



DATA SHEET

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Sheet #:	D5a
Title:	FREIGHT AND TENDER TRUCKS
Updated by:	David Halpern, MMR
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Originally Compiled by:	Harry M. Thomas
Drawings Furnished by:	Model Railroad Equipment Company
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INTRODUCTION

Pictured on this sheet are freight and tender truck side frames commonly used in the days of "modern steam" railroading and well into the diesel era. Though some of the side frames shown are seldom seen today on mainline railroads and others may be found in limited industrial use, all can be found in prominent rail and transportation museums around the country and ample reference materials, including excellent drawings, are available through the model railroad press. Modelers more familiar with the early history of railroading will note that "Old time" and obsolete truck types are not shown here.

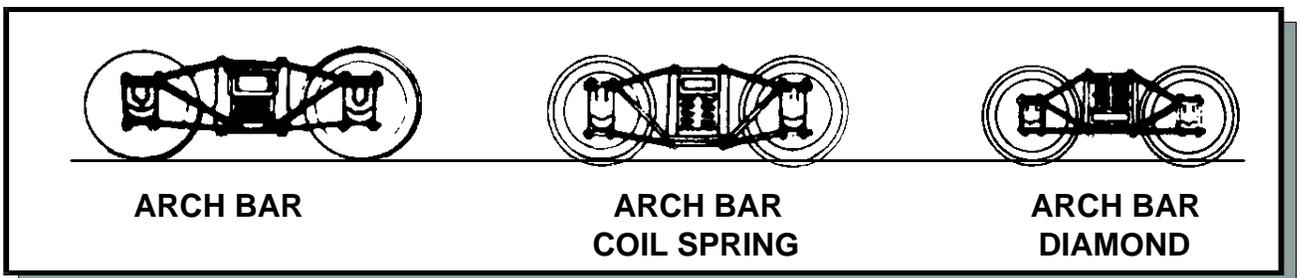
If you are a modeler with a relatively new interest in railroading, or if your modeling interests are purely contemporary, a trip to a local freight yard or engine terminal is highly recommended to familiarize yourself with equipment in current use. You will notice that much of today's rail equipment appears to be standardized. While there is an even wider variety of car types than ever before, the trucks on which they ride, their details and the safety appliances used on them appear very much the same from one car to another.

Each of the trucks shown here was built for various capacities. AAR standards (Rule 86) for axle size are as follows:

Table 1: AAR STANDARDS FOR AXLE TYPE AND SIZE

Axle Type	A	B	C	D	E	F
Axle Diameter at Center	4¼	4¾	5-3/8	5-7/8	6-7/16	6-7/8
Nominal Capacity of Car (1000 lbs.)	40	60	80	100	140	200

FREIGHT TRUCKS



Use of all the Arch Bar trucks shown above was permitted only on cars operating on the owning railroad's own system. They were not allowed on cars in interchange service. They were used chiefly on work cars, house cars, switcher tenders, short haul caboose and company supply cars.



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FREIGHT TRUCKS - continued



ANDREWS
COIL SPRING



BARBER
STABILIZED



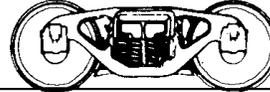
BETTENDORF



COIL ELLIPTIC



A.A.R.



DALMAN



NATIONAL TYPE B



SIMPLEX
HIGH SPEED



SYMINGTON
HIGH SPEED



SYMINGTON GOULD

The 4-wheel trucks shown above (except arch bar types) were used on automobile, box, flat, gondola, hopper, refrigerator, stock, and tank cars.



BUCKEYE
PLAIN BEARING



BUCKEYE
ROLLER BEARING



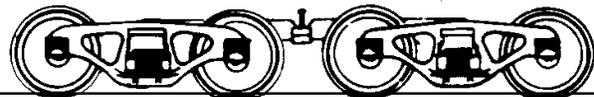
PENNSYLVANIA
HIGH CAPACITY



COMMONWEALTH



LAMONT



GOULD SPAN BOLSTER

The above 6 and 8-wheel trucks were used on heavy duty gondola, mill type gondolas, heavy duty flat and well cars or any car built for heavy or special loading.



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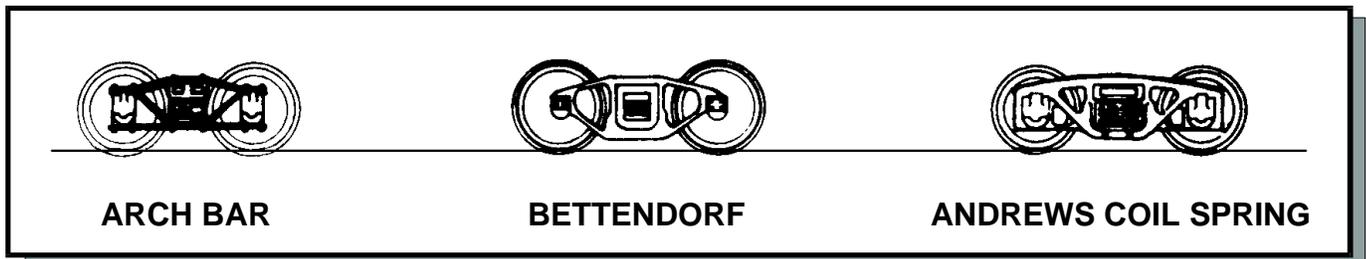
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FREIGHT TRUCKS - continued

Any freight car that is operated in passenger trains at high speed such as express refrigerator, railroad express, etc. must be equipped with passenger type trucks--see Data Sheet D5b.

