

C. K. PICKLES.  
STREET CAR.

APPLICATION FILED APR. 17, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

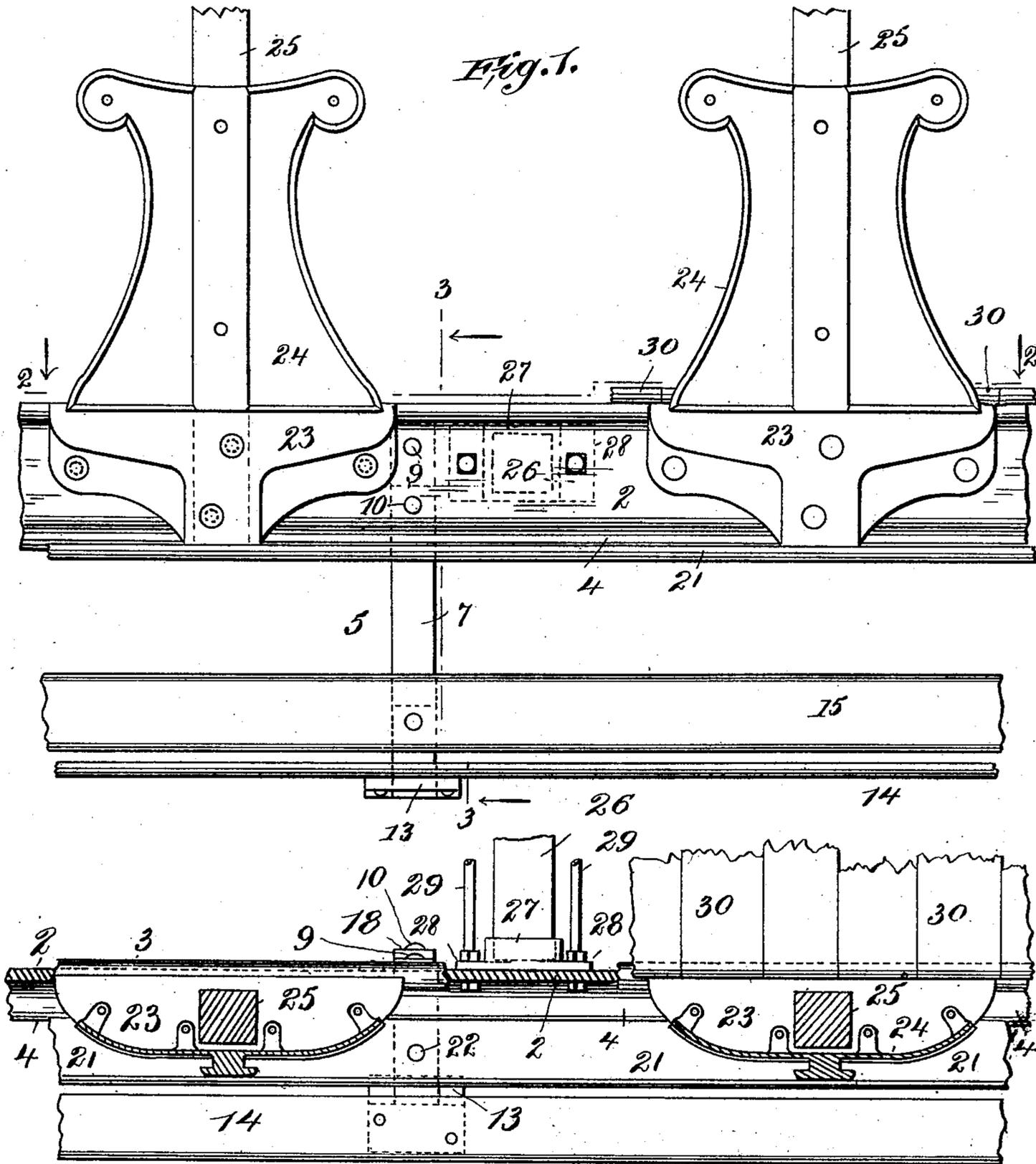


Fig. 2.

