

No. 731,733.

PATENTED JUNE 23, 1903.

J. McE. AMES.
UNDERFRAMING FOR RAILWAY CARS.

APPLICATION FILED FEB. 27, 1903.

NO MODEL.

Fig. 1.

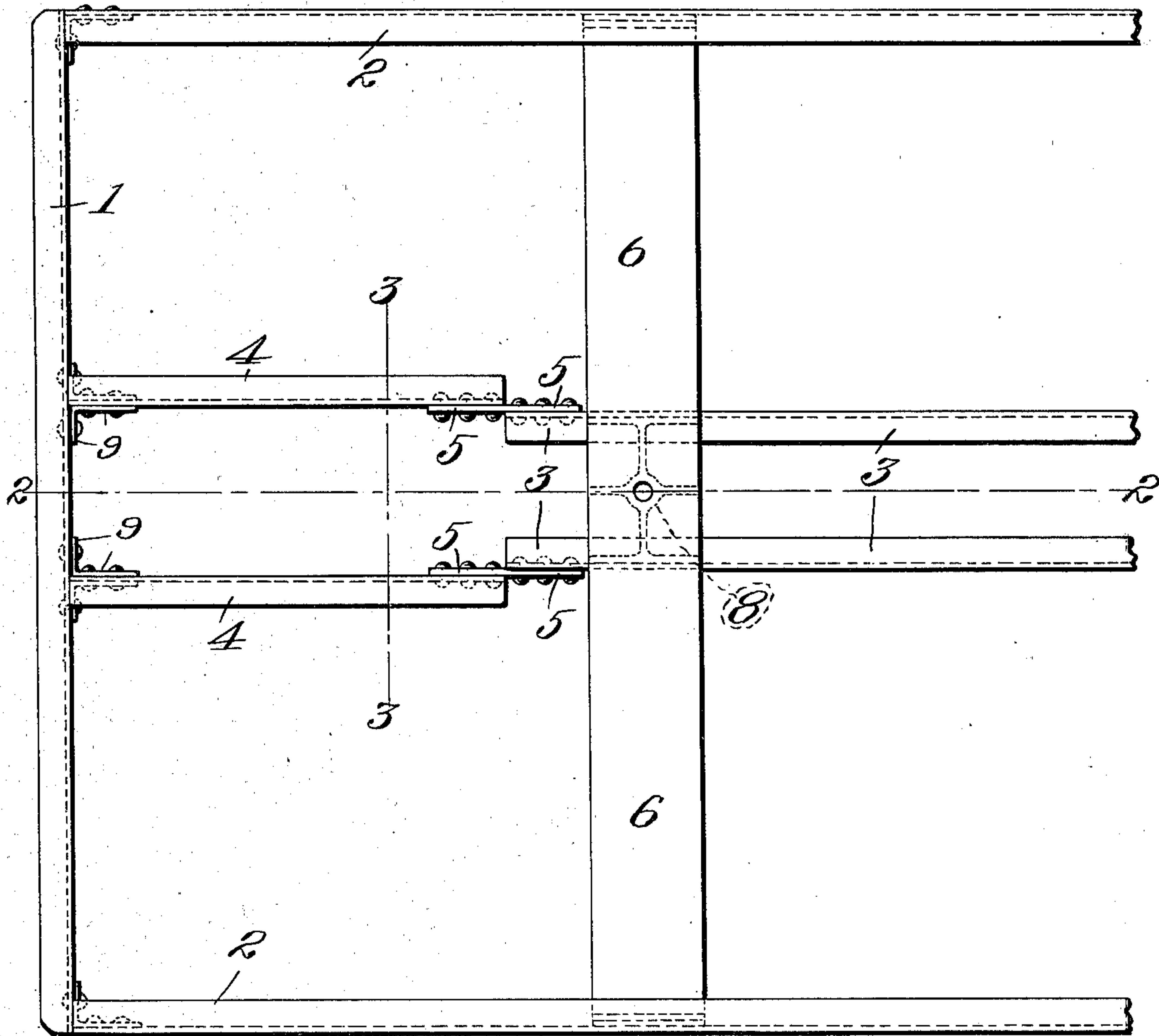


Fig. 2.

