

No. 801,541.

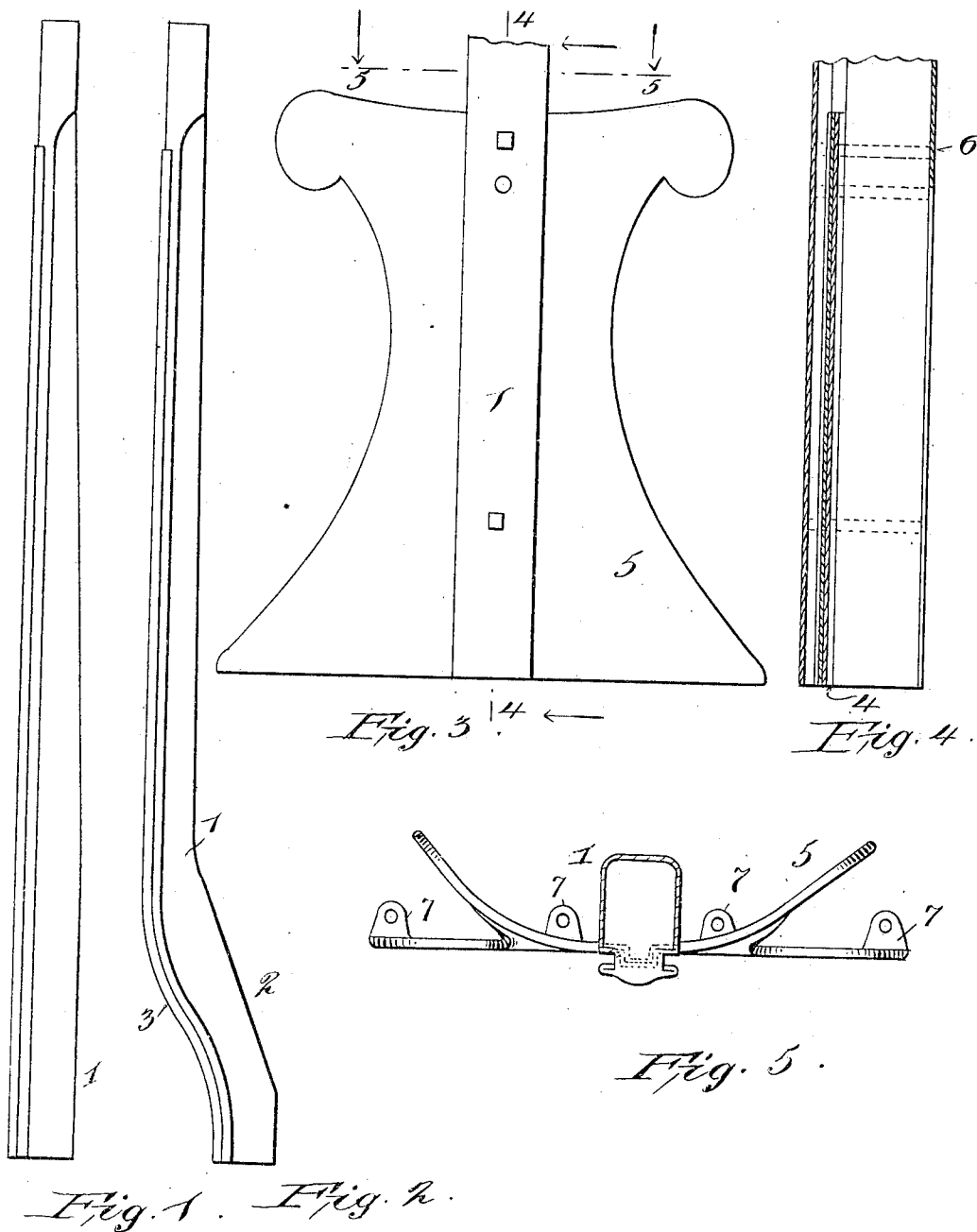
PATENTED OCT. 10, 1905.

R. J. McHALE & P. HABERLE.

CAR CONSTRUCTION.