Witnesses  
 C. W. Benjamin  
 Chas. Husley

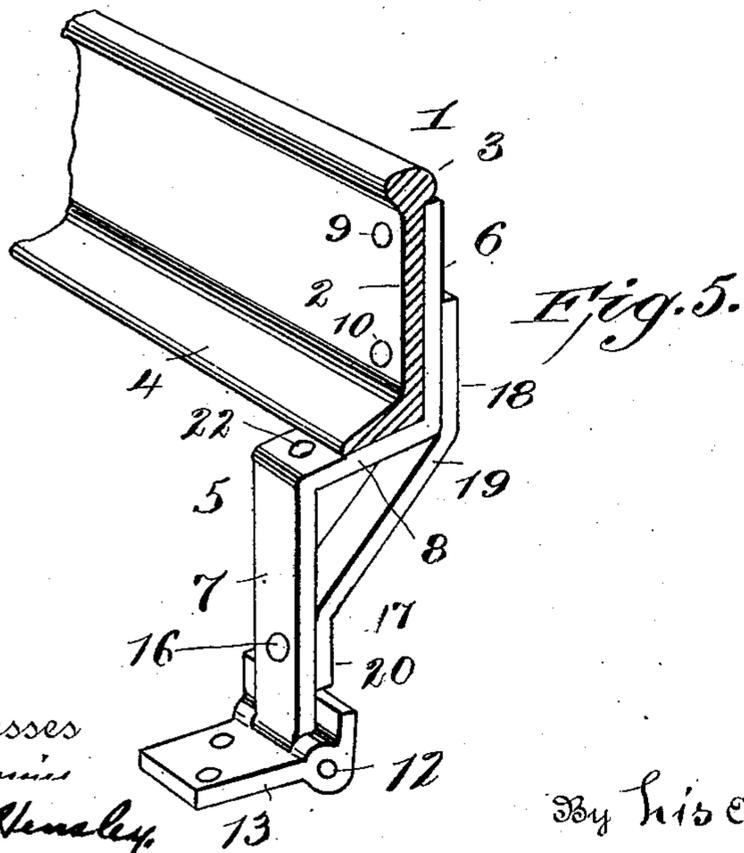
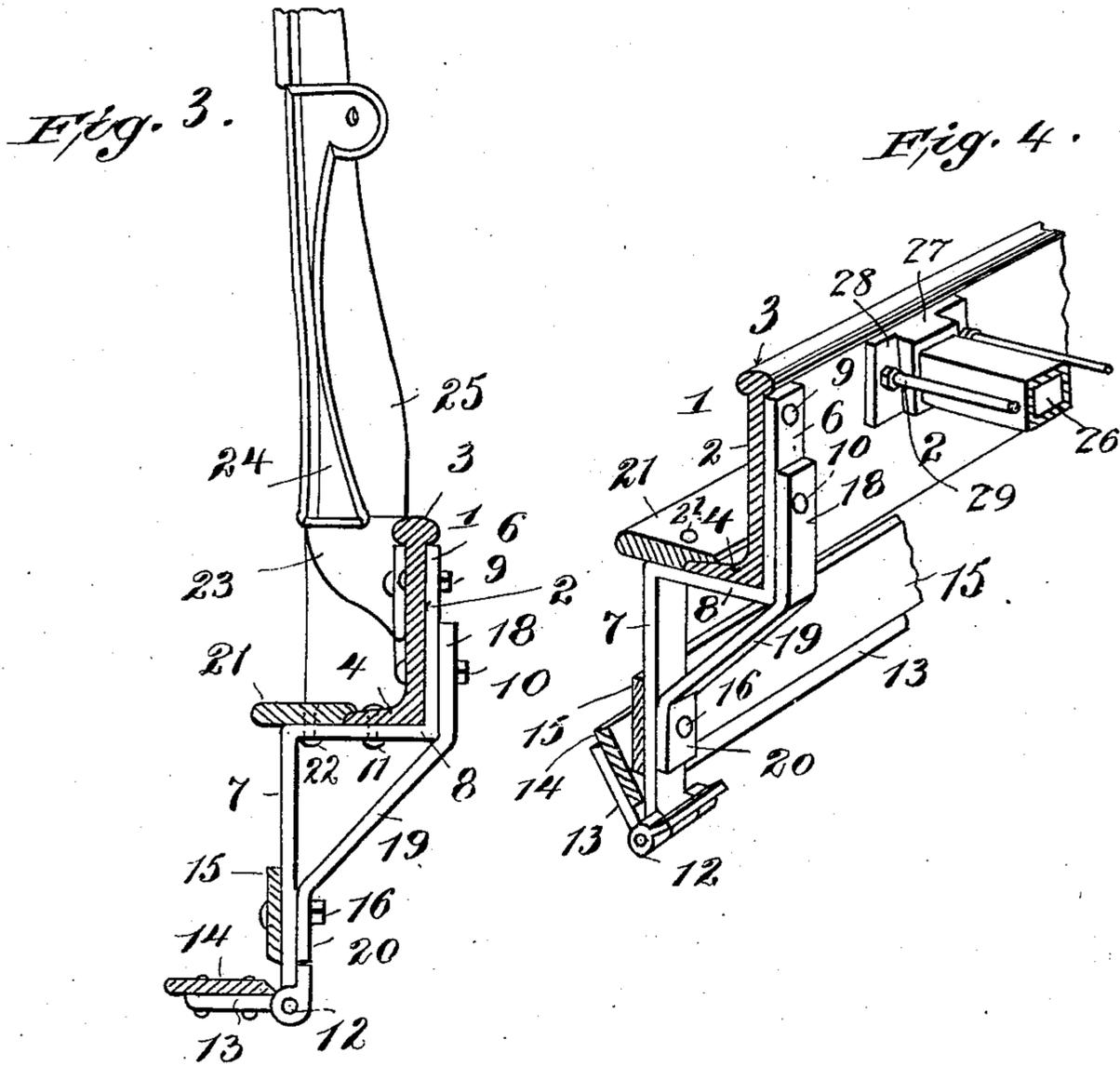
Inventor  
 Charles K. Pickles  
 By his Attorneys, Joseph L. Levy

