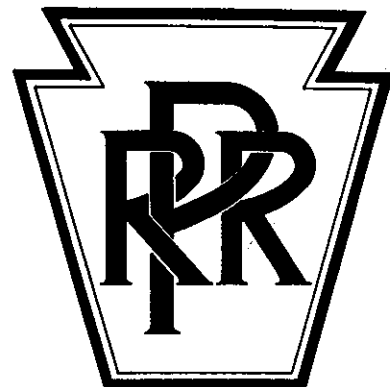


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PAINTING AND LETTERING OF PENNSYLVANIA RAILROAD CABIN CARS

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Early PRR cabin cars were painted bright red; in the last years before the merger, they were painted bright orange. However, during the years in between, the typical Pennsy cabin car was painted the same color as freight cars. Despite the lack of distinctive color, and the absence of the slogans used by some other roads, there is quite a lot of variety in the painting and lettering of PRR cabin cars. It is our intent to review the principal painting and lettering schemes used by the PRR from the earliest days to the merger. Our knowledge and sources are sometimes fragmentary, particularly for the early days. We would very much appreciate hearing from anyone able to fill in missing details.

The emphasis is on the standard and most common painting and lettering arrangements and on important variations. There are many one-of-a-kind painting and lettering schemes - some official experimental designs given much publicity and then quickly dropped, others a result of local practice. These rare designs often seem to monopolize coverage, leaving unanswered the question of what was standard or common at a given time.

Painting

The first paint color specifications issued by the PRR, about 1885, were for a standard "Cabin Car Color." The pigment was scarlet lead chromate, specially treated to achieve the bright red color desired for added safety from rear-end collisions. This pigment was chosen as a less-expensive substitute for vermilion, which was probably used (possibly mixed with other pigments) before the 1885 specifications. The specified cabin car pigment was changed to straight toluidine red, also a bright red, in October 1911; this standard applied to both Lines East and Lines West of Pittsburgh.

Although the specification for toluidine red was reprinted as late as 1919, some lettering arrangements for allied lines such as N.Y.P. & N. specify freight car color as of 7-9-1915 and scarlet lead chromate before that. We have not seen Pennsylvania or Pennsylvania Lines cabin car lettering arrangements before 1920; after 1920, PRR arrangements specified PRR standard freight car color for the entire body of the car. The pigment for this color was originally iron sesquioxide, to match PRR standard samples, but other pigments have been used since. In fact, freight car color has become increasingly dark, tending to brown, as synthetic pigments have been introduced over the years. The pigment of the 1920-1940 era was a much lighter shade, with almost an orange tint; as recently as the 1950's the standard color was lighter than in the years just before the merger. Freight car color remained the standard cabin car color until 1965.

In June 1965, focal orange was introduced for steel cabin cars; at that time one of the authors saw black lettering on an orange N5c, possibly of a lighter shade than finally adopted, but white remained the standard lettering color from the early days to the end. Other body colors such as maroon have occasionally been reported on individual cars, but standard colors were those described here.

Interior paint in cabin cars was originally buff color, at least after 1916. The 1950 lettering arrangement drawing for N8 cabins specifies

buff for some interior surfaces, cream for others. About 1960, light green was introduced for interior painting.

Cabin cars in maintenance-of-way service were painted standard M of W battleship gray, with black lettering, beginning in 1940. The M of W scheme became yellow with black lettering in 1953, and M of W cabin cars were painted the same. Before 1940, M of W color (at least for cabin cars) was freight car color, with white lettering.

The paint colors described are the basic body colors, also used for underframe, trucks, and wheels on repaint work (at least in the 1930's). New trucks were black. According to PRR specifications for class NB cabin cars, dated April 1890, the scarlet lead chromate was applied to the outside of the car body, while roof and truck (wooden parts of the underbody, probably including platforms) were metallic brown. All iron work was black. A 1904 Lines West cabin car drawing refers to "metallic brown roof paint," so similar schemes might have been used west of Pittsburgh. Various parts of later cabin cars were painted other colors. Beginning in 1949, for example, the curved handholds and the vertical handholds on the corner posts were to be painted chrome yellow. From 1920, perhaps earlier, the car roofs were body color, but black was introduced for roofs by the late 1940's and was used later on the cupola as well. Often the entire cupola and roof were black, but cupola side and/or end sheets were commonly painted body color, particularly on focal orange cars, on which the roof walks were also orange. Beginning in late 1961, the entire cupola, including the cupola roof, was painted chrome yellow on cars permanently assigned to through pool service. (For a month preceding this, this specification called for chrome yellow on cupola side sheets only.) For cars temporarily assigned to through pool service, a chrome yellow circle with 5-inch O.D. and 2-inch I.D. was stenciled on the center of the cupola side sheets, as shown in Figures 4 and 7 and in the photograph of class N5 cabin car 477192 in The Keystone, December 1973. For pool cars in electrified territory, cupolas were painted gray beginning in 1963.

Lettering

The earliest PRR cabin car lettering scheme known to the authors is shown on a photograph of a class NA car, circa 1872, with the words "P.R.R. CABIN CAR." arranged in a semicircle above "No. 201". By 1876 the style shown in the accompanying photograph of class NC 90660 had been introduced, with a simple "P.R.R." above the number, in 7-inch letters and numerals. We have no definite information on end lettering for this scheme, although one early photo shows none at all. Even less information is available for cabin car lettering on the other Pennsylvania lines, such as Northern Central and the various western lines, but it is likely that schemes corresponding to that shown for PRR 90660 were used; for example, by the late 1890's, there were definitely Lines West cars lettered "P.C.C. & St.L.R." and "P.F.W. & C.R.W.", both with 7-inch letters and numerals.

