

D. L. & W. Rebuilt Cars Feature Lighting and Decoration

Shadowless direct lighting and the use of a new photographic process on panel murals add much to interior attractiveness

THE Delaware, Lackawanna & Western has placed in through service, between Hoboken, N. J., and Buffalo, N. Y., two cars—a diner and a buffet-lounge car—which have been completely modernized recently at its Kingsland, N. J., shops. Both of these cars embody new features in lighting and interior decoration. The interior arrangement and decorations of both cars were designed by Douglas Ernst of Contract Sales, Inc., New York, in collaboration with the railroad company.

Interior Appointments

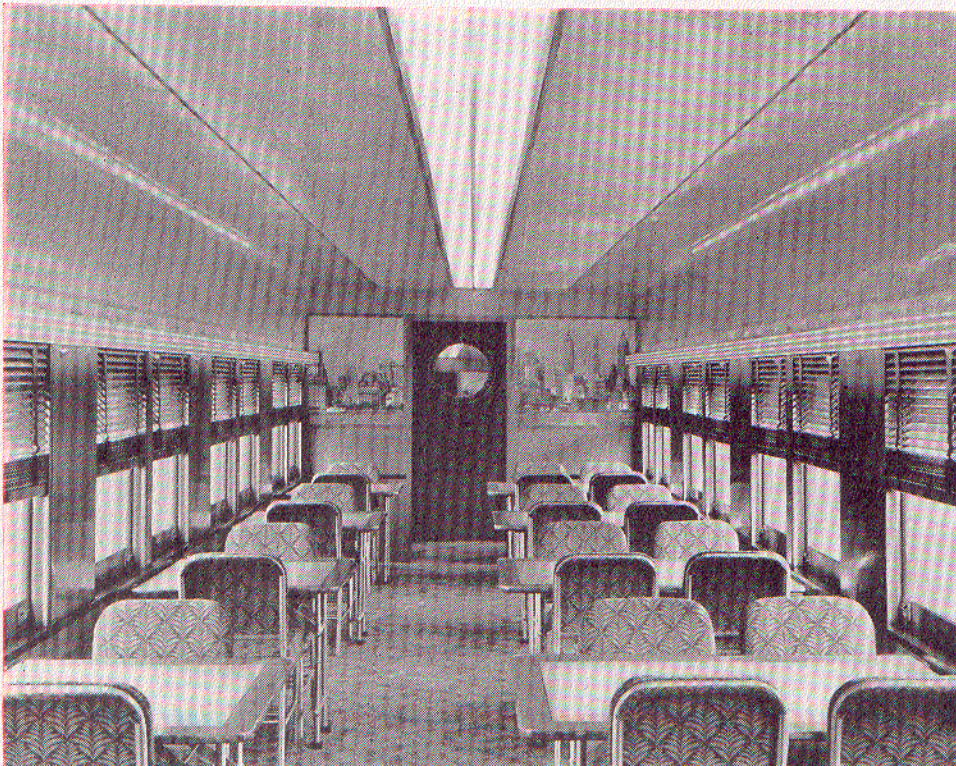
The diner is a rebuilt parlor car. No changes were made in the running gear or exterior but the interior was completely rebuilt. Chairs and tables are made with aluminum frames. Venetian blinds were applied to the windows, these being raised and lowered in the same manner as a window shade, and the slats tilted by means of a small handle at the upper right-hand corner of each window. The side walls and ceiling are painted in varying shades of blue-green, with a maroon trim. The darkest note in the car extends from the floor to the base of the windows. A second color, somewhat lighter, is used for the panels between the windows, a third is still lighter and extends from the tops of the windows to the Burgess panels, and the lightest shade is on the panels themselves. There are two maroon bands extending the length of the side walls, just above the side lighting

fixtures, and the blue-green table tops are trimmed with maroon with aluminum bands at the edges.

Window sills are of black Bakelite and the chair upholstery and floor covering material is a mixture of maroon and blue-green, blending with the darker shades on the side walls. The Venetian blinds are also blue-green with maroon tapes. At each end of the car there are photo-murals depicting scenes in New York City. These pictures are photographed on a General Electric plastic and are also under a thin film of plastic which makes them washable with soap and water. They consist of silver tones on a maroon background.