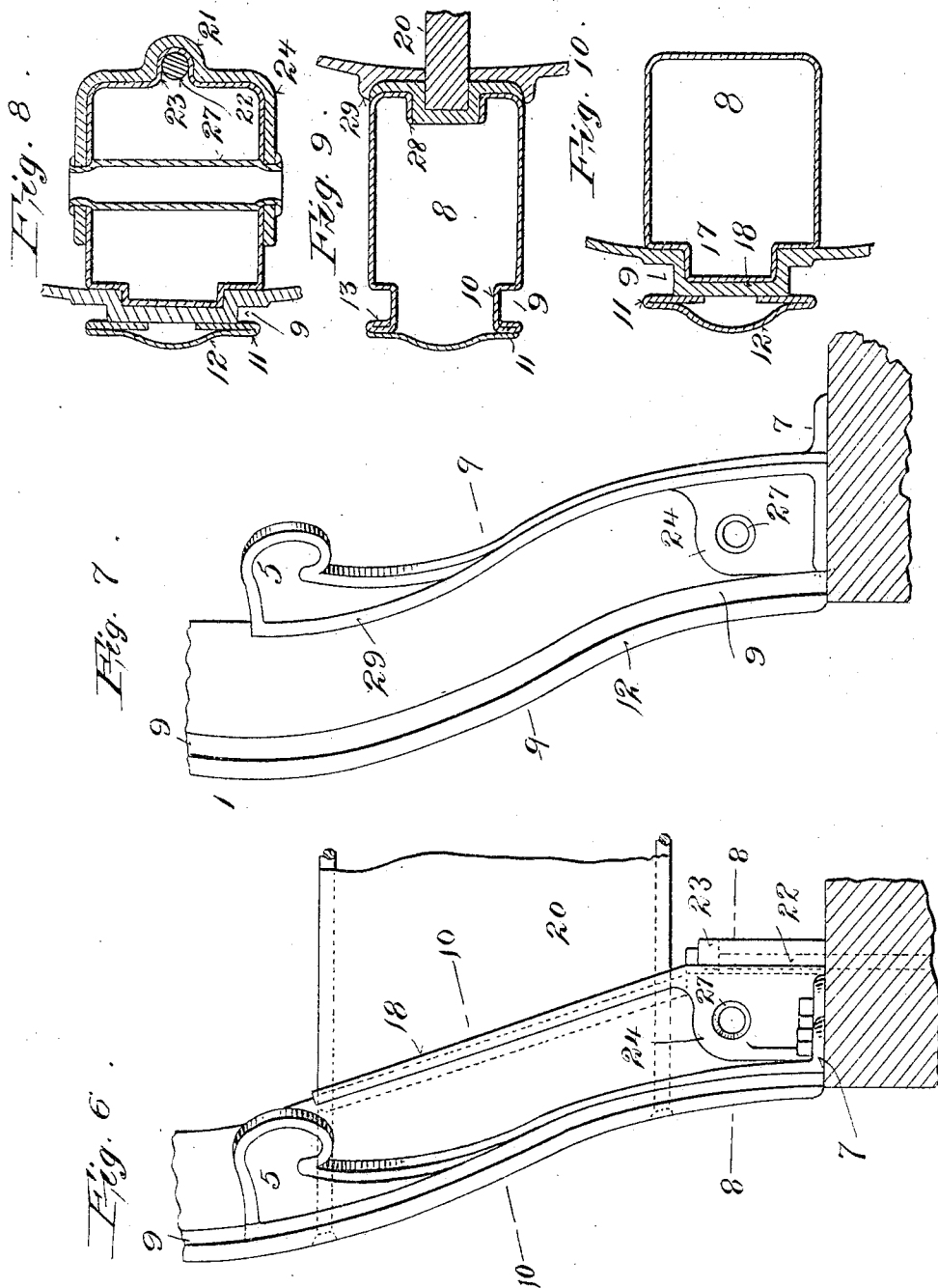
APPLICATION FILED OCT. 26, 1904.

4 SHEETS—SHEET 1.



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4 SHEETS—SHEET 3.