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Witnesses  
*Chas. Benjamin*  
*Phas. Henaley*

Inventor  
*Charles K. Pickles.*  
 By his Attorney, *Joseph L. Levy*

# UNITED STATES PATENT OFFICE.

CHARLES K. PICKLES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
JOHN A. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

## STREET-CAR.

SPECIFICATION forming part of Letters Patent No. 755,314, dated March 22, 1904.

Application filed April 17, 1903. Serial No. 153,001. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES K. PICKLES, a citizen of the United States, and a resident of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Street-Cars, of which the following is a specification.

My invention relates to the construction of what are known as "summer" or "open" cars, and is as to certain details a modification of that shown and described in an application of John A. Brill, filed April 23, 1902, Serial No. 104,239, to which cross-reference is here made for full details as to general construction.

The object of my invention hereinafter described is to simplify this construction mainly through the utilization of commercial forms of iron in the construction of the sills. This I accomplish by the use of a bulb-iron sill with a lower flange on one side only, so that the sills of the car are made up of easily-obtained and commercial forms of iron that are kept regularly in stock.

There are also other features of my invention which will appear below.

For a more particular description of one embodiment of my invention reference is to be had to the accompanying drawings, forming a part hereof, in which—

Figure 1 is a side elevation of a portion of a car provided with my improvements. Fig. 2 is a plan view of the same, partly in section, on the line 2 2, Fig. 1. Fig. 3 is a sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of one of the sills and attached parts, partly in section; and Fig. 5 is a like view reversed.

The same reference characters designate the same parts throughout the several views.

In the following is described only a portion of one sill and the connecting parts, because this disclosure is sufficient to enable those skilled in the art to practice my invention. The sills at both sides of the car are identically constructed, and for additional details, not essential here, reference can be made to the said Brill application.

The side sill 1 is made of "bulb-iron," hav-

ing a central and vertical web 2, an enlarged upper edge 3, and an outwardly-extending lower flange 4 at its lower edge, which forms a portion of a step. The exact outline of the sill is immaterial, providing the cross-section be substantially unchanged.

