

1959

Portland Railroad: Part II, Rolling stock, carhouses, power supply

Osmond Richard Cummings

Follow this and additional works at: https://digicom.bpl.lib.me.us/books_pubs

Recommended Citation

Cummings, Osmond Richard, "Portland Railroad: Part II, Rolling stock, carhouses, power supply" (1959). *Books and Publications*. 42.
https://digicom.bpl.lib.me.us/books_pubs/42

This Book is brought to you for free and open access by the Special Collections at Bangor Community: Digital Commons@bpl. It has been accepted for inclusion in Books and Publications by an authorized administrator of Bangor Community: Digital Commons@bpl. For more information, please contact ccoombs@bpl.lib.me.us.

A PUBLICATION OF
CONNECTICUT VALLEY CHAPTER



WAREHOUSE POINT, CONN.

Transportation

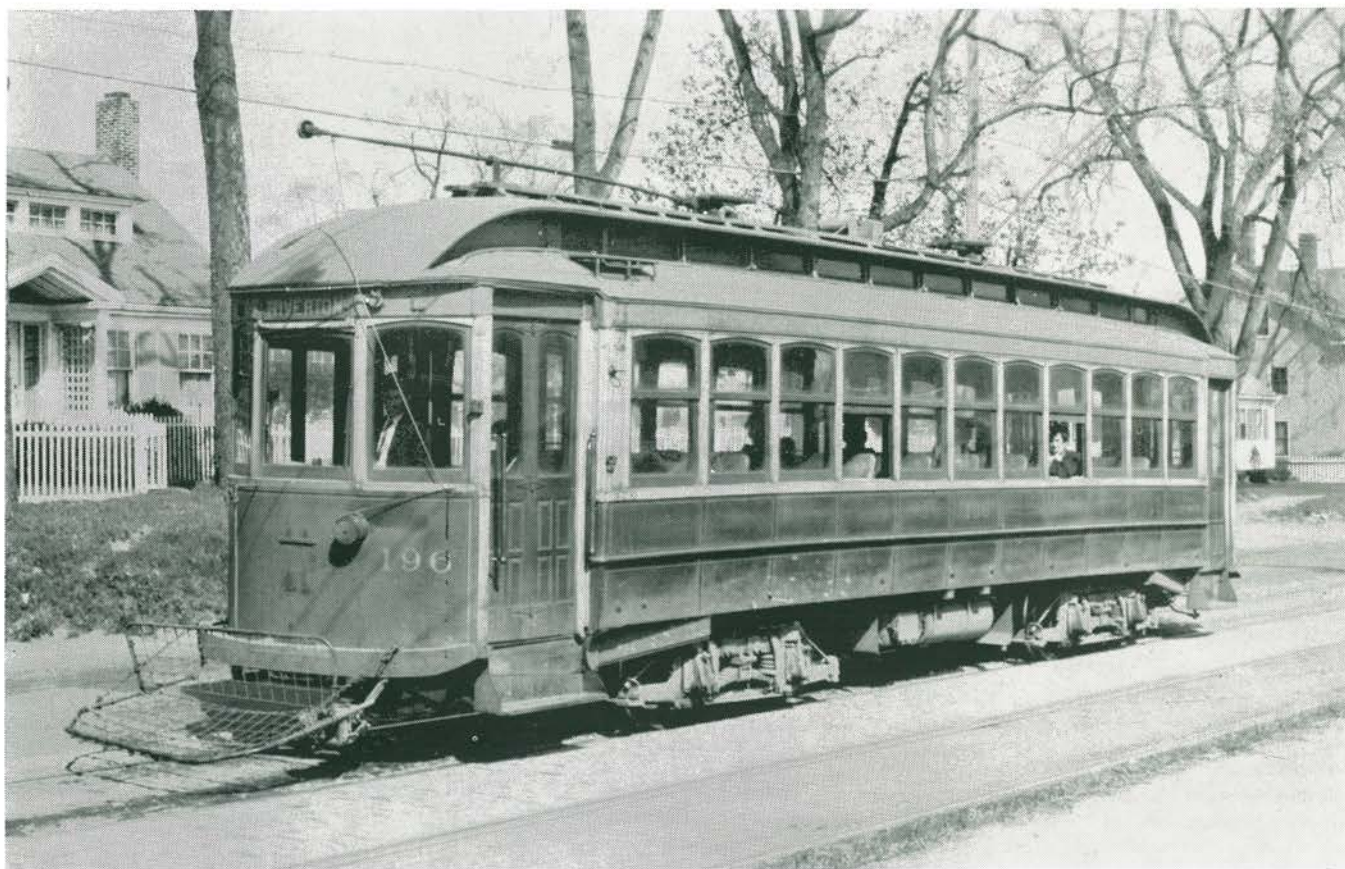
Volume 12.

JANUARY 1959.

Price \$1.50

PART II . . . Rolling Stock, Carhouses, Power Supply

Portland Railroad



SCENE TYPICAL OF PORTLAND as late as the 1930s shows a big railroad roof car on the suburban Riverton line. No. 196 was one of 10 semi-convertibles built by Brill in 1902 for Westbrook, Windham and Gorham service. In 1918 these cars were equipped to haul the 760 class trailers to Westbrook.

PORTLAND RAILROAD

INTRODUCTION

CONVERTED horsecars, large, easy-riding suburban types with and without smoking compartments, single and double truck Birney cars, center-entrance trailers with trolley poles and small 4-wheel arch roof semi-convertibles—all of these were among the wide variety of rolling stock owned by the Portland Railroad, Maine's third largest electric railway.

Altogether, the Portland Railroad owned over 300 cars during its lifetime—from 1863 to 1941—and most of them were products of J. G. Brill or two of its subsidiaries, Wason and Stephenson. There also were a number of Laconia, Jones, American and home-built cars on the roster, but these were in the minority.

Portland Railroad cars were always well maintained and they were being overhauled and painted right up to within a year or two of the end of rail service. It can be said truthfully that the nearly 40-year-old cars being used in the last years of trolley operation were in as good condition as when they were purchased.

This report will deal with the cars in the order in which they

were acquired. Such technical information as is available has been included and every known detail of interest has been noted. Unfortunately, the only official record available is a numerical roster of equipment, which is incomplete in many details. But it has been possible to find much supplementary data in the Street Railway Journal, the Electric Railway Journal, various issues of Brill Magazine and several scrapbooks kept by former employees of the road.

The first part of the report covers the horsecar days; the second the early electrics; the third, equipment taken over from companies absorbed by the Portland Railroad; and the fourth, the cars purchased from 1900 through 1941. These are followed by descriptions of freight and express cars, service equipment and snow plows.

Every effort has been made to insure accuracy and where information has conflicted, that which seemed the most reliable or most logical is quoted.

The roster is followed by a description of the carhouses, power houses and substations, and the more serious accidents on the Portland Railroad system over the years.

Among those who have furnished material or pictures for this effort are Ernest R. Rowe of Westbrook, Maine; Charles D. Heseltine and George F. Monahan of South Portland, Maine; Edward D. Leavitt of Biddeford, Maine; Edwin B. Robertson of Westbrook, Maine; the late Harold D. Forsyth of Marblehead, Mass.; Charles C. Holt of Saugus, Mass.; Gerald F. Cunningham of Washington, D. C.; Charles A. Duncan of Danvers, Mass., and J. R. McFarlane of St. Albans, Vermont.

J. Emmons Lancaster of West Falmouth, Maine, attended to the drawings of the carhouse diagrams.

O. R. CUMMINGS

105 Theresa Court

Manchester, New Hampshire

Transportation

Volume 12

January 1959.