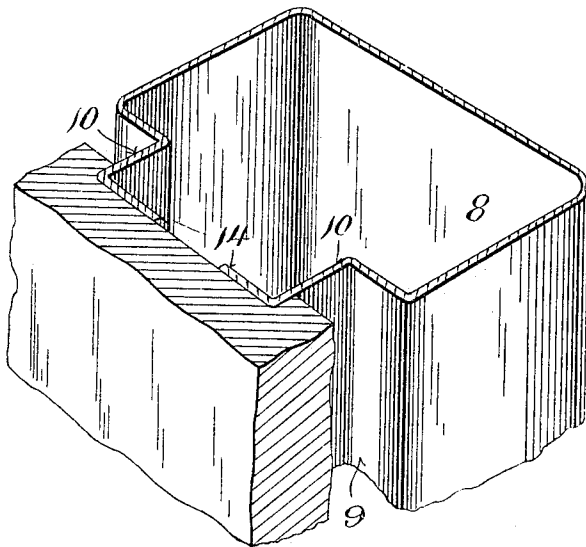


Fig. 13.

Fig. 12.

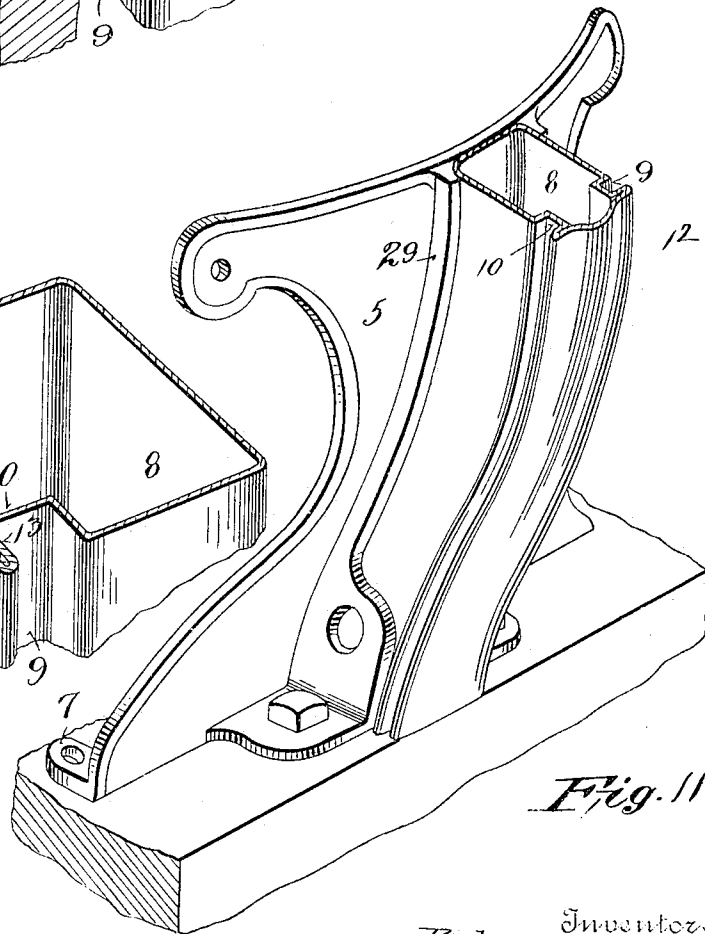
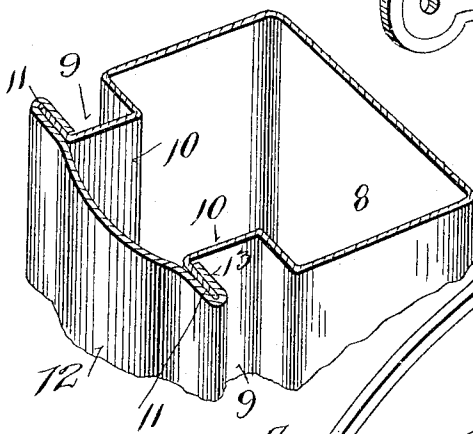


Fig. 11.

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4 SHEETS-SHEET 4.