By 1902 the full name "PENNSYLVANIA" was placed above the windows in 7-inch letters, with 7-inch numerals being centered (both horizontally and vertically) between the windows. This arrangement is shown, as it appeared in 1916, in the accompanying views of the only class N4 cabin car, 488251. On the ends 3-inch initials "P.R.R." were placed over the doors and 5-inch numerals over the right window, as shown in the photograph. Lines West cars were similar, as shown in the photograph of class NE cabin car 997426, with 7-inch "PENNSYLVANIA LINES" in place

of "PENNSYLVANIA". The ownership initials of the particular Lines West or Lines East company were over the door, again in 3-inch letters. The Panhandle and Fort Wayne roads used the respective abbreviations mentioned in the preceding paragraph. Lines West did not use the same arrangement as the PRR for other side lettering in this era, the class designation being omitted and the date built shown on one line following the location built, as shown in the photograph. Sometimes this information was shown at the right end of the side, and sometimes the ownership initials were shown at the right. We have seen very few photos from this era, most with the crew hiding the lettering, and would welcome further information.

A different lettering arrangement was introduced for the N5 all-steel cars in 1914; however, since from the beginning steel cars had somewhat different lettering schemes than the wood cars, we will complete our discussion of the wood cars before dealing with the steel. In 1920 separate Lines West arrangements were eliminated when the eastern and western lines were merged, and the arrangement shown in Figure 1 was adopted for wood cabin cars. The side lettering was unchanged from the earlier scheme, except that classes NA and NB apparently had 6-inch lettering before 1920, but after several changes in the first month after the drawing (Figure 1) was issued, 4-inch initials and numerals were located as shown over the right end window. On the sides the 2-inch ownership initials beneath the date built specified the owner, one of the companies making up the Pennsylvania System. For 4-wheel cabin car classes a condensed style was used for the word "PENNSYLVANIA", resulting in a length of about 8'4" instead of the 10'7" shown for NDa, N4, N6a, and N6b. Thus NDa had the longer style while ND, with the same size body, had the shorter style. For all classes the numerals were centered horizontally and vertically between the side windows, but for NA and NB, "PENNSYLVANIA" was placed $3 \frac{3}{16}$ inches above the tops of the windows, while for NC, ND, NE, and NEa, this distance was $8 \frac{1}{2}$ inches; for NDa, N4, N6a and N6b the location was specified with respect to the top of the car side as shown in Fig. 1. Division assignments were added in 2-inch letters, 5 inches below the numerals, in December 1926.

In April 1927, lettering was rearranged to a style similar to that shown in Figure 2. The 10'7" length of "PENNSYLVANIA" was specified for all cars, and 1-inch wide lines were added as shown. Date built, class, and ownership initials were relocated. In 1930 the end numbers were removed, and for two months late in 1931 the keystone monogram was added; we do not know if any cars actually received the monogram at that time. It should be noted that the arrangement shown in Figure 2 was often modified in practice. Although most ND cars had the tops of the numerals on the same level as the tops of the windows, many had the numerals lower, approximately centered with the windows. On N6a and N6b, the windows are higher and further apart than on the ND, and the lower edge of "PENNSYLVANIA" usually was slightly below the tops of the windows. Photographs in The Keystone, December 1973, show typical N6b lettering as well as a common ND arrangement. The lettering arrangement shown in Figure 2 lasted for 30 years with only the slight revisions shown on the drawing.

In January 1956, the last redesign of lettering for wood cabin cars was adopted, as shown on the accompanying photograph of N6b 982402. The road name was 15'4" long in 13-inch letters. A black-shadowed keystone monogram, 2'5 $\frac{1}{2}$ " high overall, was centered below the name. Numerals

were initially 9 inches but were changed to 7 inches in August 1960, and region assignment was given in 3 1/2 inch letters as were date built and ownership marks. Four inch figures were specified, but often not used, for the class. Four inch car numbers were restored on the ends as shown in Figure 1. As always there were significant variations among individual cars. In later years M of W equipment particularly showed many variations, often with "PRR" instead of the full name, and either the new keystone or the old keystone-in-a-circle monogram.

The lettering of all-steel cabin cars was somewhat different from that for the wood cars. The arrangement shown in Figure 3 was designed for class N5 and subclasses in May 1926. Between 1914 and 1926, N5 cars had "PENNSYLVANIA" and the car number located as shown in Figure 3, but with a single 1 inch line, 2 inches below the road name, instead of lines above the name and below the numerals as in Figure 3. Other side lettering was located as shown in Figure 1, and end lettering was as shown in Figure 3.

The arrangement shown in Figure 3 was standard for N5 and subclasses for almost 30 years. Revisions during this period, shown on the drawing, include addition of division assignment (December 1926), change to region assignment (December 1940), and removal of number from car end (August 1930). Other lettering schemes were tried between 1926 and 1955, most notable among which was the Futura style, used on N5b cars beginning about 1941. The photograph of N5b 477635 in The Keystone, December 1973, shows this style. A similar scheme using Futura figures with lines above and below was used as early as 1937 on an N5a car, but the Futura lettering was generally little used. The standard 1926-1955 arrangement is shown in The Keystone, December 1973, on N5 477571 and on N5c 477829; note that the lettering was placed much lower on N5c cars than on the other N5 subclasses, because of the lower belt rail.

In December 1955, the arrangement shown in Figure 4 was introduced for N5 subclasses. This scheme is similar to that shown earlier for the wood cabin cars, but with the 13-inch "PENNSYLVANIA" below the windows (some N6b cars had the arrangement shown in Figure 4 - Pennsy's famous standards were sometimes ignored). The revisions to this scheme are noteworthy. According to revision "B", 1-9-1956, the large (2'5 1/2") keystone was changed to 18 21/32 inches after only one month, apparently because the riveted horizontal "belt rail" interfered with the stencil. Revision "C", 4-30-57, restored the large keystone. However, though the arrangement shown in Figure 4 was standard until late 1961, there were apparently many more cars painted with the small keystones than with the large. A typical car is N5 477192, shown in The Keystone, December 1973.