Interior Lighting of Diner

The center lighting units in the diner consist of two rows of 15-watt lamps on 9-in. centers, arranged in double, inverted troughs or reflectors made of sheet steel in sections 45 in. long. The inside surfaces of the troughs are cadmium plated and painted with white Glyptol enamel. The lamps are in Federal sign sockets, screwed against leather gaskets and staked. The lower surfaces of the trough, which is flush with the ceiling, is enclosed by $\frac{1}{16}$ -in. Insoroc plastic, which is completely diffusing and has high light transmission. The location of the lamp sources are not visible to an observer in the car. In each trough there are 30 lamps, making a total of sixty 15-watt units in the double center



The Interior of the Dining Car Has Been Designed So That Furnishings, Decorations and Lighting Blend to Produce an Atmosphere of Colorful Simplicity. Photo-Murals on Plastic Decorate the Panels at Both Ends of the Room

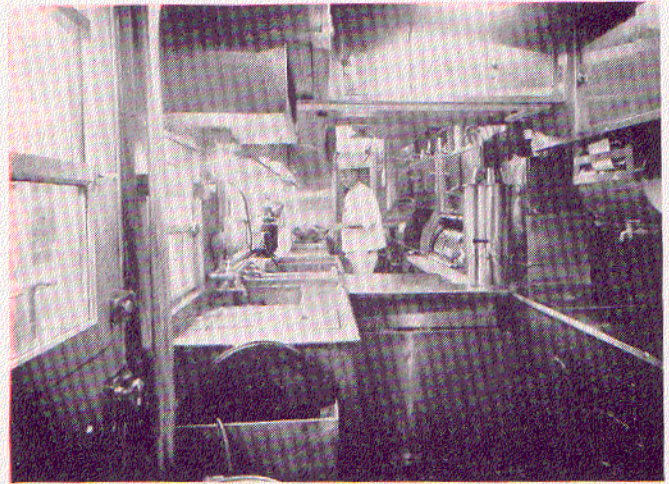
lighting fixture. Since it is fully enclosed, little cleaning is necessary, but when this is needed or when lamps must be replaced, the plastic strips can be removed by backing out screws part-way, and slipping sections of the plastic out of the retaining strips.

The center lighting is augmented by side lighting units extending the full length of the dining section immediately over the windows. These units are boxes of rectangular cross section placed end-to-end. They are mounted on piano hinges, so that when the unit is swung upward it opens a compartment back of the fixture which houses the mechanism for operating the Venetian blinds. In each box are six type T-8 Lumiline lamps placed end-to-end. The upper surface of the box is covered with clear glass, and the lower with the same plastic used for the center units. Inserted in three continuous slots in the side of the box are three Lucite strips. The strips extend the full length of each light box to form three decorative continuous lighted lines. The visible edges of the Lucite strips are etched so that no light source will show, and so that the lighting of the strips will be uniform. The Lumiline lamps are 30-watt units and there are 30 lamps on each side of the car.

Passageways and vestibules are lighted by flush-type ceiling units with 25-watt lamps, diffusing lenses and parabolic reflectors. The lenses are similar to those used for signal lamps, but differ in that the vertical edges of the prisms have been etched to avoid bright spots in the units themselves. The all-Monel-metal pantry and kitchen are lighted by five 50-watt lamps in RLM reflectors, supplemented by seven 25-watt local lights over the tables. The total connected lighting load is 110 amperes. All lighting units were supplied by the Safety Car Heating & Lighting Company. The lighting intensity on the table tops is 12 foot-candles.