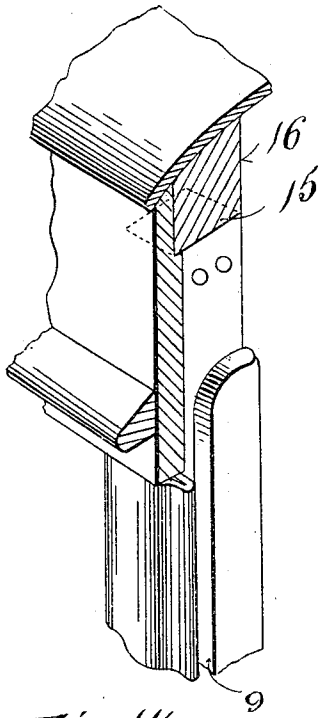


Fig. 14.

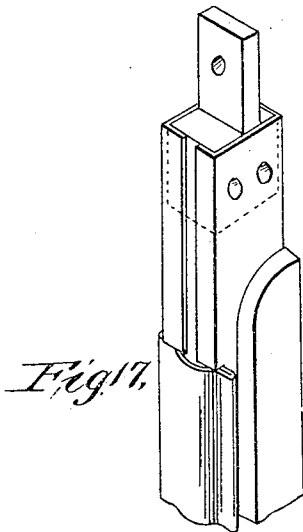


Fig. 17.

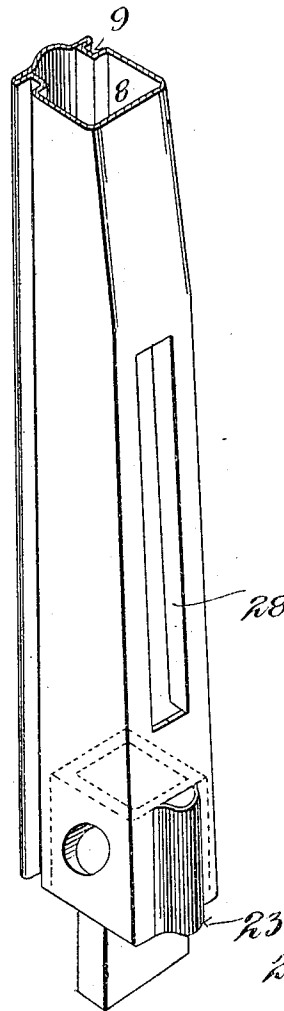


Fig. 15.

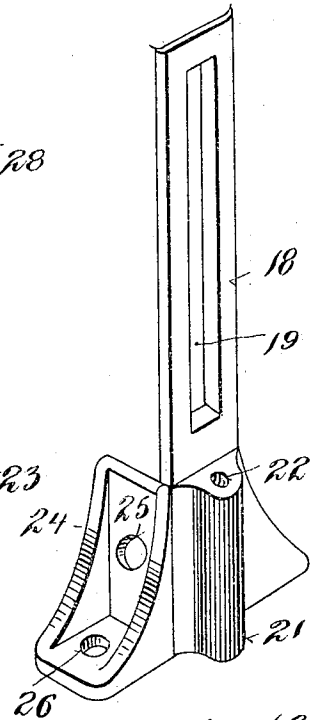


Fig. 16.

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UNITED STATES PATENT OFFICE.

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CAR CONSTRUCTION.

No. 801,541.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed October 26, 1904. Serial No. 230,116.

To all whom it may concern:

Be it known that we, RICHARD J. McHALE and PETER HABERLE, citizens of the United States, and residents of the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Car Construction, of which the following is a specification.

Our invention is especially adapted to the construction of open street-railway cars, although some of the features may be used on other cars; and it consists, among other things, in providing a novel and simple means of constructing the stanchions of the car of metal instead of wood, thereby increasing the strength and reducing the cost, as well as doing away with some of the inflammable material of the car.

Various other objects of our invention will be hereinafter set forth, and further pointed out in the claims.