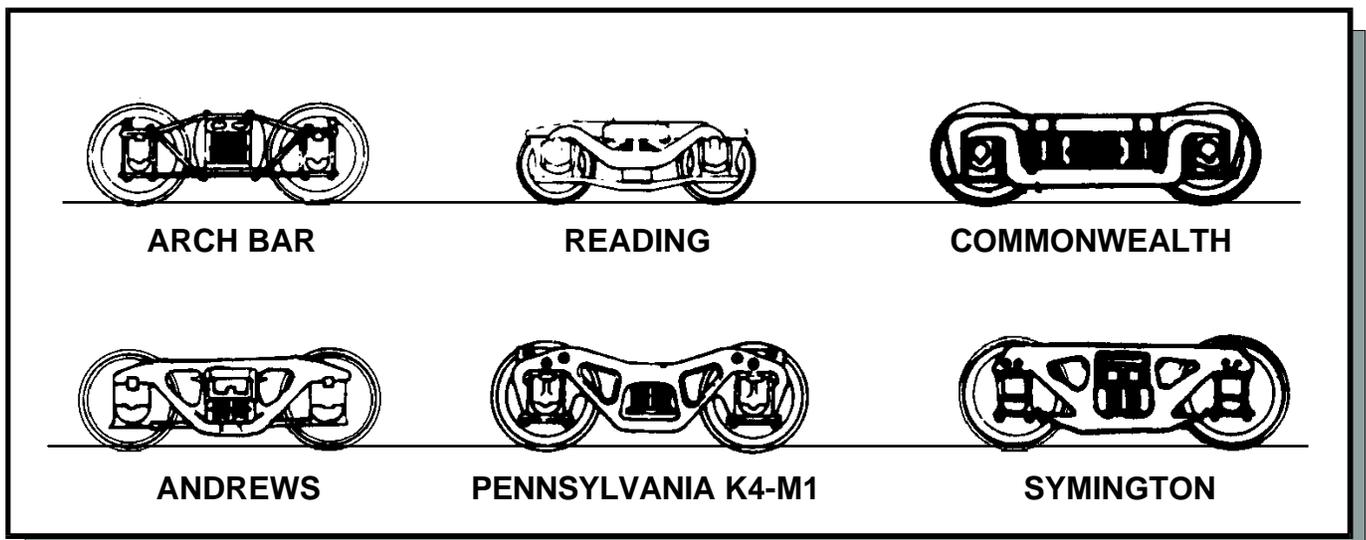
Most railroads and private owners select trucks based on capacity rather than type for any specific application. Hence, most any type of truck within the general limits set forth above can be used on any car provided the capacity of the truck and car match. It is suggested that when you are selecting a truck, you check the prototype's weight and the axle diameter against the values shown in Table 1 to determine the proper truck to use.

CABOOSE TRUCKS



Though caboose use has been discontinued on most modern railroads (except in transfer operations), their use was standard practice through the 1980s. On caboose cars, either Andrews or Bettendorf could be used for any type of caboose. Arch Bar sprung trucks could be used on caboose cars that are confined to tracks owned by the railroad, but they were not permitted in interchange.

TENDER TRUCKS





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TENDER TRUCKS - continued

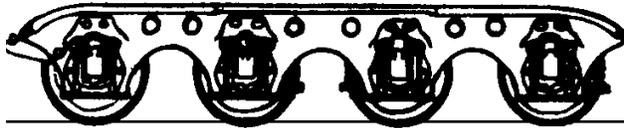
Steam locomotives used in road service were always served by a "tender" connected to the locomotive to carry fuel and water. In modeling, any type of tender trucks can be selected for use so long as they are matched to the tender's weight and loading, appropriate to the tender's design and the period during which the prototype would have been in use. However, arch bar type trucks should be used only on yard switchers and 6 and 8-wheel trucks should be used only on long haul or large capacity tenders.



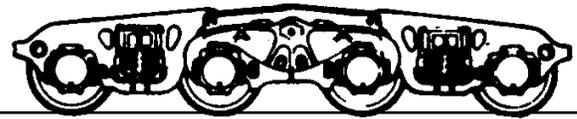
COMMONWEALTH 6 WHEEL



BUCKEYE 6 WHEEL



COMMONWEALTH 8 WHEEL



BUCKEYE 8 WHEEL