Brackets or hangers consisting of a bar 5, having the upright portions 6 7 and intermediate horizontal portion 8, are riveted or otherwise fixed to the web 2, as by the bolts 9 10 and rivets 11, the portion 8 extending beyond and under the flange 4, the arm 8 extending downwardly, and at the lower ends of the arms 7 are hinges connected at 12 with irons 13, on which a running-board 14 rests and is secured thereto in any suitable manner. This running-board forms the first step of the car, and a back board 15 may extend over the running-board 14 and be secured to the vertical arms 7 of the brackets by means of bolts 16. A brace 17, comprising the arms 18 19 20, connects the vertical arms 6 of the brackets by the bolts 10 and the arms 7 by the bolts 16 and are secured to the brackets to reinforce and strengthen them. The horizontal portion 8 of the bracket supports a board 21 (or the like) and which, with the flange 4 of the sill, (in whole or in part,) forms a partial step—that is, a part of the sill and the board form the step or the board above. The board 21, which is preferably continuous, is secured to the arm 8 by bolts or rivets 22, the arm 8 being extended beyond the flange 4 to sustain the step thus formed. The step may be cut away or inset to clear the panel castings 23, which are secured to the web 2 of the sill, or it may be intermitted between said castings and rest directly on the flange 4. Either construction may be employed, as desired. The board 21 and the flange 4 of the sill form a step within the car, as explained more fully in the said Brill application.

The panels 24 and stanchions 25 may be of any suitable design and are secured to the castings 23; but as they are fully shown and described in the Brill application above mentioned I do not consider it necessary to describe them further here.

The sill 1 is connected with a corresponding

sill (not shown) by means of crossings 26 of suitable construction. They may be, as shown, in which they are bars, preferably rectangular in cross-section and provided with ends that rest in flanged pockets 27, the flanges 28 of which are riveted or bolted or otherwise fixed to the webs 2. Tie-bolts 29, which pass through the sills and flanges 28, secure them to the pockets and the crossings and sills, thus forming a rigid frame. Any suitable flooring 30 may be placed on said crossings.

While I have shown and described one form of my invention, it is obvious that it may be embodied in many other forms without departing from the spirit of my invention or sacrificing any of the advantages thereof.

Having described my invention, what I claim is—

1. In a car or similar vehicle, a sill having an outwardly-extending flange, and a step secured to said flange by means secured under said flange and step.

2. In a car or similar vehicle, a sill having an outwardly-extending flange, and a step co-extensive longitudinally with said sill, and means below the flange and step for supporting them adjacently and in the same plane.

3. In a car or similar vehicle, a frame comprising side sills made of bulb-iron, means for connecting said sills, and flanges forming a part of steps secured to said sills.

4. In a car-frame, a sill, with an outwardly-extending flange at its lower edge, a hanger secured thereto and provided with a horizontal portion extending under said flange and adapted to receive a step-plate.

5. In a car-frame, a sill with an outwardly-extending flange at its lower edge, a hanger secured thereto and provided with a horizon-

tally-extending portion, a step-plate resting on said portion, a running-board secured to said hanger, and brace reinforcing said hanger.

6. In a car-frame, a sill with an outwardly-extending flange at its lower edge, a hanger secured thereto and adapted to support a step-plate in connection with said flange and a running-board pivotally connected with said hanger.

7. In a car-frame or similar device, a sill, a hanger fixed thereto, a brace secured to said hanger, a step, and a running-board also fixed to said hanger.

8. In a car-frame, a bulb-iron sill with an outwardly-projecting lower flange and a hanger secured to said flange.

9. In a car-frame, a sill with an outwardly-projecting lower flange forming a part of a step, a hanger secured to said sill, and a step plate or board resting on said hanger and completing the step.

10. In a car-frame, a sill with an outwardly-projecting lower flange, a hanger secured to said sill, a brace secured to said hanger, and a step-plate on the hanger cooperating with said flange to form a step.

11. In a car-frame, a sill with a projecting lower flange, a hanger secured to said sill, a brace secured to said hanger, a running-board and a step plate or board also secured to said hanger, said step-plate cooperating with said flange to form a step.

Signed in the city and county of Philadelphia, State of Pennsylvania, this 27th day of March, 1903.

CHARLES K. PICKLES.

Witnesses:

WM. J. FERDINAND,  
TERRENCE McCUSKER.