In the drawings similar reference-numerals indicate corresponding parts in the several views, in which—

Figure 1 is a side elevation of a metallic stanchion, showing the curtain-groove. Fig. 2 is a similar view of a stanchion with the lower end curved inward, as is quite customary. Fig. 3 is a front elevation of the stanchions shown in Figs. 1 and 2, together with the seat end panel. Fig. 4 is a vertical section on the line 4 4 of Fig. 3 looking in the direction of the arrows. Fig. 5 is a cross-section on the line 5 5 of Fig. 3 in the direction of the arrows. Fig. 6 is a section between the car-seats and showing an elevation of the stanchion end, with the seat-panel and other parts attached. Fig. 7 is a similar view with the seat-panel attached to the inner side of the stanchion. Fig. 8 is a cross-section on the line 8 8 of Fig. 6 in the direction of the arrows. Fig. 9 is a cross-section on the line 9 9 of Fig. 7 in the direction of the arrows. Fig. 10 is a cross-section on the line 10 10 of Fig. 6 in the direction of the arrows. Fig. 11 is a perspective view of the seat-panel and post construction shown in Fig. 7. Figs. 12 and 13 are perspective views of the stanchion, taken at different points thereof; and Figs. 14, 15, and 16 are perspective views of the stanchion, showing the manner of its connection at the top and bottom and facing-

strip, respectively. Fig. 17 is a perspective view of the top of the stanchion, showing the filler in the end thereof.

In the construction of railway-cars, and particularly open or summer street-cars, it has been customary to make the stanchion of wood; and it is the object of our invention to simplify, cheapen, and increase the efficiency of the stanchions as well as improve the method of securing the stanchions with the other parts of the car by making the stanchions of hollow metal, such as steel, and in the manner set forth.

Referring especially to Figs. 1 to 5, in this construction we employ a stanchion 1, which may be straight, and having the usual groove for the curtain, though the present practice of car-building generally requires a post, such as 2, wherein the lower end is given a curve at 3. The post is provided with a longitudinal slot 4, Fig. 4, running from the bottom upward, whereby the end of the stanchion may be made to straddle the seat end panel 5, and by providing bolts 6, secured from the outside of the stanchion of one side of the car to the outside of the opposite stanchion, the seat-panels and stanchions are held firmly together. The seat-panel may be any preferred construction and is preferably provided with ears 7, having apertures whereby they may be bolted to the car-flooring. For the preferred construction of stanchion to be used in this manner, except such parts as have already been described, reference is to be had to Figs. 12, 13, 14, and 15, in which the body of the stanchion is composed of a rectangular portion 8, formed of sheet metal and provided with an outside curtain-groove 9 by turning out one side of the post metal to form the groove-base 10. The metal is then bent again at right angles to form the edges 11, over which is secured the cap 12, by means of the turned edges 13.

At a point where the letter-board covers the stanchion the outer edges of the stanchion metal are turned at right angles in the opposite direction to the rest of the stanchion to form intumed ends 14, which may be sunk in the letter-board, as shown in Fig. 13. For the purpose of strengthening the stanchion and to secure it at the top I have provided an end

filler 15, bolted in the stanchion and which is mortised in the top rail 16.

In Figs. 6, 8, and 10 is shown a construction in which the seat-panel is secured to the stanchion on the outer side. The stanchion is provided with a second rectangular outer part 17 throughout the length of the panel instead of having edges turned outward, as in the other part of the stanchion, and about which is secured the panel, the recess 18 in the panel fitting the part 17. The cap 12 is then secured to the panel throughout its length, so that the panel forms the base and inside of the curtain-groove, while the cap forms the outer side thereof. A filler (shown in Fig. 16) may be secured on the inner side of the stanchion. It consists of an upper plate 18, with a vertical opening 19 to receive the end of the division-board 20, and a vertical cylindrical offset portion 21, adapted to overlap a similar projection 23 on the lower end of the stanchion, and is provided with a bolt-aperture 22, whereby a bolt may be used to pass through and hold the facing and post on the flooring or side sill. The face-plate is also provided with a base 24, adapted to partly surround the bottom of the stanchion, and has apertures 25 and 26. The apertures 26 are provided so that the base may be bolted to the car-flooring. A thimble 27 is passed through the apertures 25 and corresponding apertures in the stanchion and filler (see Fig. 15) and is spread on the ends, whereby the stanchion is prevented from spreading or collapsing.

In the construction shown in Figs. 7 and 9 the seat-panel is shown secured to the inner side of the stanchion. In this use the panel may, if desired, take the place of the facing-plate, it being provided with a similar slot to receive the division-board 20. This part 18 of the panel is then let into an opening in the stanchion formed by turning in the edges 28. In this case the outer side of the stanchion is finished all the way to the floor or sill. When the face-plate is used in this construction, the seat-panel is secured against the facing-plate 18 so that the flanges 29 overlap the edges of the same. It will be understood that the face-plate may be used, as shown in Fig. 9, or it can be left out, as shown in Fig. 11. When used without the face-plate, Fig. 11, we prefer to provide a base for the bottom of the panel to receive the stanchion, similar to the base of the face-plate shown in Fig. 16.

