

FREIGHT CAR EQUIPMENT OF THE CHESAPEAKE & OHIO RAILWAY 1937 — 1946

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Summary of end extension types:

Angular / Trapezoidal (applied)

Radial (applied)

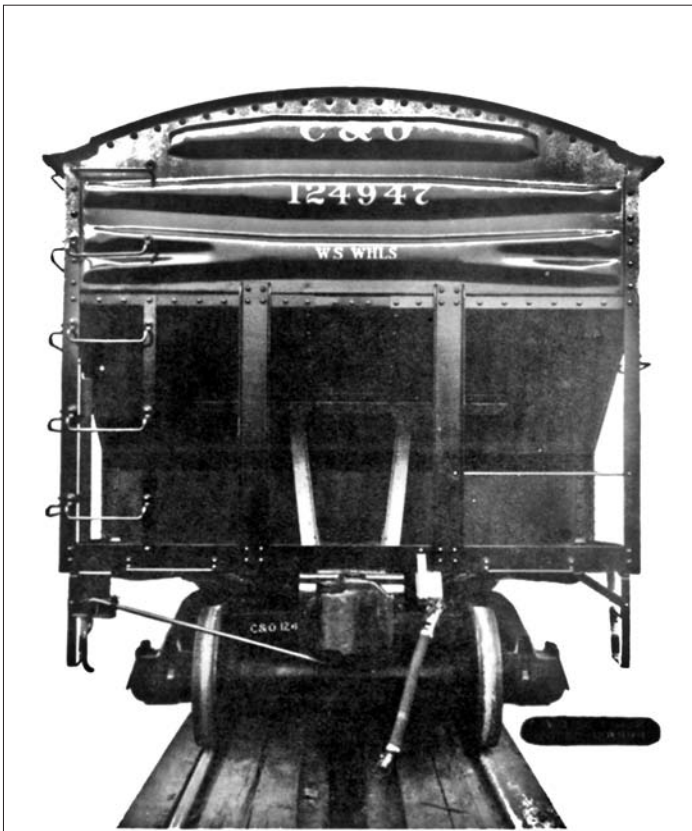
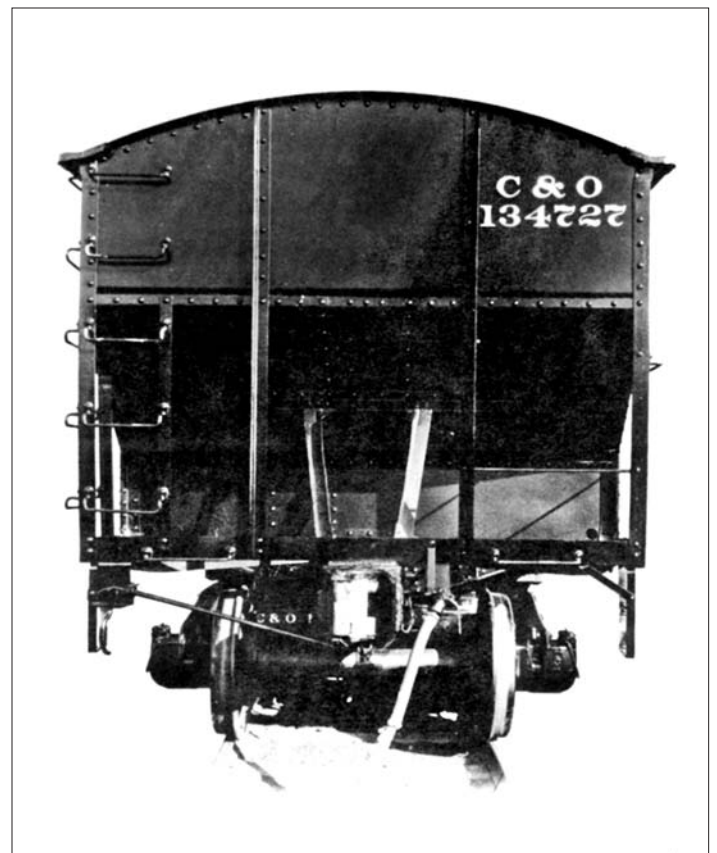
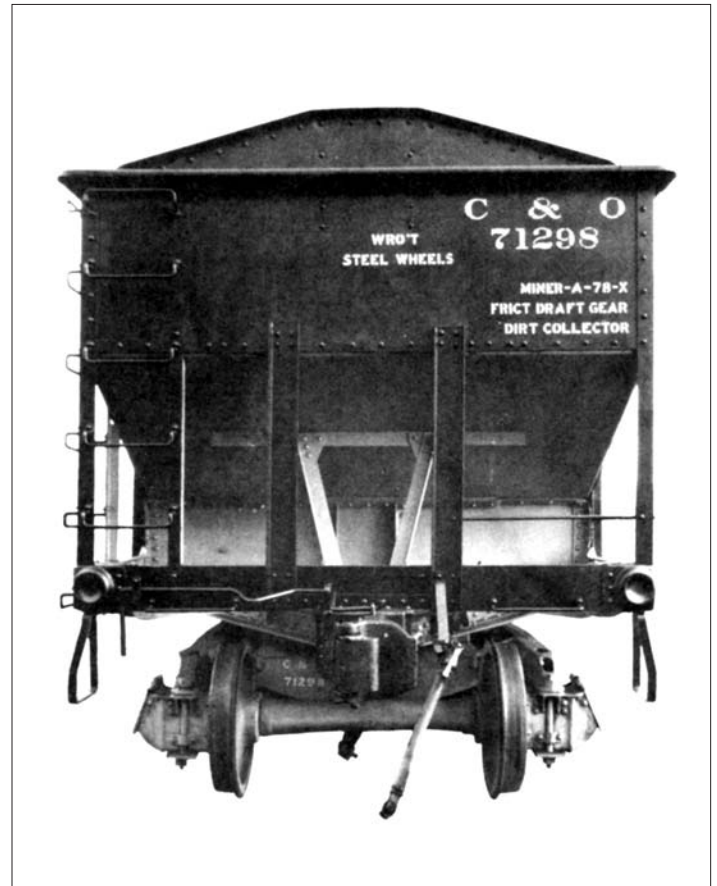
Bib (applied)