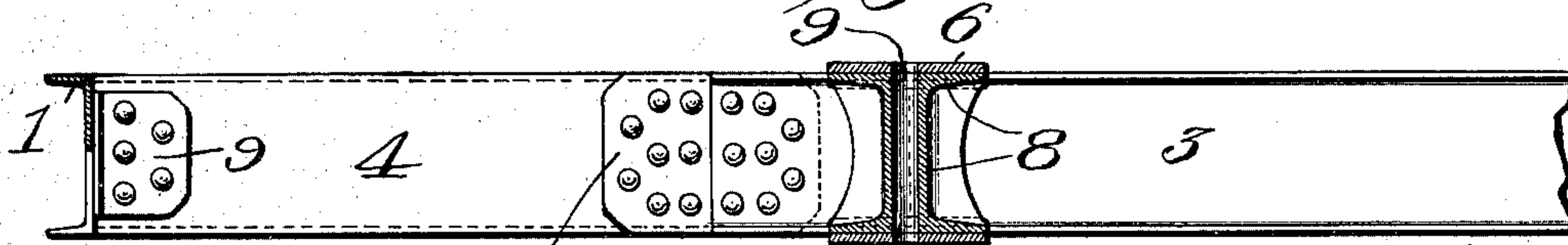
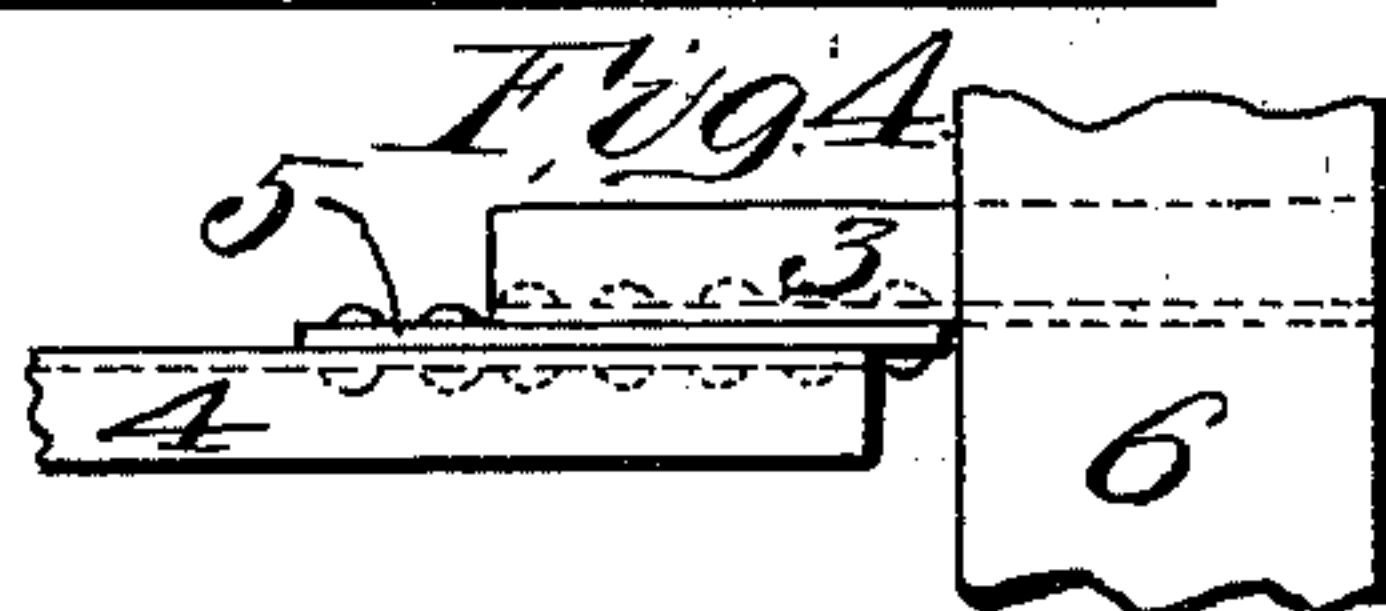
