Sept. 11, 1923. 1,467,682

H. M. PFLAGER

TRANSOM DRAFT GEAR

Filed June 14, 1921

Fig. 1.

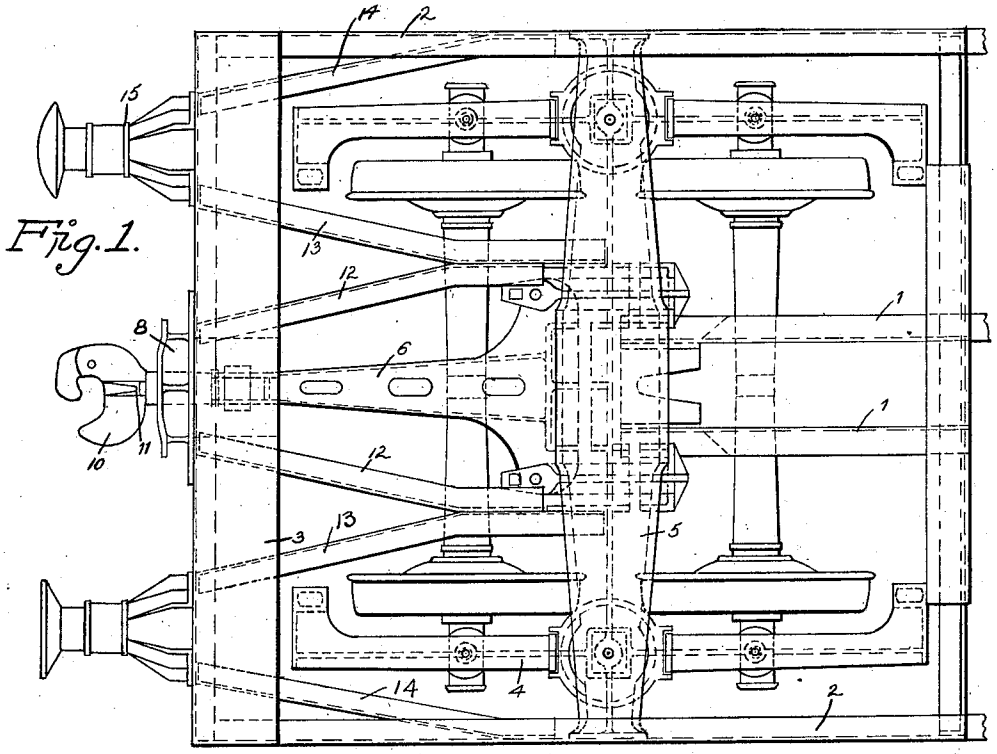


Fig. 2.

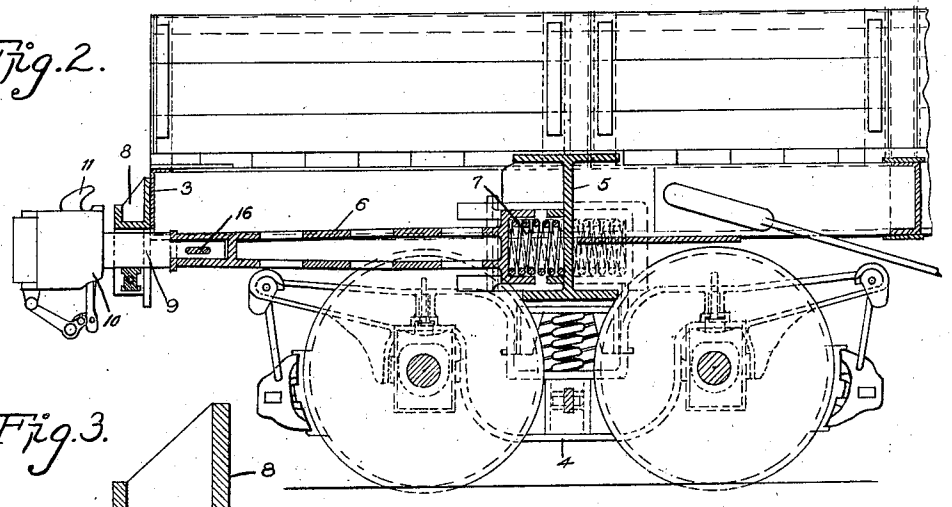
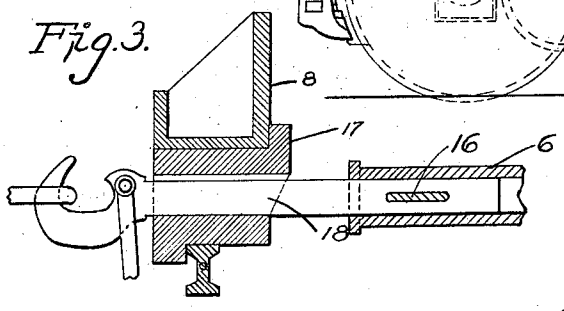


Fig. 3.