Published by:

Connecticut Valley Chapter,
National Railway Historical Society,
Inc.

Roger Borrup, Publication Chairman
Warehouse Point, Conn.

Printed by the Wadsworth Press,
Warehouse Point, Conn.



MONUMENT SQUARE,
Portland, Maine, as it was
in the 1930s when trolleys
still dominated the scene.

Horsecars

IT IS all but impossible to present an adequate discussion of the horsecars of the Portland Railroad because information about them is scanty and photographs of the early equipment are few and far between.

The original rolling stock of the line consisted of two cars, probably both closed, as operations began in the fall of 1863. But, by 1874, the company owned 26 cars and the stables held 83 horses.

Pictures of closed horsecars in operation during the 1870s and 1880s indicate they were box-like affairs, with slightly curved roofs and 9 windows on each side of the body. They had driver's platforms on each end and were drawn by two horses.

By 1890, the year prior to the start of electrification, there were 50 horsecars, both open and closed, on the roster and 225 horses were owned. Open cars were of the 7- and 8-bench type, while the closed cars were both 16 and 18 feet in length. Most were built by Brill.

Four new closed horsecars were built by the Portland Railroad in 1890 and were among the 6 of that type motorized for operation on the Deering line in 1891. By 1896, the year after the electrification was completed, horsecars on the roster numbered 22 closed and 20 open. Some of the closed cars were converted to service equipment and both open and closed horsecars were used as trailers behind the electrics for a number of years. The last 6 closed and 14 open horsecars were retired in 1905.

Early Electric Cars

WHEN the Portland Railroad embarked upon the experimental electrification of its Deering line in 1891, it motorized 6 of its newer closed horsecars (including the four built in 1890) and constructed two 10-bench opens, Nos. 70 and 71, in its own shops.

The electrics were equipped with Peckham trucks, two Thomson-Houston WP-30 15-horsepower motors and Thomson-Houston rheostat controllers, probably of the 51-D type.

All 8 cars went into operation when the Deering line opened on June 19th. Later in the year, the

company produced two more closed cars, Nos. 72 and 73, equipped with Robinson Radial 6-wheel trucks.

The Radial truck cars were 33 feet in overall length and had a seating capacity of 34. They were constructed of bird's-eye maple and were straw in color, with gold lettering reading "Deering, Oakdale and Morrills." Interior furnishings included Fowler stoves and red plush seats with German silver trimmings.

Like the converted horsecars and the new opens, they were equipped with Thomson-Houston motors and controllers.

Originally, it was intended that the two opens, Nos. 70 and 71, be equipped with Robinson trucks, but for some reason this was not done. The two closed cars retained the 6-wheel trucks until 1900 and perhaps later).

With the opening of the Portland-Westbrook line in 1892, two 25-foot closed (Nos. 74 and 75) and four 12-bench open cars (Nos. 76-79) were constructed by the Portland Railroad. Both types were equipped with an early design of maximum traction truck, Thomson-Houston WP-50 motors and rheostat controllers.

Two 20-foot single truck closed cars (Nos. 80 and 81) were built in the company shops in 1894 and as of April of that year, rolling stock of the Portland Railroad included 42 horsecars, 18 motor cars and 8 trailers. The trailers were used on the Westbrook line.

Both the Deering and Westbrook

cars were fitted with ring bolts so they could be drawn by horses between the carbarn on Munjoy Hill and the start of the overhead wire in Monument Square. This procedure was continued until 1895 when the city lines in Portland were electrified.

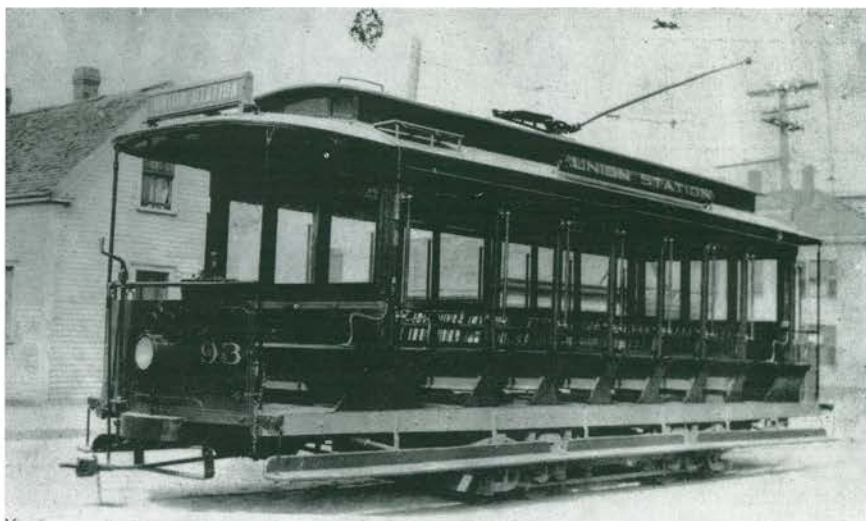
New Rolling Stock

WITH complete electrification of the system in 1895, many new cars were purchased from Brill and Wason, and as of June 30, 1896, passenger equipment consisted of 32 closed and 29 open electric cars, of which 20 and 23, respectively, had been acquired within the year. Of the total, 44 were single truck, two had 6 wheels and 15 had double trucks.

Ten-bench single truck open and 20-foot single truck closed cars predominated among equipment purchased in 1895. There was one 22-foot closed car (No. 109), and one of the four Wason-built closed cars (No. 113) was equipped with vestibules. This was the first vestibuled car on the system and no more were added until 1901.

Beginning in 1896, the company began to acquire large numbers of 12-bench double truck opens, all built by Brill and all equipped with maximum traction trucks. One 25-foot double truck closed car (No. 143) was delivered by Brill in 1897, but the Portland Railroad did not begin to buy double truck closed cars in any quantity until 1901.

A brief description of the passen-



TYPICAL of the 10-bench single truck open cars of the Portland Railroad was No. 93, built in 1895. There were 50 cars of this type.

ger cars of the Portland Railroad appeared in the March 1896 issue of the Street Railway Journal and read as follows:

The cars are particularly handsome and attractively finished, a rich wine color, with gold lining, being used in the exterior for the main line on Congress Street. All recent cars have been supplied by the J. G. Brill Company, with the exception of four which were built by the Wason Manufacturing Company. The railway company also has a number of cars built in its own shops which are giving good satisfaction, but has given up the manufacture of cars, finding that it is more profitable to purchase them than to build directly. While the facilities for the manufacture of cars in Portland were very good, the management stated that in their opinion, this branch of the business could best be conducted on a large scale by persons devoting their attention exclusively to the work.

The closed cars are 20 and 25 feet long in body and are of solid mahogany finish throughout, with bronze metallic trimmings, cushion upholstered seats and backs and crystal plate glass.

A part of the equipment of 20 foot cars is mounted on Brill 21C trucks and a part on Peckham trucks. The 25-foot cars are mounted on Brill Eureka maximum traction trucks. The open cars are 10 and 12 benches in length and are finished with decorated ceilings, solid bronze metal trimmings, entrance guards, etc.

The motors are of the GE200 type with K-2 controllers.

Included in the new equipment acquired in 1896 was a double truck parlor car, the "Bramhall," built by Brill and said to have been given free to the Portland Railroad in appreciation of its past and anticipated future business. The car was a handsome one, painted a shiny black, with ornamental iron grill-work at the ends, a deep soft carpet, comfortable wicker chairs and richly brocaded drapes at the windows. It is said there was even a wine closet. This luxurious vehicle was intended primarily for use by Portland Railroad officials but it was available for charter by special parties—at an extra rate, of course.