In December 1961, the lettering was simplified as shown in Figure 5. The keystone was the same size (about 25 inches high) as that in the earlier large shadowed design, without the shadow. Despite the standard, however, in practice many cars were given smaller keystones, again without the shadow. Some cars also had large letters "PRR" below the keystone in later years; the accompanying photograph of N5c 477893 shows this arrangement.

Class N8 cabin cars, introduced in 1950, had a lettering arrangement unique to that class, as shown in Figure 6. Except for the previously-mentioned brief period in 1931 and possibly a few one-of-a-kind cases, the old keystone monogram was specified for no other cabin car, though

it appeared on the N6b at Horseshoe Curve, and was seen on at least one M of W N6b in the mid-1960's. Although an extended arrangement was used for "PENNSYLVANIA" (12'11" instead of 10'7") and the numerals, the letter and numeral sizes were the same as on the arrangement for N5 and sub-classes in 1950, Figure 3. A photograph of an early N8 appears in The Keystone, December 1973.

In December 1955, the arrangement shown in Figure 6 was made obsolete by the adoption for N8 cabin cars of a scheme quite similar to that shown in Figure 4 except that the date built, class, and ownership were shown at the left end of the side, to avoid interfering with the trust plate, and the end initials and numerals, 4 inches high, were placed over the right-hand end windows. Although the large shadowed keystone was specified, a smaller one was also used in practice, despite the absence of a belt rail to interfere with the large stencil.

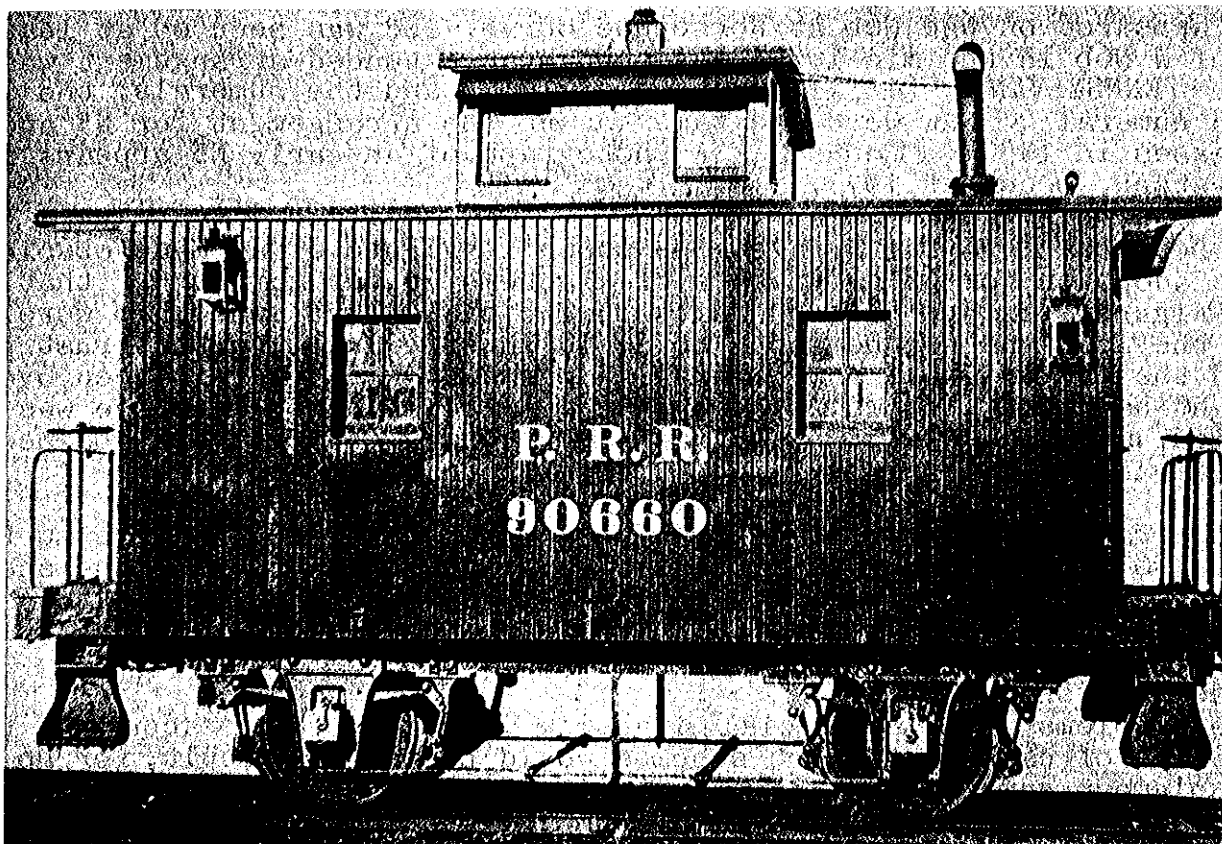
The arrangement shown in Figure 7 was introduced for N8 cars in December 1961, and lasted until the merger. Although the keystone shown in Figure 7 appears larger than the others, smaller ones were also used in practice, and their placement on the car side was far from uniform.

