

W. S. SCHROEDER.
GONDOLA CAR.

Patented Sept. 14, 1897.

[illegible]

FIG. 2.

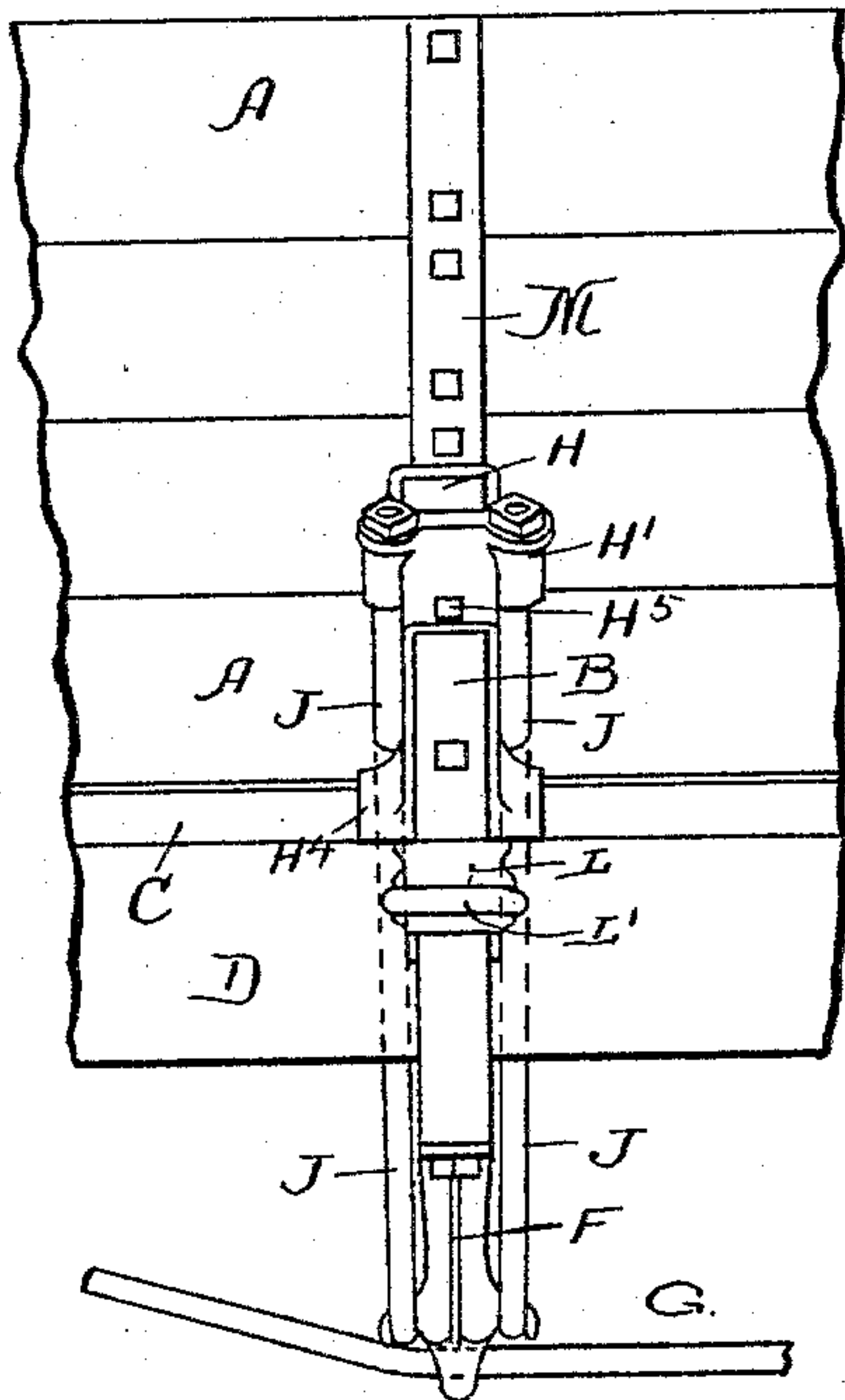
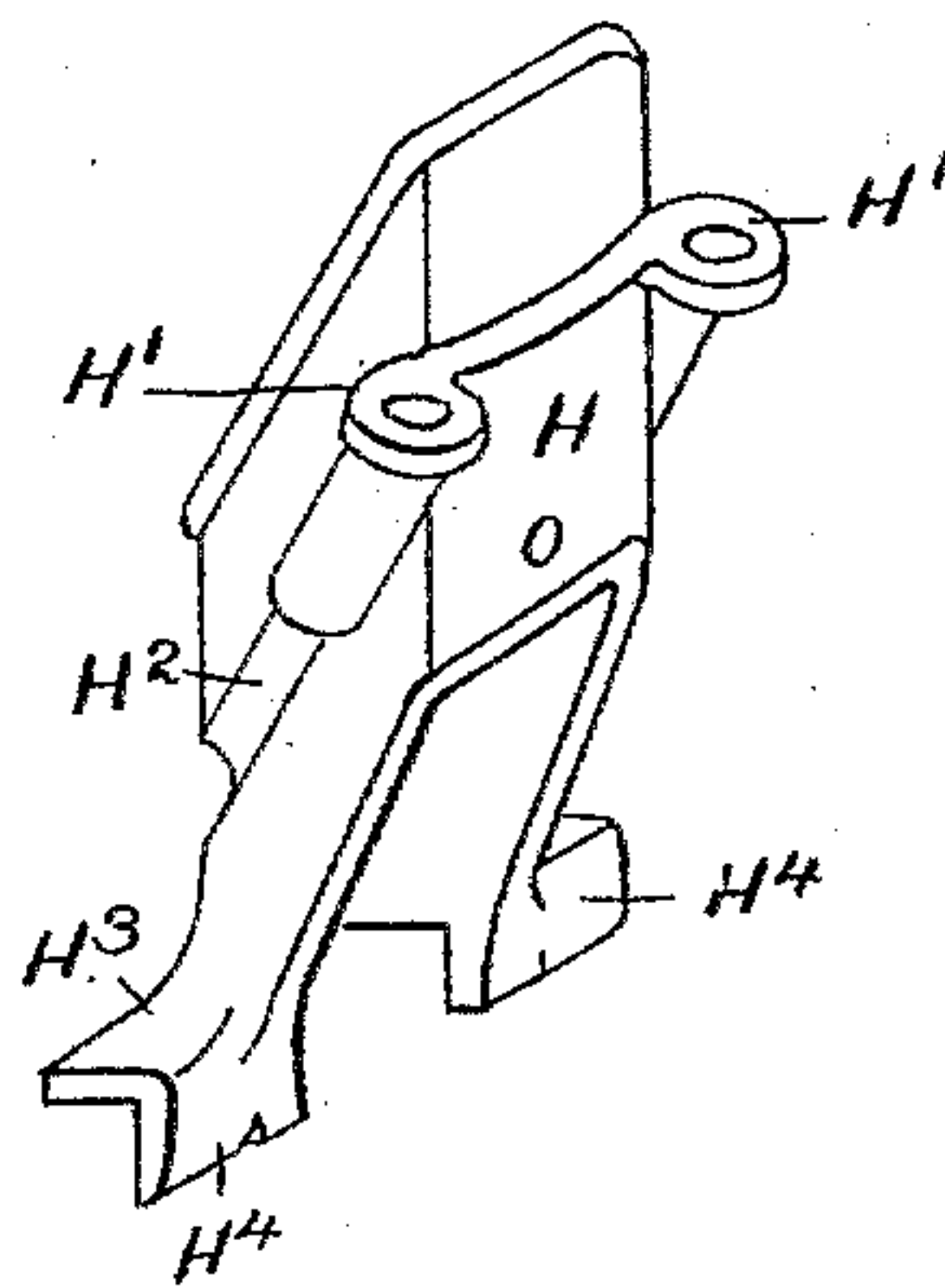