Second-Hand Cars

EQUIPMENT of the Portland & Cape Elizabeth Railway was taken over by the Portland Railroad in 1899. This included 10 closed motor cars, 20 open electrics and two closed trailers, all built by J. M. Jones' Sons of Watervliet, New York.

The closed cars were of the 18-foot variety and their open end platforms permitted entrance and exit on one side only. The open cars were of the 10-bench type.

Both open and closed cars were equipped with Bemis trucks and General Electric motors and controllers.

All the closed cars of the Portland & Cape Elizabeth Railway retained their original numbers as long as they were in service on the Portland Railroad. The open cars retained their original numbers until 1912 when they were renumbered 260-279.

During 1901, the Portland Railroad took over the equipment of the Westbrook, Windham & Naples Railway and the Portland & Yarmouth Electric Railway.

The Westbrook, Windham & Naples cars included two 20-foot single truck closed (Nos. 3 and 4), built by the American Car Company of St. Louis, and two 10-bench single truck opens (Nos. 1 and 2), built by the Laconia Car Company of Laconia, New Hampshire. They all had Peckham trucks, two Westinghouse motors and K-10 controllers.

There also were two trailers—one open and one closed—said to have been former horsecars of the West End Street Railway of Boston. They were scrapped immediately after the Portland Railroad took over the Westbrook, Windham & Naples line.

The two open and two closed motor cars retained their original numbers on the Portland Railroad until their retirement.

Cars taken over from the Portland & Yarmouth Electric Railway included 12 10-bench single truck opens, three built by Laconia and 9 by Brill; four double truck 14-bench opens, six 20-foot 4-wheel semi-convertibles, one double truck semi-convertible and one double truck closed car, all built by Brill.

The three Laconia-built 10-bench opens had Bemis trucks and all other single truck cars had Brill 21E trucks. Double truck cars all had Brill 27G trucks.

Also taken over from the Portland & Yarmouth company was a combination U. S. Mail, baggage and passenger car. It subsequently was rebuilt to an express car by the Portland Railroad.

All Portland & Yarmouth cars retained both their original color (yellow) and numbers until 1911 when they were renumbered in the 220-243 series.

New Equipment of The Portland Railroad Cars Purchased in 1895

Car Number	Type of Car	Builder	Built for:
52	21-ft. closed	Brill	
53	21-ft. closed	Brill	
54	21-ft. closed	Brill	
65	20-ft. closed	Brill	
90	10-bench open	Brill	
91	10-bench open	Brill	
92	10-bench open	Brill	
93	10-bench open	Brill	
94	10-bench open	Brill	
95	10-bench open	Brill	
96	10-bench open	Brill	
97	10-bench open	Brill	
98	10-bench open	Brill	
99	10-bench open	Brill	
100	20-ft. closed	Brill	St. John St. Division
101	20-ft. closed	Brill	St. John St. Division
102	20-ft. closed	Brill	St. John St. Division
103	20-ft. closed	Brill	St. John St. Division
104	20-ft. closed	Brill	St. John St. Division
105	20-ft. closed	Brill	St. John St. Division
106	20-ft. closed	Brill	St. John St. Division
107	20-ft. closed	Brill	St. John St. Division
108	20-ft. closed	Brill	St. John St. Division
109	22-ft. closed	Brill	St. John St. Division
110	20-ft. closed	Wason	St. John St. Division
111	20-ft. closed	Wason	St. John St. Division
112	20-ft. closed	Wason	St. John St. Division
113	20-ft. closed	Wason	Vestibuled Car
114	20-ft. closed	Brill	Deering Division
115	20-ft. closed	Brill	Deering Division

Cars Purchased in 1896

116	12-bench open	Brill	Deering Division
117	12-bench open	Brill	Deering Division
118	12-bench open	Brill	Deering Division
119	12-bench open	Brill	Deering Division
120	12-bench open	Brill	Deering Division
121	12-bench open	Brill	Deering Division
122	12-bench open	Brill	Deering Division
123	20-ft. closed	Brill	
124	20-ft. closed	Brill	
125	12-bench open	Brill	Deering Division
126	12-bench open	Brill	Deering Division
128	12-bench open	Brill	
129	10-bench open	Brill	Deering Division
"Bramhall" Parlor Car		Brill	

Cars Purchased in 1897

127	12-bench open	Brill	
130	10-bench open	Brill	
131	10-bench open	Brill	
132	20-ft. closed	Brill	St. John St. Division
133	20-ft. closed	Brill	St. John St. Division
138	20-ft. closed	Brill	Deering Division
139	20-ft. closed	Brill	Deering Division
142	20-ft. closed	Brill	
143	25-ft. closed	Brill	St. John St. Division

Cars Purchased in 1898

134	12-bench open	Brill	
135	12-bench open	Brill	
136	12-bench open	Brill	
137	12-bench open	Brill	
140	10-bench open	Brill	
141	10-bench open	Brill	
144	20-ft. closed	Brill	
145	20-ft. closed	Brill	
146	20-ft. closed	Brill	
147	20-ft. closed	Brill	
148	20-ft. closed	Brill	
149	20-ft. closed	Brill	
150	20-ft. closed	Brill	

Cars Purchased in 1899

151	12-bench open	Brill	
152	12-bench open	Brill	
153	12-bench open	Brill	
154	12-bench open	Brill	

PORTLAND & YARMOUTH ELECTRIC RAILWAY

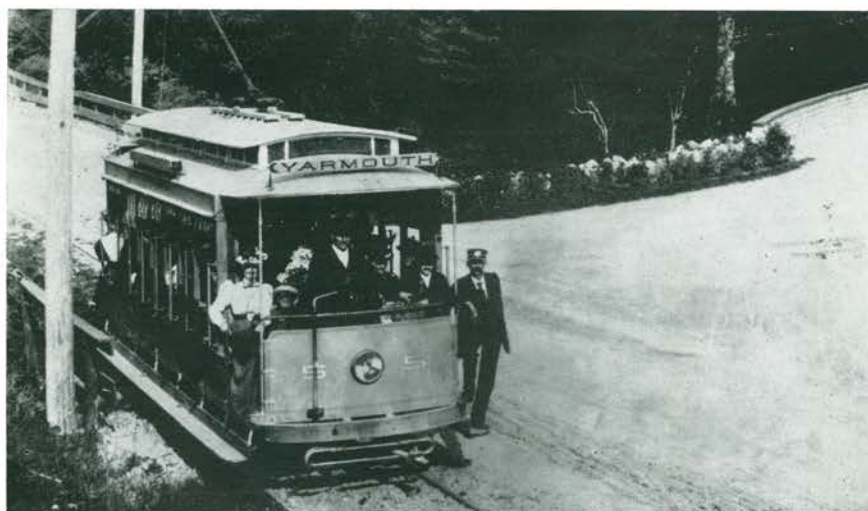
Equipment Owned 1899-1901

		Added During Year
1899	Box cars, electric	4
	Open cars, electric	12
	Total passenger cars	16
	Mail car, electric	1
	Above cars with 4 wheels	16
	Above cars with 8 wheels	1
	Work cars	4
	Snow plows (including one rotary)	2
1900	Box cars, electric	6
	Open cars, electric	14
	Total passenger cars	20
	Mail car, electric	1
	Above cars with 4 wheels	18
	Above cars with 8 wheels	3
	Work cars	4
	Snow plows (including one rotary)	3
1901	Box cars, electric	8
	Open cars, electric	16
	Total passenger cars	24
	Box freight car	1
	Platform freight cars (work)	3
	Snow plows (including one rotary)	3

