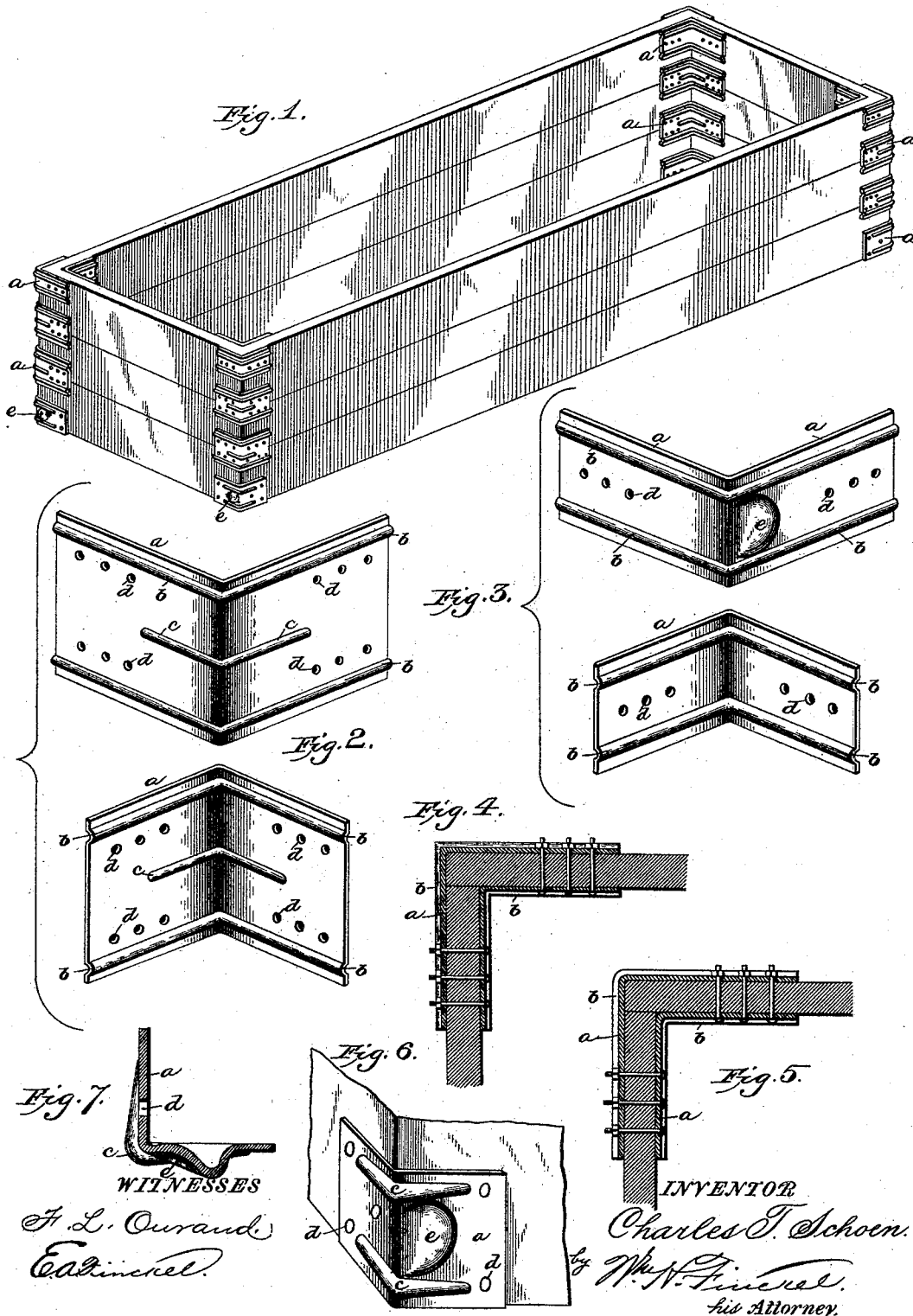


(No Model.)

C. T. SCHOEN.
CORNER STRAP FOR CARS.

No. 419,715.

Patented Jan. 21, 1890.



UNITED STATES PATENT OFFICE.

CHARLES T. SCHOEN, OF PHILADELPHIA, PENNSYLVANIA.

CORNER-STRAP FOR CARS.

SPECIFICATION forming part of Letters Patent No. 419,715, dated January 21, 1890.

Application filed December 10, 1889. Serial No. 333,242. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. SCHOEN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Improvement in Corner-Straps for Railway-Cars, of which the following is a full, clear, and exact description.

This invention relates to the irons, straps, or clamps used to brace, strengthen, or re-enforce the corners of cars. Ordinarily these irons have been applied in pairs to the corners of the cars and united by bolts passed through and through—that is to say, one iron would be arranged outside the car and the other inside the car and in alignment with the outside iron and the two united by bolts. These irons have been made of cast-iron, and also of wrought-iron, and are comparatively costly; but the cast-iron ones are specially objectionable because of their weight, which, as is obvious, is so much unprofitable tonnage.

In my invention I have avoided the expensiveness of castings, and also removed the large percentage of their dead-weight by substituting wrought metal—such as plate or sheet steel, by preference Bessemer or similar steel—and have retained all the strength of the wrought and cast iron straps (indeed exceeded it) by ribbing the metal. I have added to the straps sockets to receive a pole for pushing a car.

My invention consists, then, of a corner-strap for cars constructed of wrought metal, with stiffening-ribs and with a push-socket, substantially as I will proceed now particularly to set forth and claim.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a perspective view of the body of a gondola-car broken away at one corner and showing the application of the straps inside and outside the car. Fig. 2 shows in perspective a pair of double-ribbed straps. Fig. 3 shows in perspective a pair of single-ribbed straps. Fig. 4 is a cross-section (horizontal) of a corner of a car with my straps applied, and Fig. 5 is a similar section showing straps having rounded instead of angular corners. Figs. 6 and 7 are respectively a perspective view and a longitudinal section of the strap having the push-socket.

In practicing my invention I cut from sheet metal, in any suitable manner and by any suitable means, a blank of proper size to form a corner-strap. This blank is to be ribbed along its longitudinal edges and bent at right angles and provided with openings for the passage of the bolts. The ribbing of the metal may be done in the sheet or in each individual blank and by means of dies, rolls, or other appliances; and so, also, the punching or making of the bolt-holes may be done at any convenient stage of the process of making the straps.

In the examples of straps shown in the drawings, Fig. 2 illustrates what may be called the "double" strap *a*, having marginal ribs *b* and intermediate shorter ribs *c* and bolt-holes *d*. Fig. 3 illustrates what may be called the "single" strap, in which the shorter ribs may or may not be used, and a single row of bolt-holes be all that is required. Figs. 6 and 7 show the strap with the push-socket *e*, the object of which is to receive a pole or bar by which to push the car from an engine on a parallel track. This socket is made by pushing up the metal of the strap obliquely, or at an angle to its plane. As shown in all the views, the straps are right angular; but the corners may be rounded, as indicated in Fig. 5.

In practice my corner-straps may be made of wrought metal of about half the thickness and weight of ordinary flat wrought-straps and at very much less cost. At the same time they will present a much better appearance. These wrought-metal straps are applied to a car by bolts in the ordinary manner, as clearly illustrated in the drawings, more particularly Figs. 4 and 5.

What I claim is—

A corner-strap for cars, constructed of wrought metal, with stiffening and strengthening ribs and a push-socket, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand this 7th day of December, A. D. 1889.

CHARLES T. SCHOEN.

Witnesses:

EDWARD P. HIPPLE,
W. H. SCHOEN, Jr.