Air Conditioning

The car has an ice-activated air-conditioning system furnished by the Safety Car Heating & Lighting Company. Approximately 1,500 cu. ft. per min. of air is recirculated

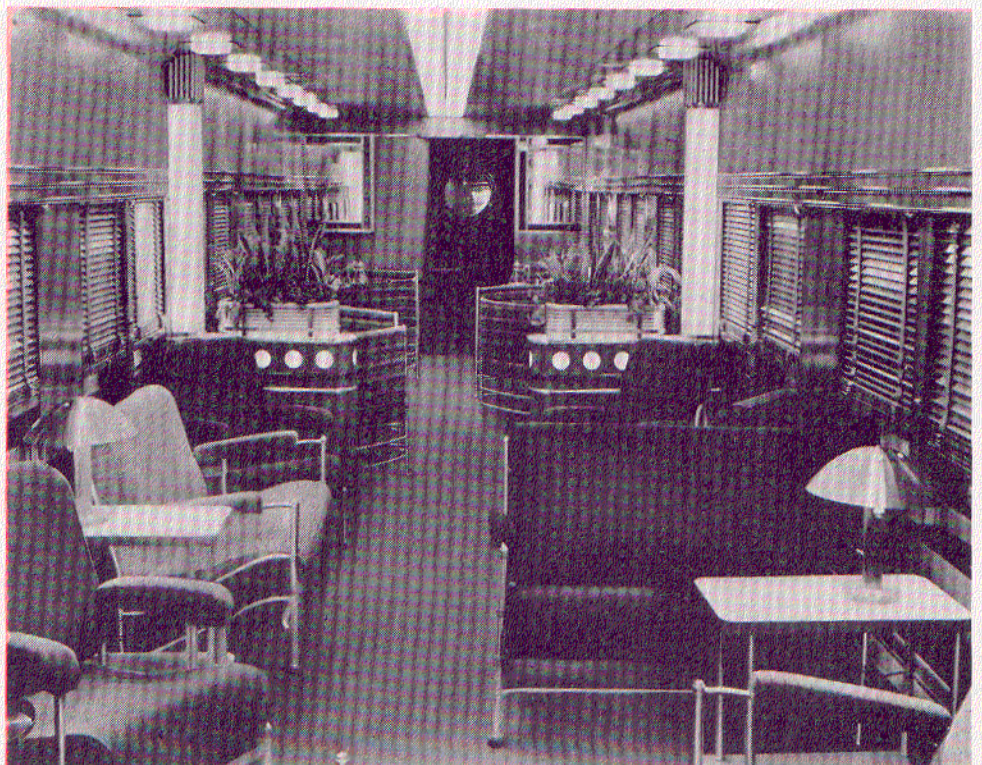


The Dining-Car Kitchen Is Completely Equipped with Monel-Metal Fixtures and Is Air Conditioned

through the dining section and fresh air is added at the rate of 600 cu. ft. per min. The conditioned air is admitted to the dining section through a Pyle-National multi-vent or Burgess ceiling, which is shown in one picture as the dark panels on either side of the center lighting unit. Temperature is controlled by Vapor correlative control.

The kitchen and pantry are positively air-conditioned by air taken from the dining section through a duct running from the car ceiling at the pantry end of the dining section to two ceiling outlets, respectively, in the pantry and kitchen. There are two fans which draw about 600 cu. ft. of air per min. through the duct. Air is removed from the kitchen at points above the stove and sink by three exhaust fans having a capacity of about 800 cu. ft. per min. The difference between the amount of air taken from the dining section and that removed by the exhaust fans is taken in through louvers in the outside end doors and various other openings. There is no air cur-

A Combination of Side, Center and Special Lighting in the Buffet-Lounge Car Serves to Bring Out the Unusual Features of the Arrangement of the Interior Facilities to Greatest Advantage—Stainless Steel and Aluminum Trim Provide the Contrast to the Olive-Green Background



tain at the pantry door and tests have shown no movement of air from the pantry to the dining section. Air distribution is unaffected by the closing of this door. The air conditioning system requires a total of 33 amp. for pumps, blowers and control.

An additional 25 amp. is required for locker lights, dish washer and garbage disposal. The latter device is a motor-driven grinder or chopper which will finely divide nearly all forms of garbage, mix it with water and wash it down a drain.

Power Supply and Circuit Control

Electrical power is derived from a 10-kw. Safety generator, driven from the axle by a Spicer gear drive. The battery is an Edison 1,000 amp.-hr. type G-36. The power control apparatus consists of a Safety generator regulator, reverse-current relay and two lamp regulators, each controlling half of the total load. The total connected load is 168 amp.