Passenger Cars Owned 1901

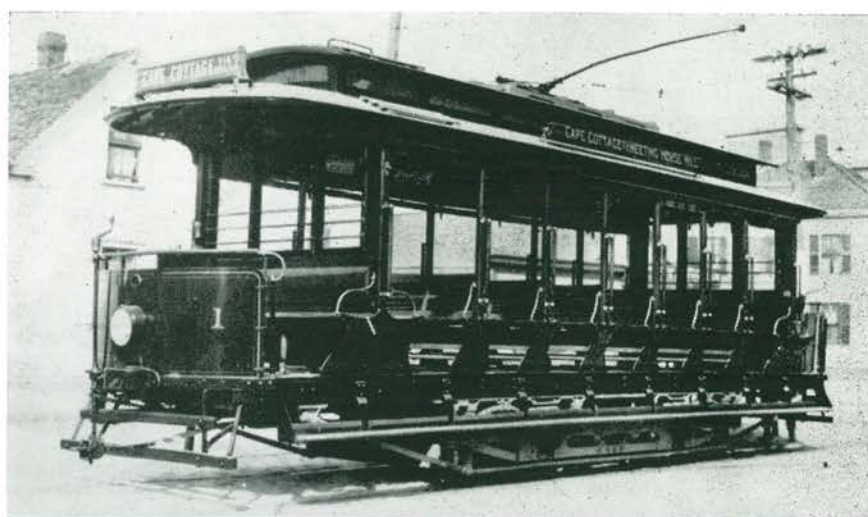
Single truck open	12
Double truck open	4
Single truck semi-convertible	6
Double truck closed	1
Double truck semi-convertible	1

All cars taken over by
the PORTLAND RAILROAD in 1901.



10-BENCH OPEN CAR No. 1,
built by Laconia and originally
owned by Westbrook, Windham
& Naples Railway, is shown
as a Portland Railroad car.

PORTLAND & YARMOUTH
Electric Railway car No. 5 is
shown in the photograph below
near Underwood Springs Park
entrance on the Yarmouth line.



PORTLAND & CAPE ELIZABETH RAILWAY

Equipment Owned 1895-1899

		Added During Year
1895	Box cars, electric	6
	Open cars, electric	6
	Trailers	2
	Total passenger cars	14
	Snow plows	1
1896	Box cars, electric	10
	Open cars, electric	16
	Trailers	10
	Total passenger cars	36
	Snow plows	1
1897	Box cars, electric	10
	Open cars, electric	16
	Trailers	10
	Snow plows	2
	Total passenger cars	36
1898	Box cars, electric	10
	Open cars, electric	20
	Trailers	8
	Total passenger cars	38
	Work cars	2
	Snow plows	2
1899	Box cars, electric	10
	Open cars, electric	20
	Trailers	2
	Total passenger cars	32
	Work cars	4
	Snow plows	2

All cars taken over by
the PORTLAND RAILROAD in 1899.

Westbrook, Windham & Naples Railway

Roster of Equipment

Car Number	Type of Car	Builder	Year Built	Trucks	Remarks
1	10-bench open	Laconia	1899	Peckham	The 4 motor cars retained their original numbers on the Portland Railroad. The 2 trailers were scrapped immediately by the Portland Railroad.
2	10-bench open	Laconia	1899	Peckham	
3	20-ft. closed	American	1899	Peckham	
4	20-ft. closed	American	1899	Peckham	
—	Closed trailer				The snow plow became Portland Railroad No. 9. The motor flat, known as "Sandy Maria," was taken over by the Portland Railroad, but was never given a number.
—	Open trailer				
—	Nose plow	Taunton	1899	Peckham	
—	Motor flat	WW&N	1899	Taunton	

New Cars After 1900

ADDITIONAL 10-bench and 12-bench open cars and 20-foot closed cars were added in 1897, 1898 and 1899, and by June 30th of the last year, equipment of the Portland Railroad included 55 closed cars equipped for electric power, 13 closed trailers, 65 open cars equipped for electric power and 23 open trailers.

These totals include the cars taken over from the Portland & Cape Elizabeth Railway.

Five cars—four 20-foot closed and one 10-bench open—were lost in the St. John Street carhouse fire of July 9, 1901, and to replace them, the Portland Railroad placed an order with Brill for three 28-foot double truck and one 20-foot single truck closed cars and one 12-bench double truck open. They were assigned the same numbers as the cars burned, namely, 65, 107, 108 and 112 for the closed cars and 99 for the open.

The single truck closed car, No. 112, was equipped with vestibules and was assigned to the Stroud-water line. Two of the double truck closed cars, Nos. 65 and 107, had extra long open platforms to carry the baggage of passengers transferring from Union Station to Grand Trunk Station or to the steamship wharves along Commercial Street.

Building of the Gorham line in 1901 necessitated the purchase of more new cars. Among these were the first air-braked cars on the system, Nos. 158, 159 and 160, all 28-foot double truck railroad roof closed cars with enclosed vestibules and cross seats. Incidentally, these were the first cross-seat cars on the system, all previous closed cars having side seats.

At the same time, three 14-bench opens, Nos. 155, 156 and 157, were added, but these had hand brakes only.

Both types were built by Brill and were equipped with Brill 27G trucks. The three closed cars had only two motors at first, two additional motors later being installed on each car.

Other new cars acquired in 1901 included two 12-bench opens (Nos. 161 and 162) and four 10-bench opens (Nos. 163-166), all built by Brill, and two 20-foot single truck

Portland & Cape Elizabeth Railway

Roster of Equipment

Car Numbers	Type of Car	Builder	Year Built	Trucks	Notes
10-15	10-bench open	Jones	1895	Bemis	Other passenger cars, of which numbers are unknown, included eight trailers purchased 1896 and four 10-bench opens purchased in 1898.
16-23	18-ft. closed	Jones	1895	Bemis	
24-33	10-bench open	Jones	1896	Bemis	
34-37	18-ft. closed	Jones	1896	Bemis	
1	Single truck shear plow	Brill	1895	Brill	
2	Single truck shear plow	Brill	1897	Brill	

There also were 4 work cars, two built in 1898 and two built in 1899. All four are believed to have been former passenger trailers.

The 20 open cars were renumbered 260-279 by the Portland Railroad in 1912. The closed cars were never renumbered, retaining their original numbers until retirement. Some were converted to service cars by the Portland Railroad.

Portland & Yarmouth Electric Railway

Roster of Equipment

Car Number	Type of Car	Builder	Year Built	Trucks	Notes
1	10-bench open	Laconia	1897	Bemis	Other cars included 3 platform freight cars, 2 single truck shear plows from Taunton and one single truck rotary plow from Ruggles.
2	10-bench open	Laconia	1897	Bemis	
3	10-bench open	Laconia	1897	Bemis	
4	10-bench open	Brill	1897	Brill 21E	
5	10-bench open	Brill	1897	Brill 21E	
6	10-bench open	Brill	1897	Brill 21E	
7	10-bench open	Brill	1897	Brill 21E	
8	10-bench open	Brill	1897	Brill 21E	
9	10-bench open	Brill	1897	Brill 21E	
10	10-bench open	Brill	1897	Brill 21E	
11	10-bench open	Brill	1897	Brill 21E	
12	10-bench open	Brill	1897	Brill 21E	
20	20-ft. semi-convertible	Brill	1897	Brill 21E	
21	20-ft. semi-convertible	Brill	1897	Brill 21E	
22	20-ft. semi-convertible	Brill	1897	Brill 21E	
23	20-ft. semi-convertible	Brill	1897	Brill 21E	
24	20-ft. semi-convertible	Brill	1899	Brill 21E	
25	20-ft. semi-convertible	Brill	1899	Brill 21E	
28	14-bench open	Brill	1899	Brill 27G	
29	14-bench open	Brill	1899	Brill 27G	
30	14-bench open	Brill	1900	Brill 27G	
31	14-bench open	Brill	1900	Brill 27G	
40	28-ft. semi-convertible	Brill	1900	Brill 27G	
41	28-ft. closed	Brill	1900	Brill 27G	
3	Combination	Brill	1897	Maximum traction	

railroad roof closed cars (Nos. 167 and 168) built by Wason.