Radial (integral with flat end)

Radial (integral with corrugated end)

Notched Radial (integral with flat end)

Notched Radial (integral with corrugated end)



Above: Radial Arch extension with Dreadnaught end

Above Right: Angular end extension

Right: Radial Arch extension integral with the car end

Opposite Top Left: Double Notch Radial or "bib" extension

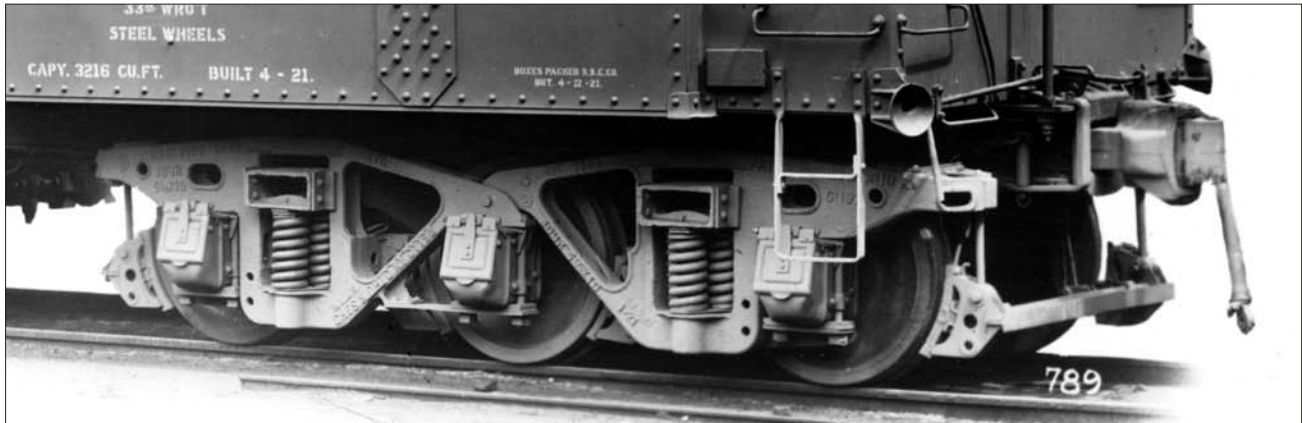
Opposite Middle Left: Arched Dreadnaught end, but with a much shallower arch.

Opposite Bottom: Radial Arch extension with Dreadnaught end on a gondola.

Opposite Top Right: Radial Arch extension applied to the car end

Opposite Bottom Right: Notched Radial Extension integral with the car end.