There are 10 lighting circuits for the body of the car and 4 in the kitchen, all controlled by a single-pole branch circuit breakers of 15 and 20 amp. capacity. The center lights are on three circuits and the side lights on four, two for each side. The remaining circuits control lamps in the passageways and vestibules.

Buffet Lounge Car

The power supply equipment in the buffet lounge car is identical with that in the diner. The center lighting is also the same, but is supplemented by rows of rectangular double prismatic 25-watt units, one on either side of the ceiling. The lounge and buffet sections are separated by turrets and pilasters made up of 1-in. Lucite rods to form half cylinders. Back of the Lucite rods is a layer of Insoroc diffusing plastic. Inside the pilasters are seven 15-watt lamps. There is also an illuminated flower stand, the upper part of which is made of Lucite rods and enclosing a copper flower pot. The latter is mounted on a turret division, having a plate-glass top, under which there are four 15-watt lamps. Light through the glass illuminates the Lucite from the inside. There are also table lamps in the lounge section.

The color scheme of the car is copper and olive green, with aluminum and stainless-steel trim. The buffet section seats 18 persons in semi-circular booths. Upholstery and floor coverings are in shades of olive-green, fawn-henna and plum. End panels in the car show pictures of early Lackawanna locomotives. They are photographed on steel by a process developed by Permanent Arts, Inc., New York.

The plates are imbedded in plate-glass mirrors, the silver backing being omitted from the mirror in the space occupied by the picture. The car is air-conditioned by a Safety ice-activated system with Pyle-National multi-vent outlets. Like the diner, the air conditioning is also extended to the kitchen.

TWO LARGE BRITISH-OWNED RAILWAYS IN ARGENTINA—the 2,806-mile Buenos Aires & Pacific and the 3,700-mile Central Argentine—are to be operated jointly, according to consular reports. Although no actual merger is proposed, the two roads will be operated by a single staff of officers as a co-operative unit. Joint operation will be similar in most respects to the co-ordination of the Buenos Aires Great Southern and the Buenos Aires Western which since 1933 have had joint chief officers and unified train operation. Thus the "Big Four" of the British-owned lines in the country will comprise two operating units which may well be further amalgamated into a single system for operating purposes.

Six Months Railway Buying Up 103 Million Dollars

(Continued from page 373)

awanna & Western, 63 per cent on the Elgin, Joliet & Eastern, 42 per cent on the Great Northern, 30 per cent on the Illinois Central, 33 per cent on the Nashville, Chattanooga & St. Louis, 18 per cent on the Northern Pacific, 41 per cent on the Reading, 82 per cent on the St. Louis-Southwestern, 61 per cent on the Seaboard Air Line, 65 per cent on the Union Pacific, 48 per cent on the Wabash, and 100 per cent on the Wheeling & Lake Erie.

Less Materials on Hand

The indicated aggregate value of materials in the hands of Class I railroads at the close of June was \$319,154,000, consisting of \$20,694,000 of fuel, \$31,319,000 of new and second hand rail, \$55,441,000 of crossties, \$200,601,000 of store house stocks and \$11,099,000 of unsold scrap. This is slightly less rail than was in stock on July 1, 1938, and indicates a reduction of almost \$10,000,000 or 15 per cent in the dollar volume of the stocks and a reduction of approximately \$25,000,000 in store stocks since this time last year.

Seventy-five railroads of 95 reporting inventory figures had less material in stock July 1 than a year ago. The reduction in total inventory, which necessarily includes large quantities of slow moving materials for standby purposes, totaled 25 per cent on the Akron, Canton & Youngstown, 30 per cent on the Chicago, Indianapolis & Louisville, 37 per cent on the Nickel Plate, 22 per cent on the New Haven, 12 per cent on the Pennsylvania, 25 per cent on the Southern, 23 per cent on the Southern Pacific, and 28 per cent on the Western Pacific.

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DO YOU KNOW

that...

Railway Fares have been greatly reduced.
Your money will now go much further in the purchase of railway travel.

IN 1935 £1 BOUGHT 100 MILES OF TRAVEL

TODAY £1 BUYS 180 MILES OF TRAVEL

This Graphic Presentation of Reductions in Passenger Fares Is a Typical Advertisement of a Series Placed in Newspapers at Regular Intervals by the Victorian Railways (Australia)