No less than 32 new cars were bought in 1902, the majority being heavy suburban-type semi-convertibles and opens for the Saco and Westbrook Divisions. For the Saco Division, there were eight 34-foot double truck railroad roof semis with smoking compartments (Nos. 173-180) and nine 14-bench double truck monitor roof "Narragansett" type opens (Nos. 181-189). Built by Brill, all were 4-motor cars. The semis had Brill 27A trucks and the opens were equipped with the Brill 27G type.

Ten 30-foot double truck railroad roof semi-convertibles (Nos. 190-193, 196-201) were purchased from Brill for the Westbrook, Gorham

and South Windham lines. For the city routes, new equipment included two 25-foot double truck closed cars (Nos. 169 and 170); two 28-foot double truck closed (Nos. 194 and 195) and two 12-bench opens (Nos. 171 and 172). The 25-foot and 28-foot closed cars had monitor roofs and longitudinal seats.

It would appear that the Portland Railroad submitted no definite specifications in purchasing cars, for most of its early equipment was of standard Brill design, common throughout the eastern part of the country. Apparently, the company simply placed orders for so many cars of such a type and seating capacity and left it to the builder to decide the details. This policy

produced a wide and interesting variety of rolling stock.

After 1902, no new rolling stock was purchased until 1905 when four 28-foot double truck closed cars (Nos. 202-205) were received from the John Stephenson Company of Elizabeth, New Jersey. These were side-seaters for city and short-run suburban service.

Two more double truck semi-convertibles with smoking compartments (Nos. 206 and 207) for the Yarmouth Division were purchased from Brill in 1906.

To meet a demand for more double truck closed side-seaters for city service, the Portland Railroad resumed car-building in 1908 and turned out four 28-foot cars (Nos. 208-211) in its own shops. Three cars of the same type (Nos. 212-214) and two 12-bench opens (Nos. 215 and 216) were ordered from Brill in that same year.

Three additional side seaters (Nos. 217-219) were built in 1910, and another three (Nos. 244, 251, 252) in 1911. These about ended the company's car-building efforts.

The last opens purchased by the Portland Railroad were three 12-bench cars (Nos. 245-247) in 1911. These were slightly heavier than

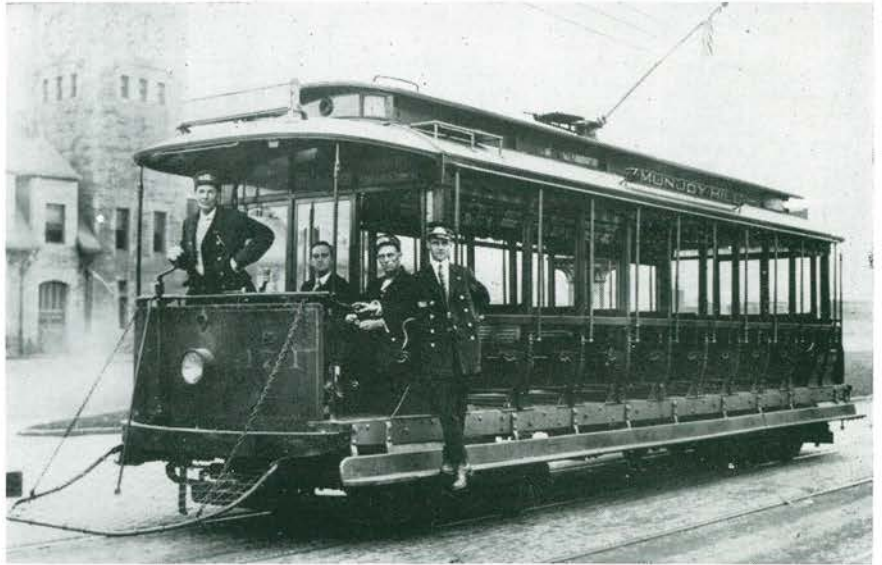
earlier cars of this type and rode on Brill 39E trucks. Three more side seaters (Nos. 248-250) also were purchased from Brill in 1911.

Vestibules

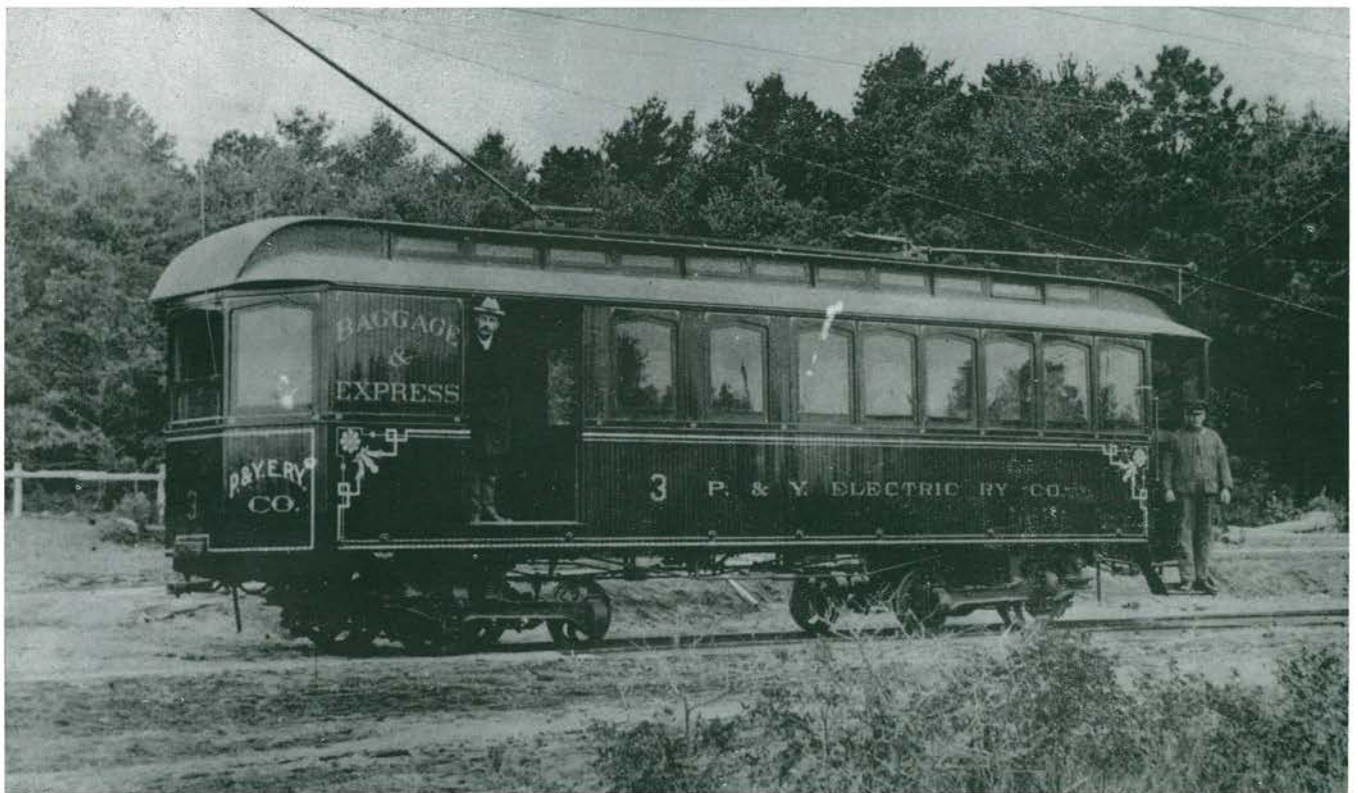
AS EARLY as 1899, the Maine Legislature considered a bill to

require street railways to install enclosed vestibules on all cars operated during the winter months. There was considerable opposition to the measure and it was defeated.