100-ton 6-wheel Trucks (5½" x 10" journals)



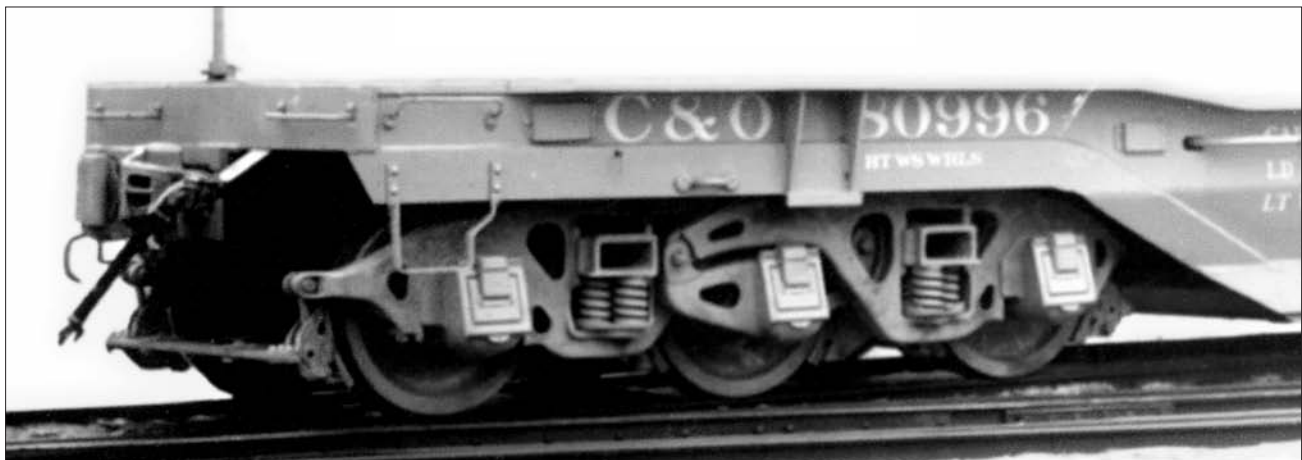
Original ASF Lewis clasp brake shoe truck with 50-ton axles and journals installed on C&O 100000-series gondola cars in 1921. Note the linkage and shoe assemblies at the end of the trucks. Sometimes these are referred to as "Pilcher-style" trucks (John Pilcher was the Chief Mechanical Engineer under W. H. Lewis at the N&W); these were replaced by the ASF Equalized trucks shown below.



Replacement 100-ton American Steel Foundries "equalized" six-wheel trucks with 50-ton journals and axles and clasp brake shoes, installed at Clifton Forge and Newport News in 1924 under the 91-ton 100000-series gondola cars. The cars were then placed in test service for an extensive shakedown period. These trucks stayed under these cars until they were retired in 1946.

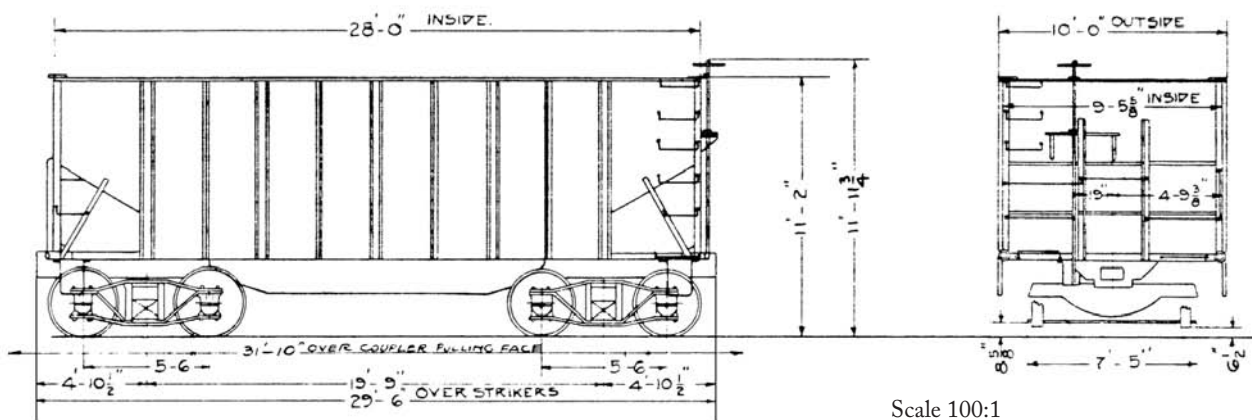
125-ton 6-wheel Trucks (6" x 11" journals)

125-ton Buckeye Steel Castings six-wheel trucks with 70-ton axles and journals built in 1942 for flat and deep-well flat cars. These trucks were also "equalized", with load distributed evenly over all three axles. The air brake reservoir tanks and cylinders were part of the truck assemblies.