Modeling Considerations

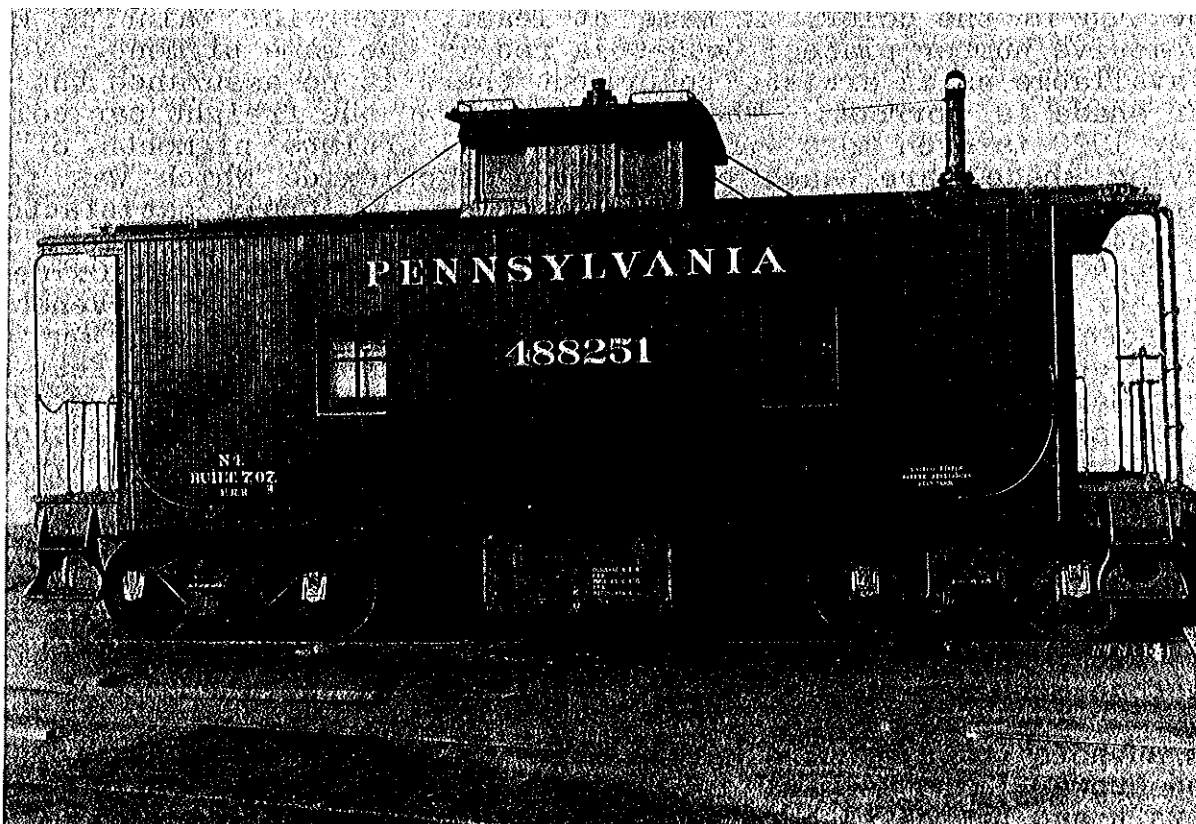
The problems with artificial lighting aside, totally accurate reproduction of cabin car paint schemes would be very difficult, for no paint or pigment samples are known to exist even for the PRR standard freight car color of the 1930's. In fact, some slight tolerance was of necessity allowed from the standard shade, at least in the early years, and even a few months' weathering changed the older paints significantly. Nonetheless, a few general statements can be made. For the older, bright red shades used before 1920, a bright red model paint, such as Scalecoat Santa Fe Red, is probably a good approximation. Toluidine red is used in some commercial paints today, for example in PPG Fiesta Red. Toluidine red is the color, in name at least, used for painting keystone locomotive number plates; Coca-Cola red is the same pigment. Vermilion is available as an artists' color, but there is no assurance the particular shade is correct. The situation with the freight car color used after 1920 is even more difficult. Several artists' pigments, of greatly varying shade, are based on the iron sesquioxide which was for many years the pigment for freight car color. A truly satisfactory PRR freight car color for the 1920-1950 era does not exist among the box car reds now available in model paints, although Scalecoat Oxide Red is a rather good start, just a bit too dark, and Polly-S Dull Venetian Red is another possibility. To simulate more recent freight car color, darker shades can be used. Focal orange is also known as safety orange, a standard safety color. Although reefer yellow and M of W gray should be satisfactory for chrome yellow and battleship gray, the authors know nothing about the pigment in early metallic roof brown. A typical box car red model paint might approximate this color.

For lettering, commercial decals and dry transfers exist in several scales. Despite the lack of correct PRR letter shapes, most of the arrangements can be approximated, sometimes by combining parts of various decal sets. The N8 scheme of 1950-1955, for example, requires the keystone monogram from a PRR freight lettering set.

