yet they may, if desired, be made in one piece.

I claim as my invention—

As a new article of manufacture, a street-car built without the usual trusses and having upper and lower panels composed respectively of convex and concave sheets of metal attached to the belt-rail band, the panel-furring and the car-sill substantially as and for the purposes described.

PETER M. KLING.

In presence of—
E. S. KNIGHT,
N. V. ALEXANDER.