50 Ton Hopper Car Class HM

Series 23000-23999



CAPACITY

Level Full . . . 1908 Cu. Ft.

Heap . . . 220 Cu. Ft.

Total . . . 2128 Cu. Ft.

H.7 Series 23000-23999 50-ton Ribbed-side Hopper

BUILT: Standard Steel Car Company, 1902

NUMBER OF CARS: Acquired 1000
August 1, 1937 3
July 1, 1946 0

LAST CARS RETIRED: in 1938

NOTES: These were the first all-steel hopper cars built by the Standard Steel Car Company. They were equipped with archbar trucks.

Between 1926 and 1935, these cars were classified H5-9.

Though most dimensions and the cubic capacity of cars in series 22000-22999 (see Section H.10) were identical to those of this series before they were rebuilt in the early 1920s, the 22000 series was built by a different carbuilder (the Pressed Steel Car Company), and the cars had a number of differences in their appearance, notably in that the 22000 series cars used hat-section side stakes and these cars used open u-section side stakes.





This builder's photo of C&O No. 122699 clearly shows the angular end extension that was standard on most of the cars in this group. Also clearly visible is the geared handbrake mechanism, characterized by the vertical brake wheel.

Standard A.R.A. and A.A.R. freight car designs

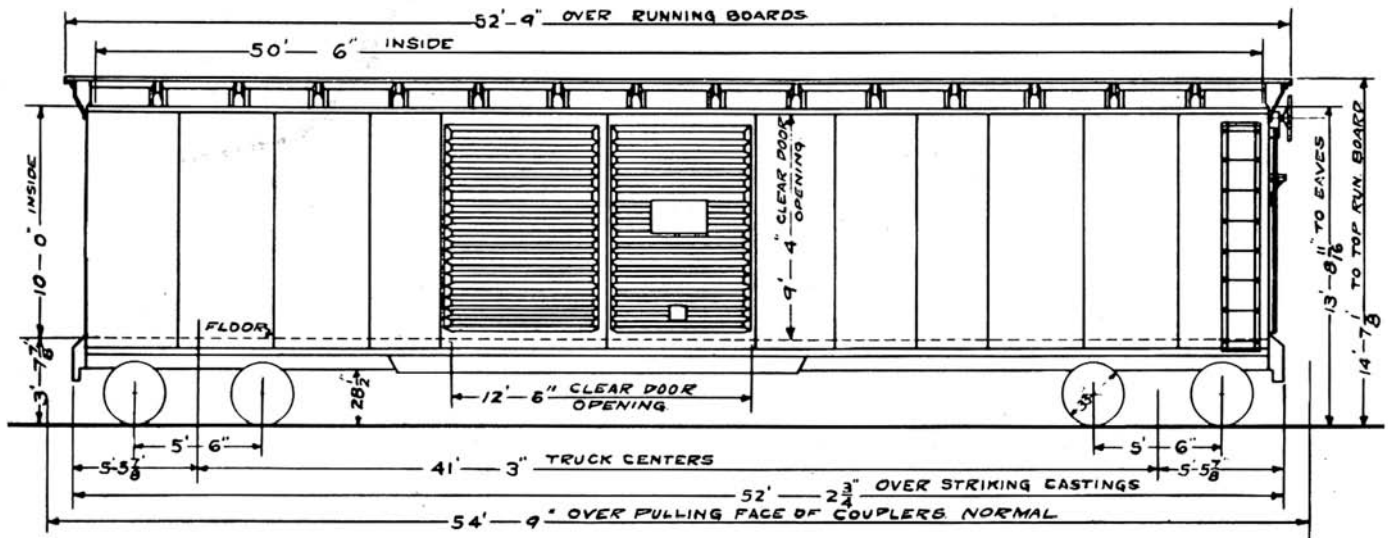
Hopper cars of the C&O built since the mid-1920s were, despite the distinctively-C&O modifications (such as ends and end extensions), often built to standards prescribed by the American Railway Association (and later the Association of American Railroads). In 1928, the A.R.A. came up with drawings for 50-ton offset-side triple hoppers and 70-ton offset-side quadruple hoppers, both of which were adopted by the A.R.A. as recommended practice. C&O cars of these types (see Sections H.13, H.18, and H.20) were based on these standards. Since the practices were only recommended, the C&O could—and did—deviate from them for many of its 50-ton hopper cars (see Section H.14).