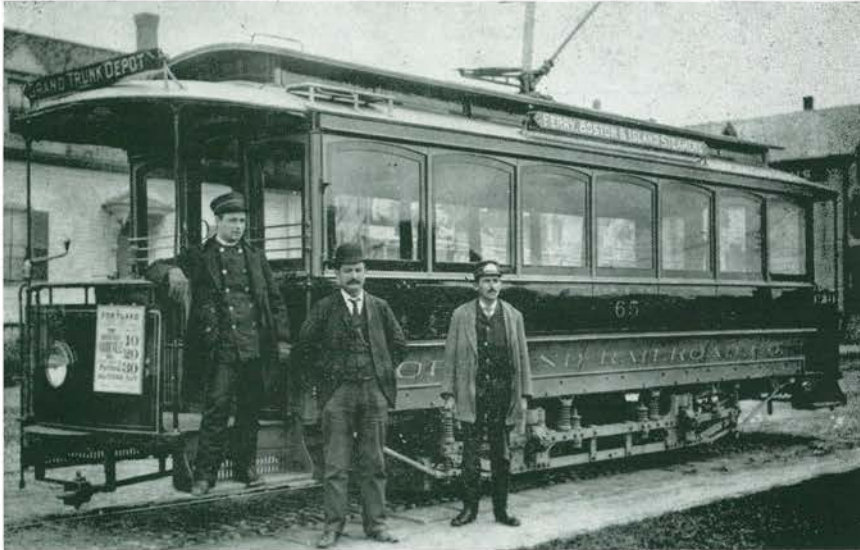
Another attempt was made in 1903 and this time, after some delay, the move was successful. The Portland Railroad sought to be



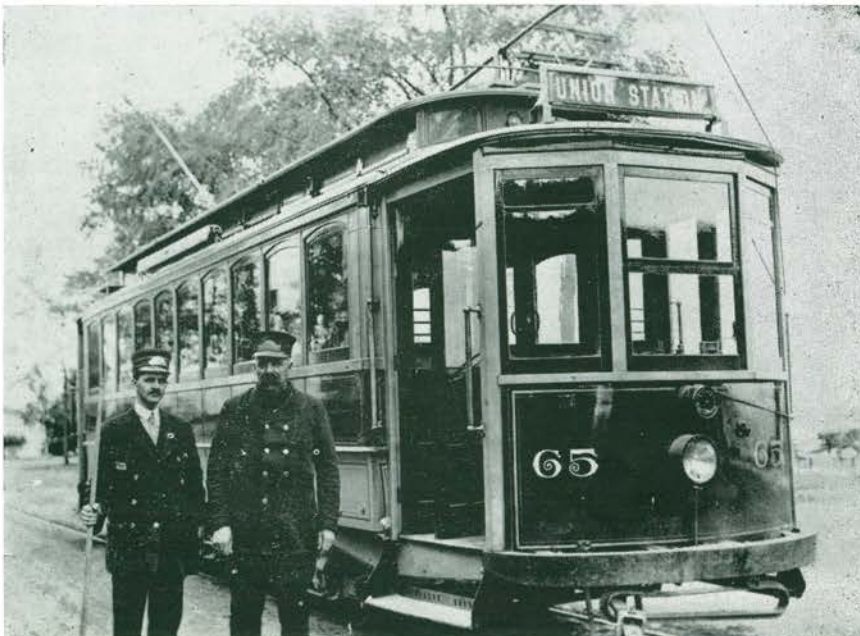
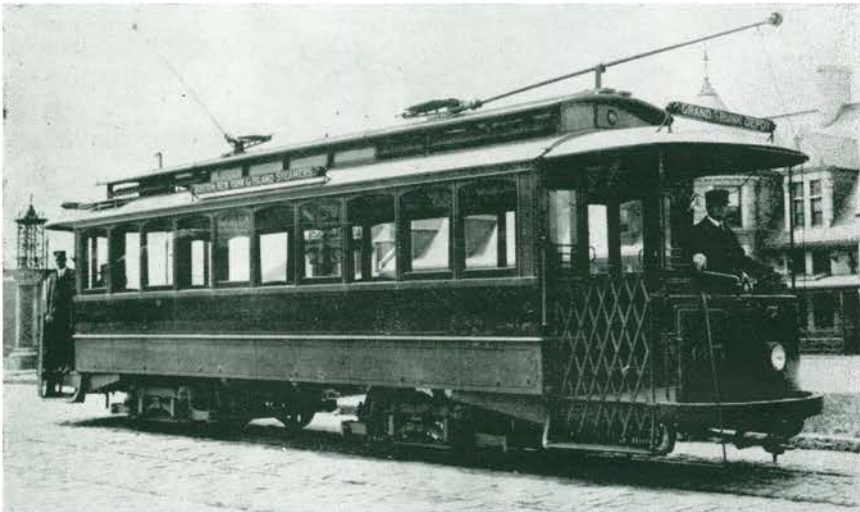
NO. 171—12-bench open at Union Station in July 1916. Small flag on trolley pole was in celebration of strike victory. All cars at the time carried these flags. (See Page 39, Part I)—Heseltine Photo.



COMBINATION CAR No. 3 of the Portland & Yarmouth Electric Railway retained the same number on the Portland Railroad roster and was later converted to a box express motor in the Portland shops



FIRST NO. 65, Brill 20-foot closed car of 1895, was destroyed in the St. John Street carhouse fire of 1901. The car is shown in this early photograph on the Union Station-Grand Trunk Station run.



excused from vestibuling cars on the Congress Street and Spring Street-Grand Trunk Station lines, but the Railroad Commission rejected the application and said that all closed cars on the system must have vestibules by Dec. 1, 1905.

It must be said that the Portland Railroad did a complete job in vestibuling its cars and when they emerged from the shops they looked as if they were new. The project also involved installation of folding doors, and on the former Portland & Cape Elizabeth cars, it necessitated the complete rebuilding of the old end platforms to permit entrance and exit from both sides.