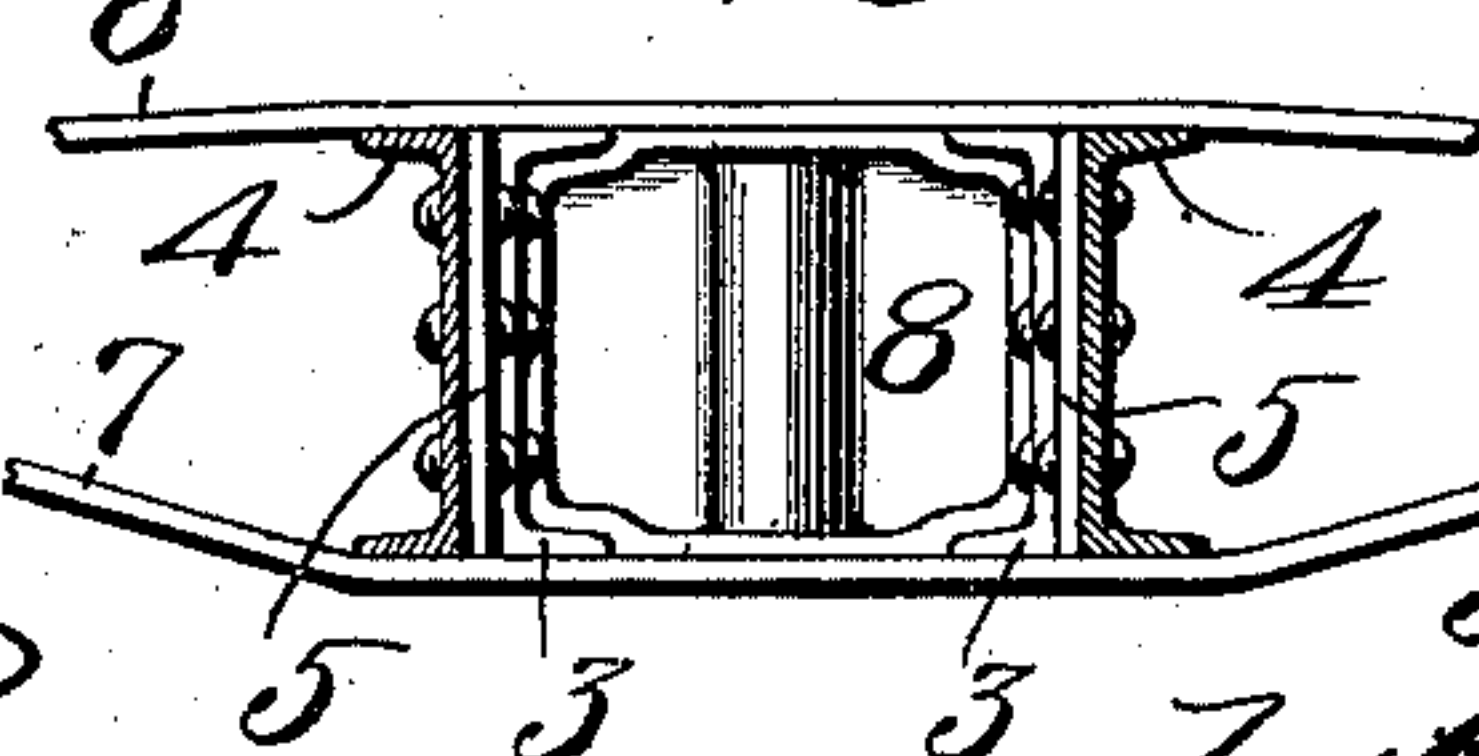