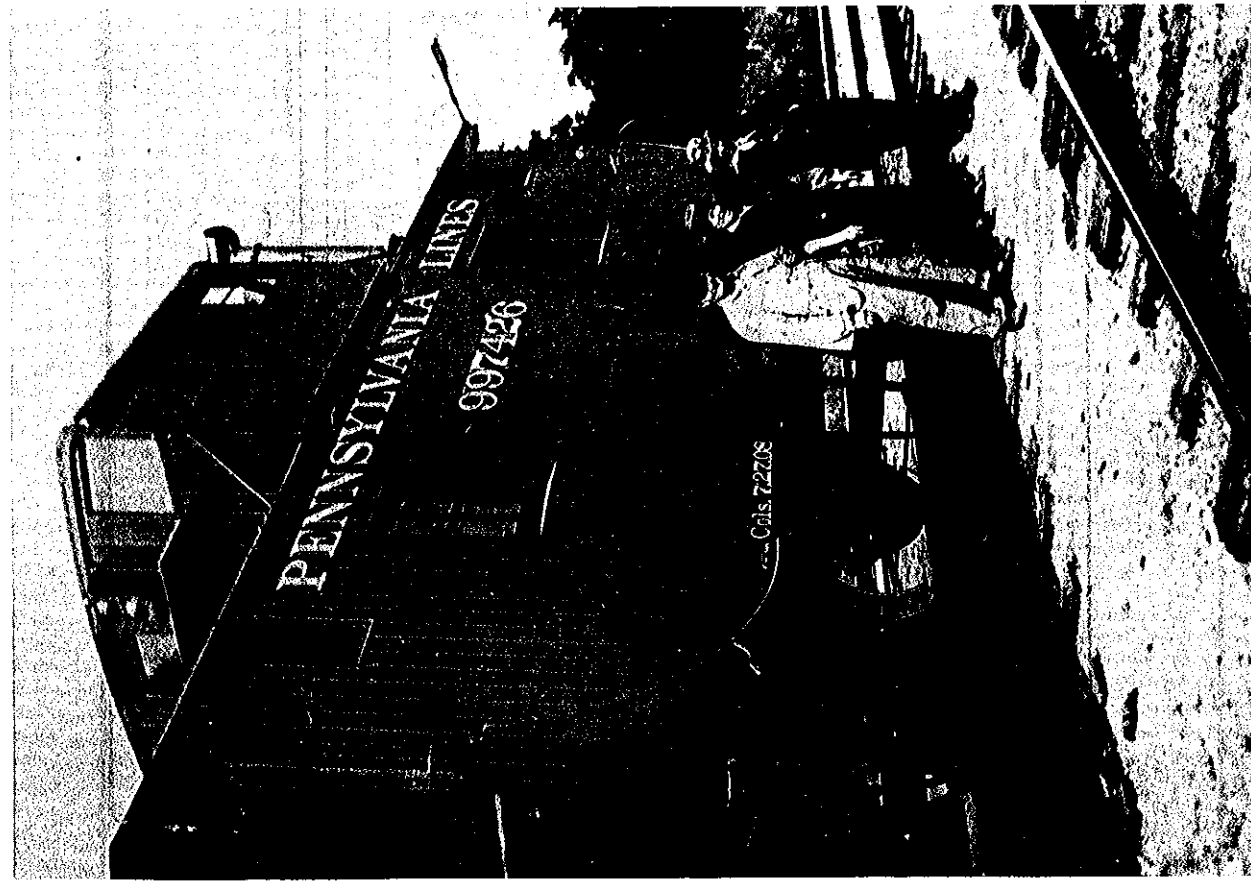
The authors thank members Harold Geissel, Tom Olsen, John Prophet, and John Stewart for helpful information; drawings were supplied by John Stewart and by the Altoona Association of Model Railroaders.



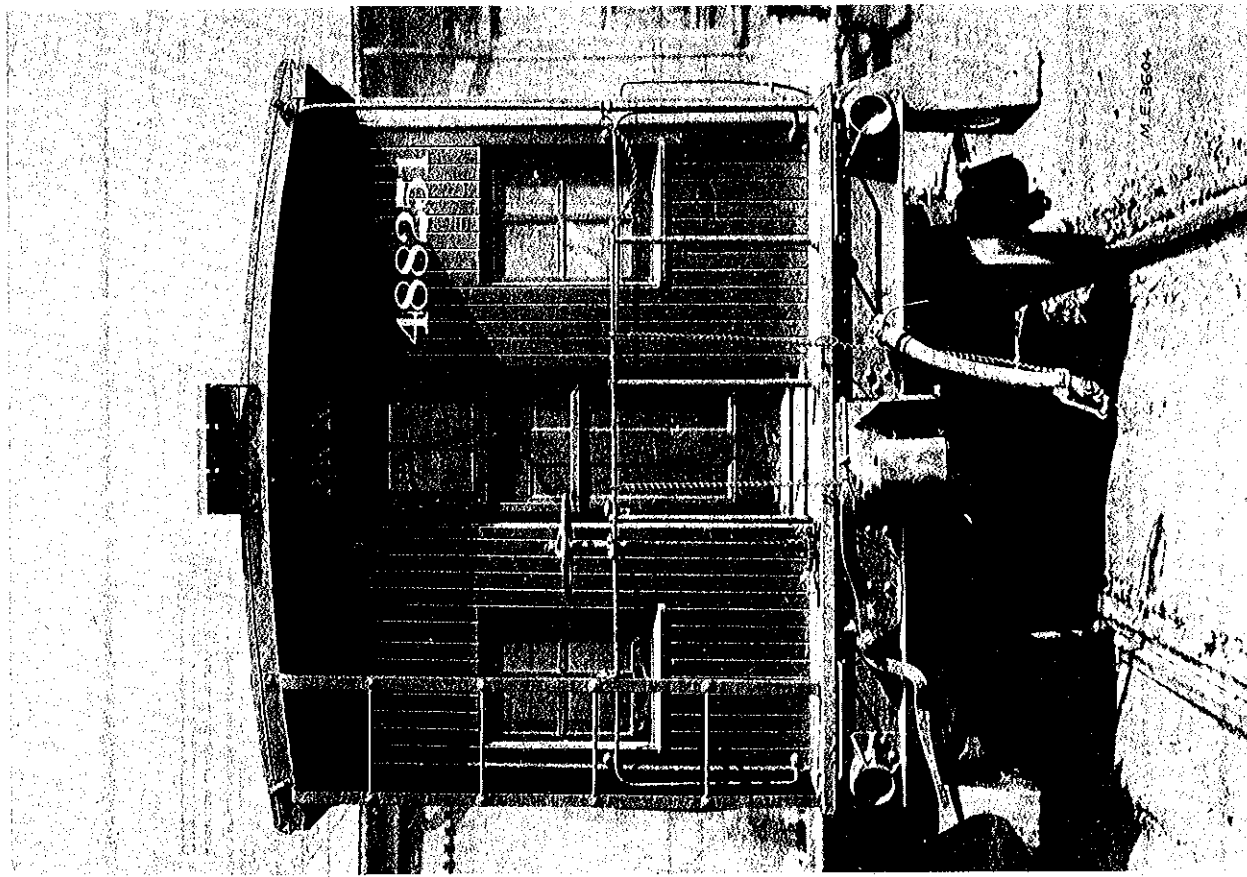
NO cabin car 90660, circa 1892.