Car Colors

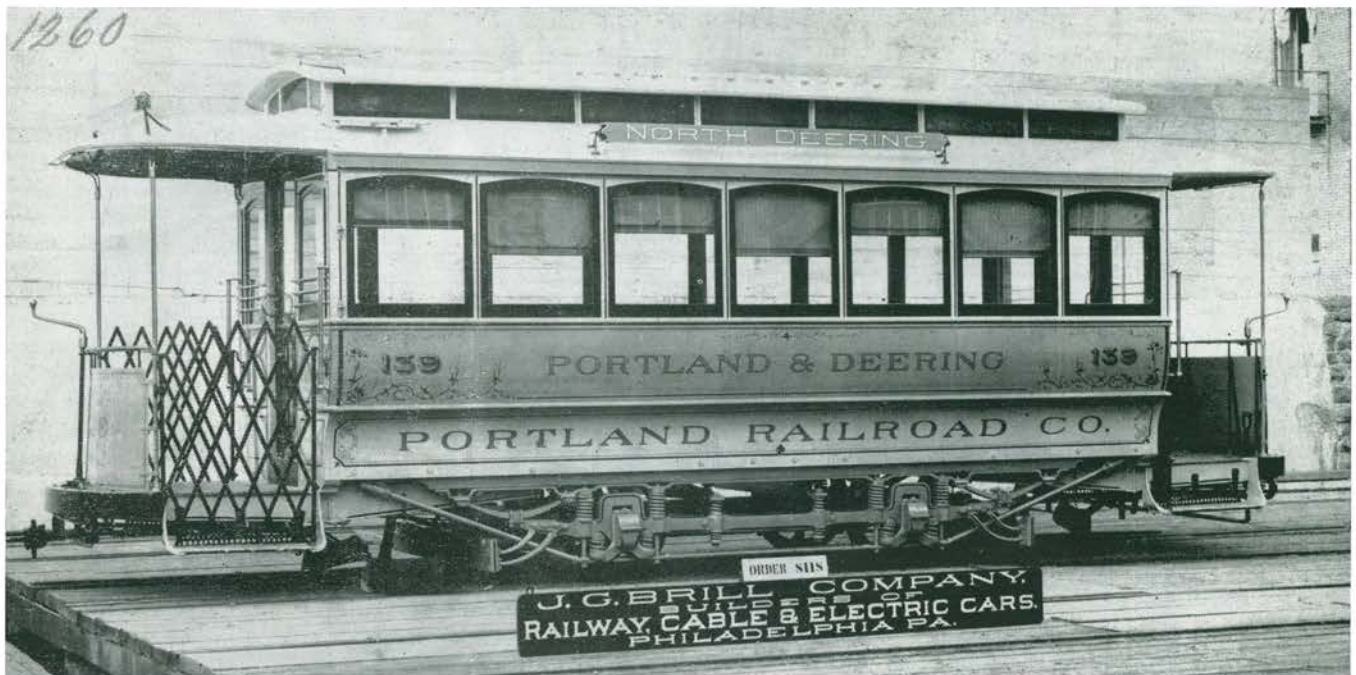
FOR MANY years, the cars were painted different colors according to the line or division on which they were operated.

For example, Union Station-Munjoy Hill cars were light green and Spring Street-Grand Trunk Station cars were blue with gold striping. Cars running between Union Station and Grand Trunk Station were red. Stroudwater and South Portland cars also were red (although of different shades) and Deering cars were yellow. Yarmouth cars originally were yellow but later were repainted green. The first Westbrook cars were brown, but later were a dark green, the same color as equipment of the Saco Division.

The company name appeared on the lower side panel of closed cars and on the side sills of the opens.

About 1920, the company settled on one paint scheme for all divisions. This called for a red body with white and blue trimming and gold leaf numerals. Roofs were gray. The company name was omitted when cars were repainted in these colors.

SECOND NO. 65—Before and after vestibules were added. As one of the cars used on the Union Station - Grand Trunk loop which also served the steamship wharves, No. 65 had extra long platforms to accommodate the baggage and trunks of passengers transferring between stations and steamers.



BUILDER'S PHOTO of one of the 5 single truck 20-ft. closed cars purchased by the Portland Railroad in 1897. Nos. 138 and 139 came painted in yellow livery and were lettered for the Deering Division.

Destination Signs

THE FIRST destination signs were of the revolving wooden box type, mounted on the sides and ends of the car roofs. Many of the open cars had their principal destinations permanently painted on the letterboards and some of the first closed cars, instead of having separate signs, had their destination and routing lettered on the sides of the body.

Shortly before World War I, box

signs at the ends of the cars were replaced with roof-mounted roller signs, the wooden side signs being retained. Still later, the end destination signs on most closed cars were installed in the vestibule body just above the center window, and the side signs were eliminated.

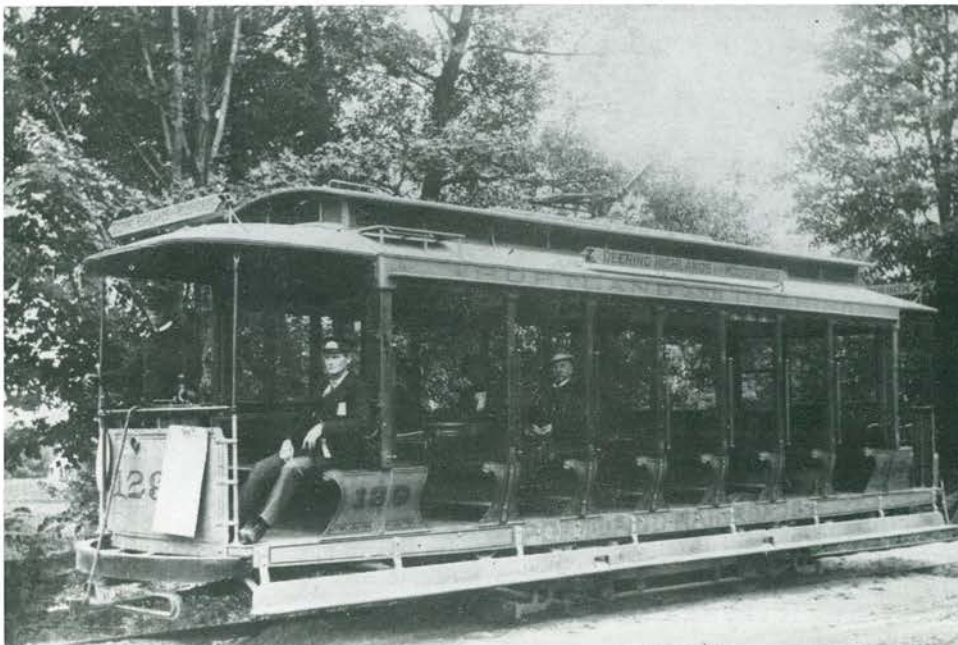
On November 21, 1917, a system of dasher signs went into effect. These signs were of various sizes, shapes and colors to designate the different routes. This plan continued until the signs became obliterated

through effect of the weather and the dash signs that replaced them all had blue backgrounds and white letters.

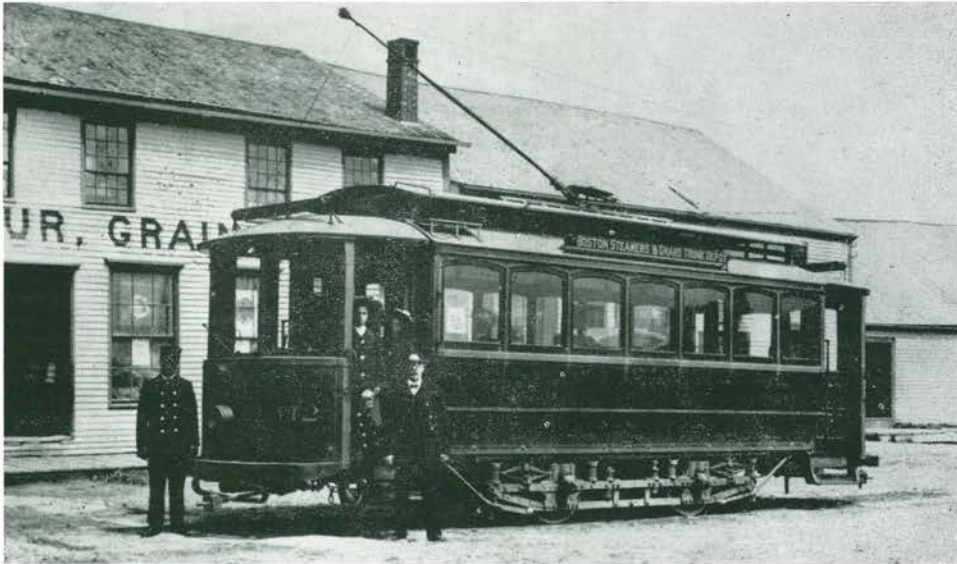
Trucks, Motors, Controls

THERE was a great variety of trucks on cars of the Portland Railroad. Most of the double trucks were of the Brill 22E (maximum traction), Brill 27A and Brill 27G types at first, with Brill 27E, Standard O-50, Brill 39E (maximum traction), Brill 27GE and Brill 51E types later being added. Single trucks were mostly of the Peckham, Bemis, Brill 21C and Brill 21E types.