In securing the lower end of the stanchion to the car-sill we use an end filler 30, which fills the lower end of the stanchion and which is mortised in the side sill of the car. An aperture is provided in the filler to register with the apertures in the stanchion and through which the thimble passes.

While our invention is especially adapted

for open street-cars, there are many of the features which may be used in closed or semiconvertible cars.

Although we have described the embodiments of our invention in detail, we do not wish to be limited in the scope of the annexed claims to such details except where they are specifically included.

Having described our invention, what we claim is—

1. A railway-car having stanchion provided with a longitudinal slot and a seat-panel secured to said stanchion and straddled thereby.

2. A railway-car having stanchion provided with a longitudinal slot, and a seat-panel secured to said stanchion by bolts through the stanchion and panel said panel being straddled by the stanchion.

3. A railway-car having a stanchion provided with a seat-panel a filler for the stanchion, comprising an upright face-plate secured to the inner side of the stanchion, and provided with a vertical aperture to receive a division-board, and a base adapted to be secured to the car floor or sill.

4. A railway-car having a stanchion provided with an offset near its lower end, a filler for the stanchion, having a base adapted to partly surround the stanchion and provided with an offset a bolt adapted to engage the offset in the stanchion and filler and secured to a member of the car-body.

5. A railway-car having a stanchion provided with an offset near its lower end, a member for the stanchion comprising an upright plate secured against the inner side of the stanchion and provided with an aperture to receive a division-board and a base adapted to partly surround the stanchion having means for engaging with the offset on the stanchion and means for securing said base to a member of the car-body.

6. A railway-car having a stanchion, a member therefor comprising an upright plate secured to the inner side of the stanchion, a base therefor adapted to partly surround said stanchion, and means passing through the base and stanchion for holding them together.

7. A railway-car having a hollow metal stanchion, a member therefor comprising an upright plate secured to the stanchion and a base therefor adapted to partly surround said stanchion and a thimble passing through the stanchion and base having shoulders adapted to interiorly engage against the stanchion and the outer ends adapted to engage the said base.

8. A railway-car having a stanchion, a seat-panel secured to the stanchion and provided with a base resting on the car-floor and secured to and adapted to partly surround said stanchion.

9. A railway-car having a stanchion, a seat-panel having longitudinal flanges adapted to engage the stanchion, and a base on the panel adapted to partly surround said stanchion and secure the end thereof to a member of the car-body.

10. A railway-car having a stanchion, provided with an offset, a seat-panel secured to said stanchion and provided with a base having means for engaging the offset on the stanchion, and means for securing the said base to a member of the car-body.

11. A railway-car having a stanchion a seat-panel secured to the inner side of the stanchion and provided with an aperture to receive the end of a division-board.

12. A railway-car having stanchion of hollow metal provided with outturned edges, and a cap secured over said edges.

13. A railway-car having stanchions composed of hollow metal having edges bent outwardly to form a groove-base, and a cap thereon to form the outer side of said groove.

14. A railway-car having a stanchion, composed of a rectangular metallic body portion, the outturned edges forming the base of a groove, a cap on the said edges to form the

outer side of the groove, said edges being turned inwardly at the top and adapted to engage with the letter-board.

15. A railway-car having a top rail, side sills, and a stanchion comprising a hollow metal body portion, a filler in the top end of the stanchion and mortised in said top rail, and a filler in the lower end of said stanchion in the said side sill.

16. A railway-car having stanchions of hollow metal and provided on the inner side with inturned edges providing an opening adapted to receive a filler.

17. As an article of manufacture a stanchion for railway-cars, comprising a hollow metallic body, fillers in the ends thereof and a curtain-groove in said stanchion.

18. As an article of manufacture a stanchion for railway-cars comprising a hollow metal body portion having a curtain-groove, and provided with an offset.

Signed this 6th day of September, 1904.

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