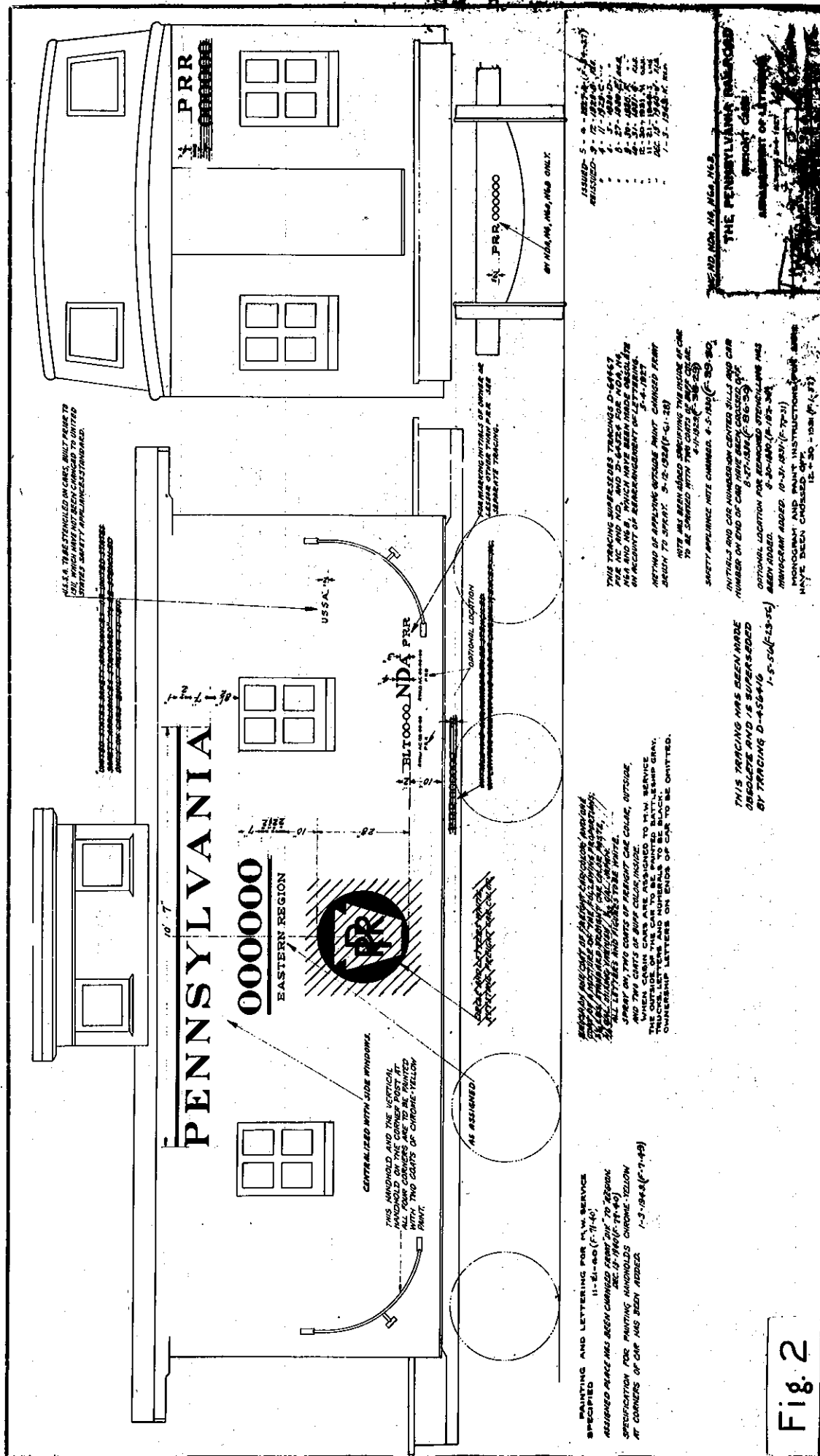
N4 cabin car 488251, shown in December 1916.

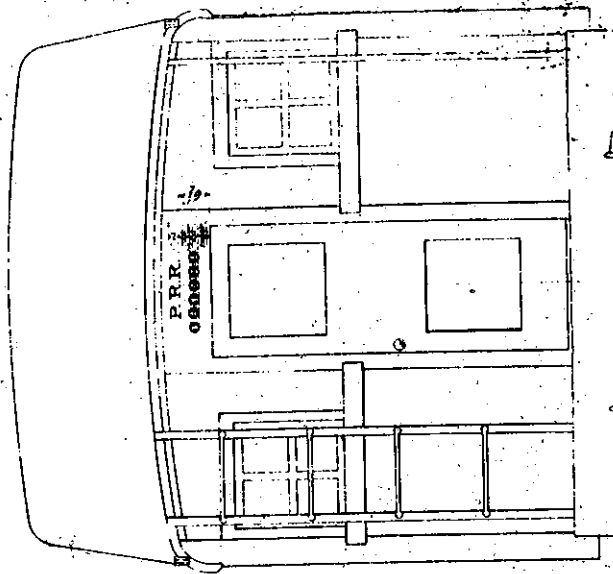


P.C.&St.L.R. class NE cabin car 997426,
built at Columbus 7-27-1908.



N4 cabin car 488251, showing end lettering.
Photo courtesy of Altoona Association of
Model Railroaders.