FIG. 3.



Sci. E. Curtis
A. W. Munday

BY *Munday, Everts & Adcock.*

HIS ATTORNEYS,

UNITED STATES PATENT OFFICE.

WILLIAM S. SCHROEDER, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF
TO CHARLES A. SCHROYER, OF OAK PARK, ILLINOIS.

GONDOLA CAR.

SPECIFICATION forming part of Letters Patent No. 589,860, dated September 14, 1897.

Application filed March 8, 1897. Serial No. 626,461. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. SCHROEDER, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Gondola Cars, of which the following is a specification.

This invention is an improvement upon the construction of gondola cars shown in the patent to me, No. 572,279, dated December 1, 1896. In it I employ a stake-pocket very similar to the one shown in my said patent and extend the truss-rods from said pocket down below the needle-beam or across the center tie and also under the queen-posts, and I connect the lower ends of the truss-rods together, so that they form practically one continuous connection from the stake-pocket on one side to the corresponding stake-pocket on the other side. The stake-pockets being firmly bolted to the stakes, it results from this construction that I transmit much of the load-sustaining power of the side planking to the center and intermediate sills of the car, such sills resting upon the center tie, and also truss said center tie, and I also by this construction secure the coöperation of the planking at both sides of the car in effecting this result.

The nature of the invention and details of construction are fully disclosed in the accompanying drawings, in which—

Figure 1 is a transverse vertical section of a car containing my invention. Fig. 2 is a partial side elevation, and Fig. 3 shows the stake-pocket detached.

In said drawings, A represents the side planking, B the side stakes, C the floor, D the side sills, D' the center sills, D² the intermediate sills, and E the cross center tie, of a car.

F F are the queen-posts, attached to the under surface of the cross center tie, and G G are longitudinal truss-rods, having bearings in said posts.

My improved stake-pocket is fully shown at Fig. 3 and is designated by the letter H in the other figures. It is provided with eyes H' at either side for the reception of the cross truss-rods J, and also with grooves H² upon the sides, in which said rods may lie. At the bot-

tom the pockets are provided with inwardly-projecting feet H³, adapted to rest upon the floor of the car, as seen at Fig. 1, and also with downwardly-projecting heels H⁴, adapted to be set against the outer edge of the flooring, as also shown. The stake-pockets set over and inclose the stake upon its exposed sides. The truss-rods J, one at each side of the stake, are passed downwardly in directions inclined toward the center of the car from the stake-pockets to and under the queen-posts F F, and their lower ends are joined together in some suitable manner between the posts, so that each pair of corresponding rods become practically one continuous rod. A convenient means of thus uniting their ends is a turnbuckle K.

Inasmuch as the flooring is liable to rot before the other parts of the car, I provide the stake-pocket, with some vertical support in addition, to the floor, and for this purpose I place the lower stake-pocket L up close under the heel of the main stake-pocket H, as shown at Figs. 1 and 2. This lower stake-pocket is bolted to the sills in the usual manner by a U-shaped bolt L'. The stake-pocket H is bolted to the stake and planking by the bolt H⁵, and the planking is tied together by vertical straps M in the usual manner. By this construction it will be seen that the center supports of the car-floor will be very much stiffened because of the aid given them in supporting the load by my construction of truss-rods and the planking; also, that the center ties will be trussed by the rods and posts, and that the queen-posts will be steadied by the rods J, which pass under them in directions crossing the longitudinal rods.

The truss-rods are used in pairs, one at each side of each stake and its pocket, and they pass down at each side of the cross-tie beam, and the queen-posts are each provided with two bearings, one for each truss-rod.

When the load deflects the center and intermediate sills of the car embodying my invention, it causes a tightening of the truss-rods and the transfer to the side planking of much of the burden, and the greater the deflection the greater the burden so transferred.

I claim—

1. The combination in a railway-car, with

the side planking and stakes, and pockets attached to the stakes, of continuous truss-rods connecting the pockets of corresponding stakes at opposite sides of the car, substantially as specified.

2. The combination with corresponding stakes and their pockets at opposite sides of the car and the side planking, of truss-rods J attached one to the pocket of each stake and joined together at their lower ends below the car-body, substantially as specified.

3. The combination of the corresponding stakes at opposite sides of the car, the truss-rods J joined to said stakes and connected together at their lower ends, and the queen-posts affording bearings to said rods, substantially as specified.

4. The combination in a gondola car of corresponding stakes at the opposite sides of the car, truss-rods attached to said stakes and united together at their lower ends, the cross center tie and the queen-posts attached to said tie and affording bearings to the truss-rods, substantially as specified.

5. The combination in a gondola car of stake-pockets located above and supported

upon the floor or side sills, the stakes, and truss-bolts connecting corresponding pockets at opposite sides of the car and acting to support the center of the car-body, substantially as specified.

6. The combination in a gondola car, of stake-pockets located above and supported upon the floor or side sills, the stakes, the truss-bolts connecting corresponding pockets at opposite sides of the car, and having bearings upon the queen-posts, and said posts, substantially as specified.

7. The combination in a gondola car of the side planking tied to side sills, stake-pockets supported above said sills, and truss-bolts connecting corresponding pockets at opposite sides of the car and acting to support the center of the car-body, substantially as specified.

8. The combination with the stake of the truss-bolts, the stake-pocket H and the stake-pocket L, the latter supporting the other stake-pocket, substantially as specified.

WILLIAM S. SCHROEDER.

Witnesses:

E. S. EVARTS,

H. M. MUNDAY.