In 1935, the Association of American Railroads' Car Construction Committee developed a new design for a 50-ton offset-side twin hopper car (as well as a 70-ton ribbed-side triple hopper car), and this design was later adopted as standard practice. It served as the basis for construction of the C&O cars shown in Section H.15, and for similar cars received throughout the rest of the 1930s and the 1940s (in 1942 the A.A.R. adopted a design for "Emergency" hoppers with steel-saving composite sides; the C&O received 3000 fifty-ton twin hoppers of this type as well).

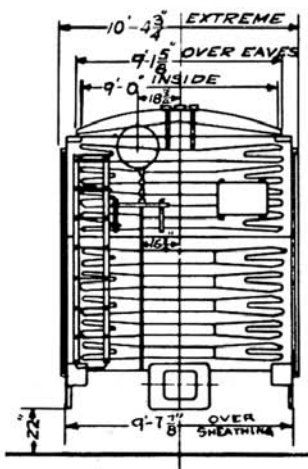
Hopper cars were not the only type to be governed by A.R.A. standards. C&O steel-sheathed box cars conformed to A.R.A. standards of 1932 (Section X.5), or A.A.R. standards adopted in 1937 (Section X.3; see also Section X.2).

50-Ton Automobile / Furniture Double-Door Box Car, Class XAF

Series 6700-6799



Scale 100:1



CAPACITY 4545 Cu. Ft.

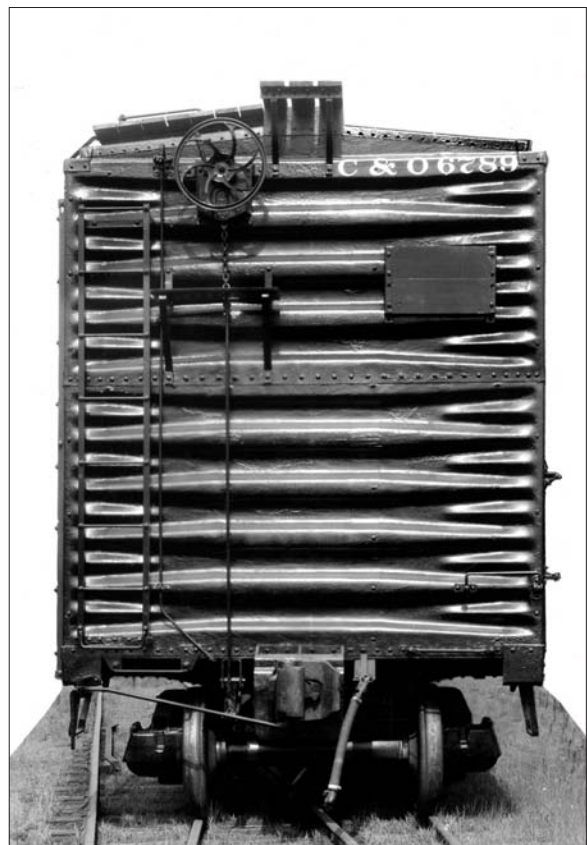
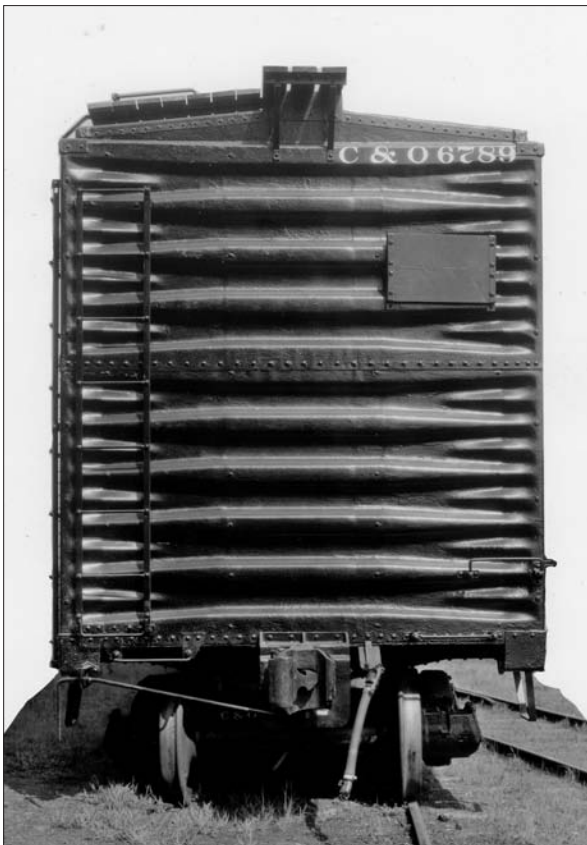
X.11 Series 6700-6799 50-ton Automobile / Furniture Double-door Box Car