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INITIALS AND CAR NUMBER ON CENTER OF CAR ARE
AT END OF CAR HAVE BEEN CROSSED OUT. (SEE 32)
OPTIONAL LOCATION FOR REMOVED STENCILS IN
STAMP. (SEE 32)
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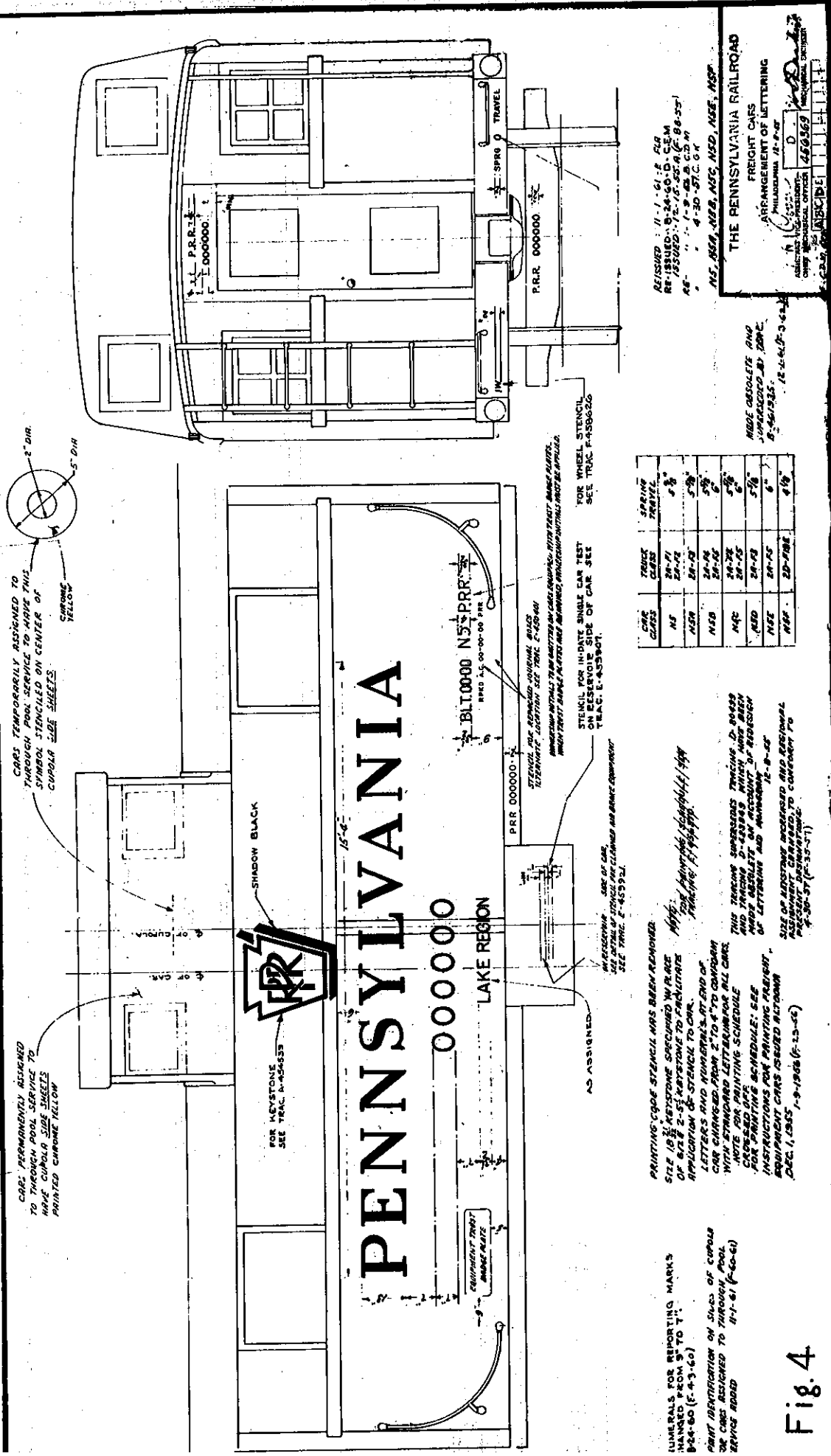
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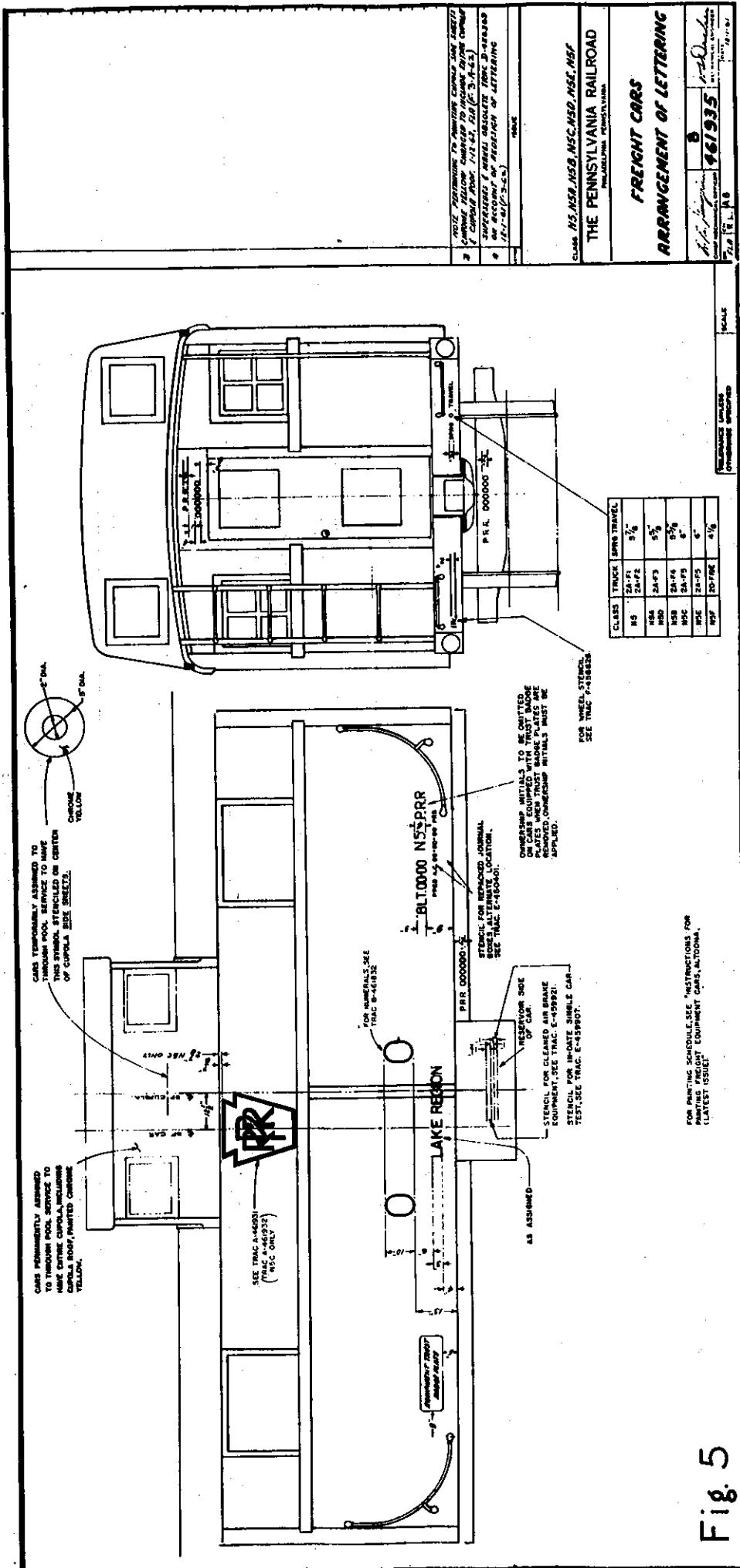