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UNITED STATES PATENT OFFICE.

HARRY M. PFLAGER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO COMMONWEALTH STEEL COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

TRANSOM DRAFT GEAR.

Application filed June 14, 1921. Serial No. 477,530.

To all whom it may concern:

Be it known that I, HARRY M. PFLAGER, a citizen of the United States, residing at St. Louis, Missouri, have invented a certain new and useful Improvement in Transom Draft Gears, 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.

My invention relates to railway rolling stock and in particular to transom draft gears, and consists in a draft gear and underframe construction adapted for both M. C. B. standard and European coupling practice.

The objects of my invention are, to provide a transom and associated parts adapted to be assembled with an M. C. B. coupler and shank and to transmit all of the draft stresses therethrough, or to be assembled with the usual draft rod and side buffers, such as are in common use on European railroads.

I also desire to provide a coupler element for such a draft gear which is adapted to cooperate with a similar coupler on the adjacent car or with the usual European coupling link on the adjacent car.

In the accompanying drawings which illustrate a selected embodiment of my invention,—

Figure 1 is a plan view of the end of a railway car with my invention applied thereto.

Figure 2 is a vertical longitudinal section taken on the center line of Figure 1.

Figure 3 is a similar detail section which shows a draft rod and link substituted for the coupler shown in Figures 1 and 2.

The car illustrated is provided with the usual center sills 1, side sills 2, end sills 3, and truck 4. The car body is preferably equipped with a cast steel transom 5 and a cast steel draw bar extension 6 which forms a part of the draft rigging assembled with transom 5 by means of suitable connections and the draft springs 7.

The end sill 3 is provided with a central buffing block 8 adapted to support the shank 9 of a coupler 10 having an M. C. B. contour and knuckle. Coupler 10 is preferably made with an integral hook 11 on its upper face, adapted to be engaged by a standard coupling link such as is used in European practice. To accommodate this position of hook 11, the coupler pin lifting and locking devices are located on the lower face of the coupler. The underframe is reinforced by braces 12 which extend from the end sill, immediately adjacent to buffer block 8, diagonally and rearwardly to a point adjacent to the connection between the drawbar extension 6 and transom 5, where they are preferably attached to similar braces 13 which connect transom 5 and end sill 3 at points on the latter spaced from buffer block 8. It will be understood that braces 12 may be secured directly to transom 5, if preferred. Similar braces 14 extend from the end sill at a point adjacent brace 13 to the side sill 2 adjacent the end of transom 5.

Yielding buffers 15 are mounted on end sill 3 in front of their respective braces 13 and 14 at each side of buffer 8.

It will be noted that with this construction coupler 10 enables the car to be coupled with a similarly equipped car, or with a car having an M. C. B. coupler only, and to transmit buffing and pulling stresses through shank 9, drawbar extension 6 and the draft springs 7, to bolster 5 and center sills 1. Or the coupler may be linked to a car equipped with European draft rod hooks and then it will only transmit the pulling stresses through extension 6. In the latter case, the buffing stresses will be received by buffers 15 and transmitted through braces 13 and 14 to transom 5 at spaced points on the latter. When so coupled, the arrangement of the various diagonal braces enables them to cooperate in sustaining the draft stresses, thereby forming an unusually rigid and efficient end construction for the underframe. With either coupling arrangement a substantial portion of a buffing stress is transmitted to the bolster at points adjacent to the connection of the latter to center sills 1 which is the most desirable distribution.

The rear end of coupler shank 9 terminates in a portion smallest at its extreme end and the forward end of extension 6 is provided with a pocket in which the rear end of shank 9 may be secured by means of a key 16. If it is desired to equip the car for European coupling practice exclusively, key 16 may be removed and coupler 10 with its shank 9 disassembled from extension 6.

Then a suitable bearing 17 may be mounted in buffer 8, and a draft rod 18 inserted therethrough and connected to extension 6.

I am aware that the particular arrangement of parts may be varied, without departing from the spirit of my invention, and I contemplate those modifications in adapting my invention to various types of cars, which fall within the scope of the following claim.

I claim:

In a railway car, an end sill, a bolster spaced from the end sill, longitudinally extending spaced center sills terminating at the bolster, a draft gear mounted on the bolster adjacent to said center sills, a center buffer block on the end sill, side buffers mounted on the end sill on opposite sides of the center buffer block, struts extending from the center buffer block diagonally towards the bolster, and struts secured to the bolster at points near the termination of the center sills and extending and secured to the end sill adjacent the side buffers.

In testimony whereof I hereunto affix my signature this 8th day of June, 1921.

HARRY M. PFLAGER.