BUILT: Mount Vernon Car Company, 1934

| | | |
|-----------------|----------------|-----|
| NUMBER OF CARS: | Acquired | 100 |
| | August 1, 1937 | 100 |
| | July 1, 1946 | 100 |

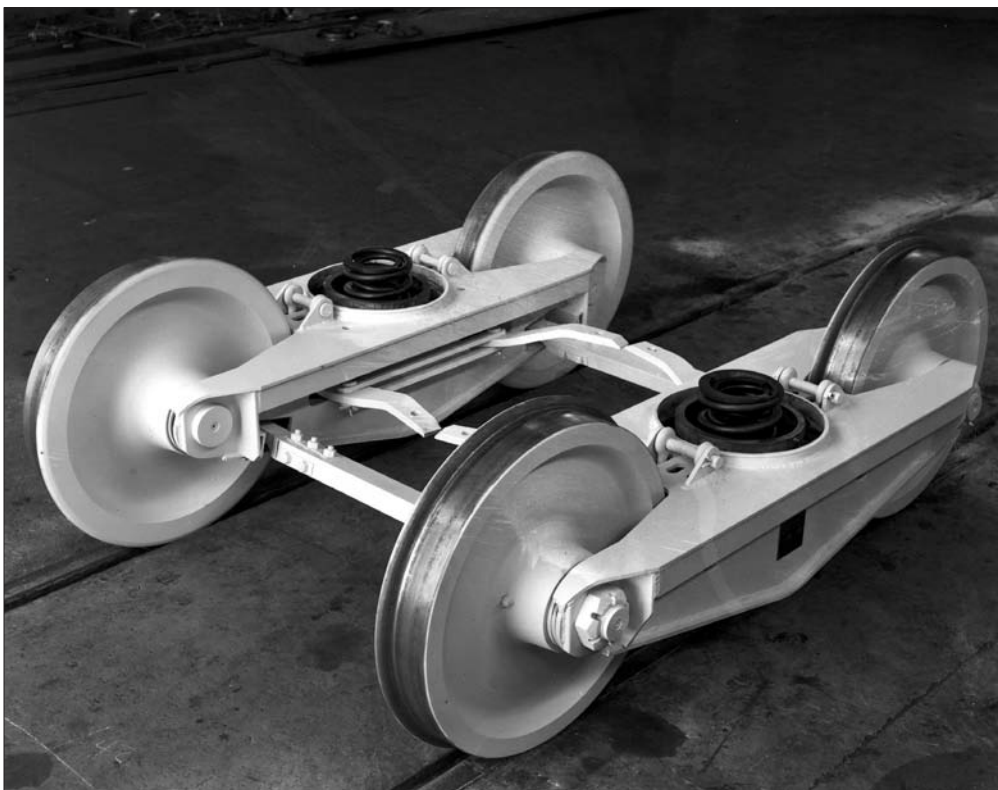
LAST CARS RETIRED: in 1985

NOTES: When these cars were built, and until 1935, they were classified AF5-1 (series 6700-6789) and AF5-2 (series 6790-6799). The distinction between classes AF5-1 and AF5-2 was that the latter class (series 6790-6799) had sides sheathed with Phemaloid, a resin-bonded plywood. This sheathing was replaced with steel in 1940, and the light weight of the cars was consequently increased by an average of 1600 pounds. A photograph of a Phemaloid-sheathed car shows its stenciled classification as AF5-1; the AF5-2 classification thus may have existed only on paper.



Class XAF

A.A.R. MECHANICAL DESIGNATION XAF: "Automobile-Furniture." Similar in design to general service box car, but with side doors at least 10 ft. wide, usually with greater cubic capacity, with or without end doors.



Steel caboose No. 90000, the first of its type on the C&O, was experimentally fitted with Difco axleless trucks. The experiment was apparently not considered to be a success, since these are the only photographs we have of this interesting installation.