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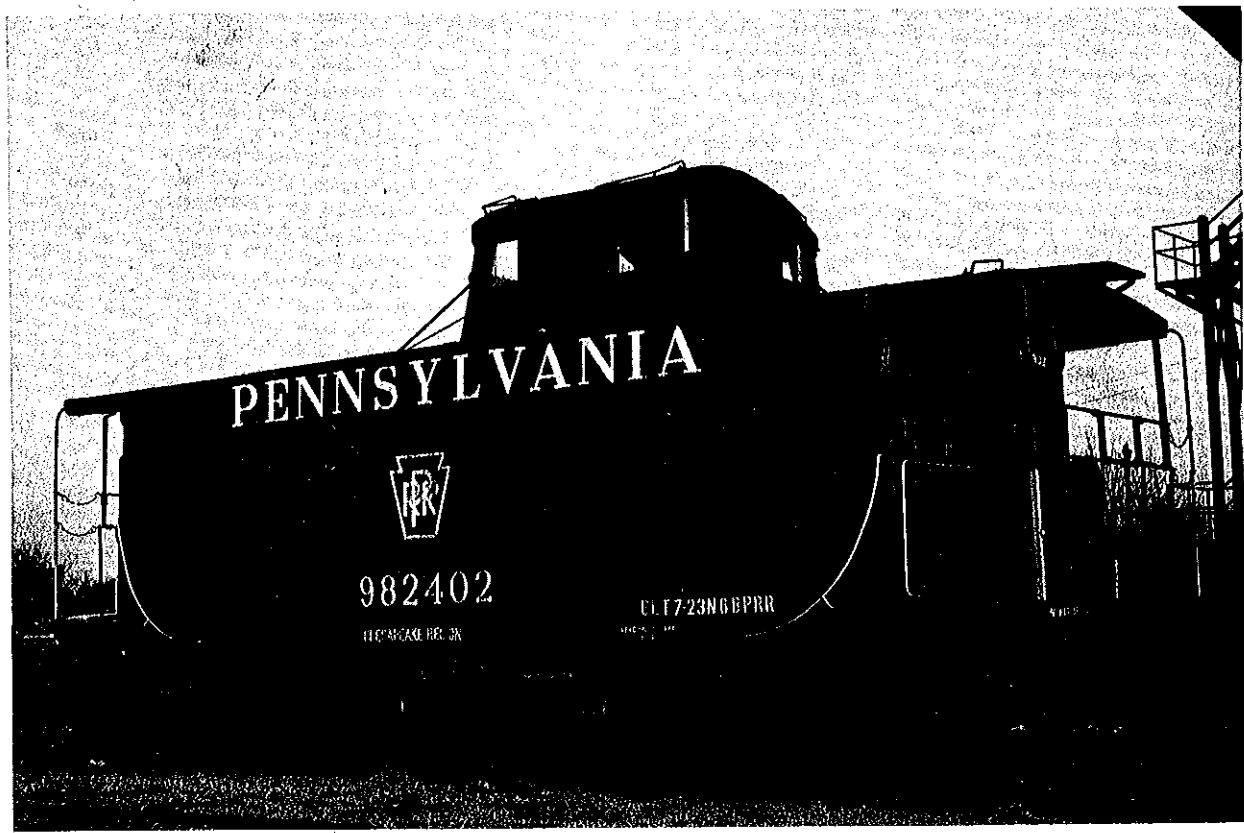
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NF	24-73	4' 6"
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NF	24-96	4' 6"
NF	24-97	4' 6"
NF	24-98	4' 6"
NF	24-99	4' 6"
NF	24-100	4' 6"

Fig. 4





N6b cabin car 982402 at Little Creek, Virginia, 1-10-1962.
John C. LaRue, Jr. collection.



N5c cabin car 477893 at Arcola, Illinois, in 1965.