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN MCE. AMES, OF NEW YORK, N. Y., ASSIGNOR TO AMERICAN CAR & FOUNDRY COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

UNDERFRAMING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 731,733, dated June 23, 1903.

Application filed February 27, 1903. Serial No. 145,318. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCE. AMES, a citizen of the United States, residing at New York city, county and State of New York, have invented a certain new and useful Improvement in Underframing for Railway-Cars, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of one end of an underframe containing my invention. Fig. 2 is a longitudinal sectional view taken on line 2 2 of Fig. 1. Fig. 3 is a transverse section of Fig. 1, taken on line 3 3; and Fig. 4 is a detail view of a modified form of construction hereinafter referred to.

This invention relates to new and useful improvements in underframing for railway-cars; and it consists in certain features of novelty in the detail construction and arrangement of parts thereof, all as hereinafter more fully described, and particularly pointed out in the claims.

The object of the invention is to provide a simple and economical connection between the center sills employed in my improved underframe and the draft-sills thereof which will enable the parts to be easily assembled and readily repaired in case of partial destruction.

Referring to the drawings, 1 is the end sill. 2 represents the side sills. 3 represents the center sills. 4 represents the draft-sills.

5 is an intermediate connecting member interposed between the webs of the center sills 3 and the webs of the draft-sills 4 and riveted, respectively, to said center sills and draft-sills through the web portions thereof.

6 is the upper plate of a skeleton bolster extending from side sill to side sill and connected with said side sills in any convenient or desirable manner. 7 is the lower member of said bolster, and 8 is a filler-block interposed between the upper and lower members of the bolster, said filler-block being provided with the usual vertical opening 9 for the king-pin. (Not shown.)

In the construction herein illustrated the center sills are formed of rolled channel members with their flanges projecting inwardly, while the draft-sills are likewise composed of rolled channel members with their flanges oppositely disposed, thereby permitting their vertical webs to have a large surface bearing upon the interposed connecting-plate 5. In this construction the center sills extend through the skeleton bolster herein illustrated and are connected to the filler-block 8 thereof, while a portion of said center sills extends outwardly beyond said bolsters in the direction toward the end sills, whereby short draft-sills may be used which when connected to the center sills, as shown, form practically continuations thereof, though not connected directly to said center sills.

In the construction shown channel end sills are used, to which the short draft-sills may be connected in any convenient manner, though brackets 9 are shown, through which rivets extend for the purpose of uniting the draft-sills and end sill, and the side sills are shown in the form of rolled channel members with their flanges disposed inwardly.

In the modification shown in Fig. 4 the webs of the center sills and draft-sills overlap for a short distance only, though the plate 5 is used in such modification interposed between the webs of the center sills and draft-sills for the purpose of strengthening the same and extends beyond the overlapping portions at each end for a short distance, whereby a more rigid connection between said members may be provided.

I am aware that minor changes in the arrangement, construction, and combination of the several parts of my improved underframing can be made and substituted for those herein shown and described without in the least departing from the nature and principle of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a metallic underframe for railway-cars, channel center sills extending beyond the bolster at each end, rolled channel draft-sills extending from end sills to said center sills, said draft-sills having their flanges dis-

posed in an opposite direction from the flanges of said center sills, and a splice-plate interposed between and riveted to the webs of said center sills and draft-sills; substantially as
5 described.

2. In a metallic underframe for railway-cars, rolled channel center sills extending beyond the bolster at each end, rolled channel draft-sills extending from end sills to said
10 center sills, said draft-sills having their flanges disposed in an opposite direction from

the flanges of said center sills, and a splice-plate interposed between and riveted to the webs of said center sills and draft-sills; substantially as described.

In testimony whereof I hereunto affix my signature, in the presence of two witnesses, this 18th day of February, 1903.

JOHN MCE. AMES.

Witnesses:

PHILIP B. SHERIDAN,
P. P. STURDEVANT.