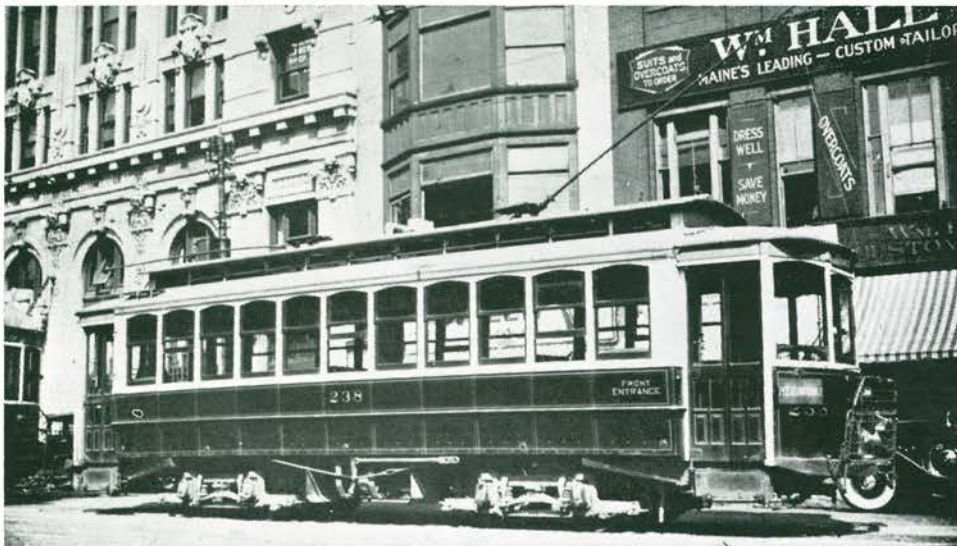
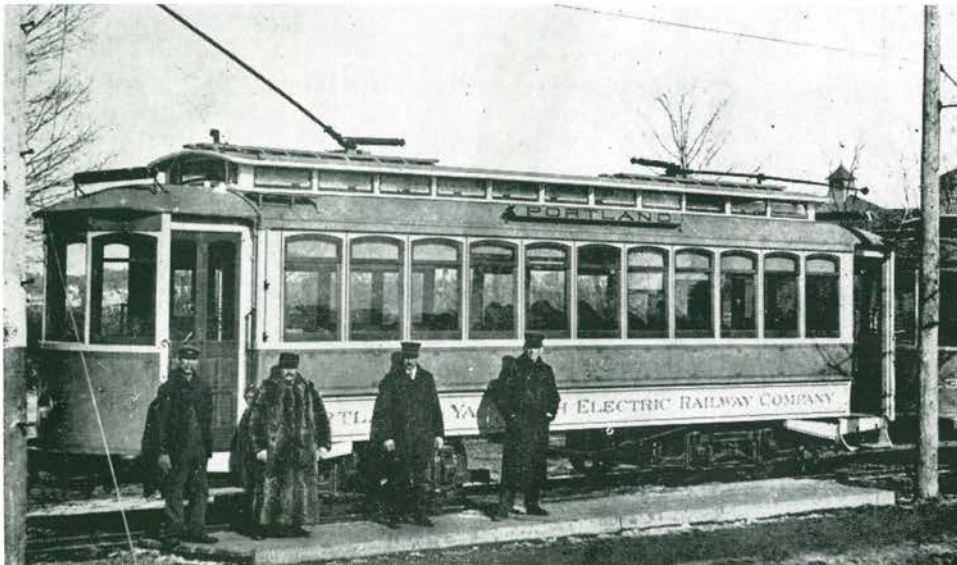
The original Thomson-Houston motors were replaced with General Electric 800 motors about 1895 and still later many of the GE1000 type were purchased. Cars added after 1901 had GE80, GE201 and GE203 motors for



PAINTED in yellow livery of the Deering Division, car No. 129, Brill 10-bench open, was photographed on so-called "Kite Line" in the Deering Highlands.



SECOND CAR NO. 112 poses for this photograph in the early 1900s.



CAR NO. 238, formerly Portland & Yarmouth No. 40 as above, and the only car of its type on the Portland system, is shown here about 1935.

the most part. K-2, K-6, K-10 and K-28 controllers predominated, with the K-35 being installed on many cars during and after World War I years.

For many years, it was the custom to shift motors and controllers from open cars to snow plows in the late fall and back to the opens in the spring. It was also the practice to remove two motors from 4-motor closed cars during summer months and use them in the opens.

Eventually, with retirement of many of the older single truck cars, enough motors were made available to keep all remaining cars of all types fully equipped all the year 'round.

Car Numbers

IN CONTRAST to the many street railways which assigned even numbers to closed cars and odd numbers to open cars (or vice versa), the Portland Railroad, for many years, numbered its cars in the order in which they were built or purchased. For example, the 8 semi-convertibles purchased for the Saco Division in 1902 were numbered 173-180 and the opens bought for the same division at the same time were numbered 181-189.

It was not until 1914 that the company began assigning specific series of numbers to groups of identical cars added to the roster. For example, the 600 series was given to the single truck Birneys and the 800 series to double truck Birneys.

For several years there were some duplicate numbers on the system, involving cars taken over from the Portland & Cape Elizabeth Railway and Portland & Yarmouth Electric Railway. However, since the equipment was operated on different divisions, the conflicts made little difference. As previously noted, the Portland & Yarmouth cars were renumbered in the 220-243 class in 1911 and the Portland & Cape Elizabeth opens were renumbered 260-279 the following year.

Closed cars, in general, had two numbers on each dasher and a single number in the center of each side. Open cars had either one or two numbers on each dasher and one number on each end of the front and rear benches.

Modernization

MODERNIZATION of Portland Railroad equipment began in early 1912 when three double truck arch roof semi-convertibles were ordered from the Wason Manufacturing Company.

Numbered 253, 254 and 255, they were designed for the pay-as-you-enter method of fare collection and had two doors in each bulkhead, one on each side, instead of the customary single door in the center. One door was for entrance and the other for exit, with the conductor's station between the two.

Two of the cars, Nos. 253 and 254, had 14 cross seats and 4 short side seats, and No. 255 had 10 cross seats and 4 long side seats. All three cars were assigned to the Stroudwater run.

The first cars with steel underframes were the 10 closed cars of the 400 series (Nos. 400 even through 418) purchased from Wason in 1914.

They also were of the pay-as-you-enter type and had the same outside door arrangement as Nos. 253-255. But, unlike the latter, they had no bulkheads. The floors were of the low-level ramp type and were concrete instead of wooden. Eventually, wooden floors were installed in all 10 cars.

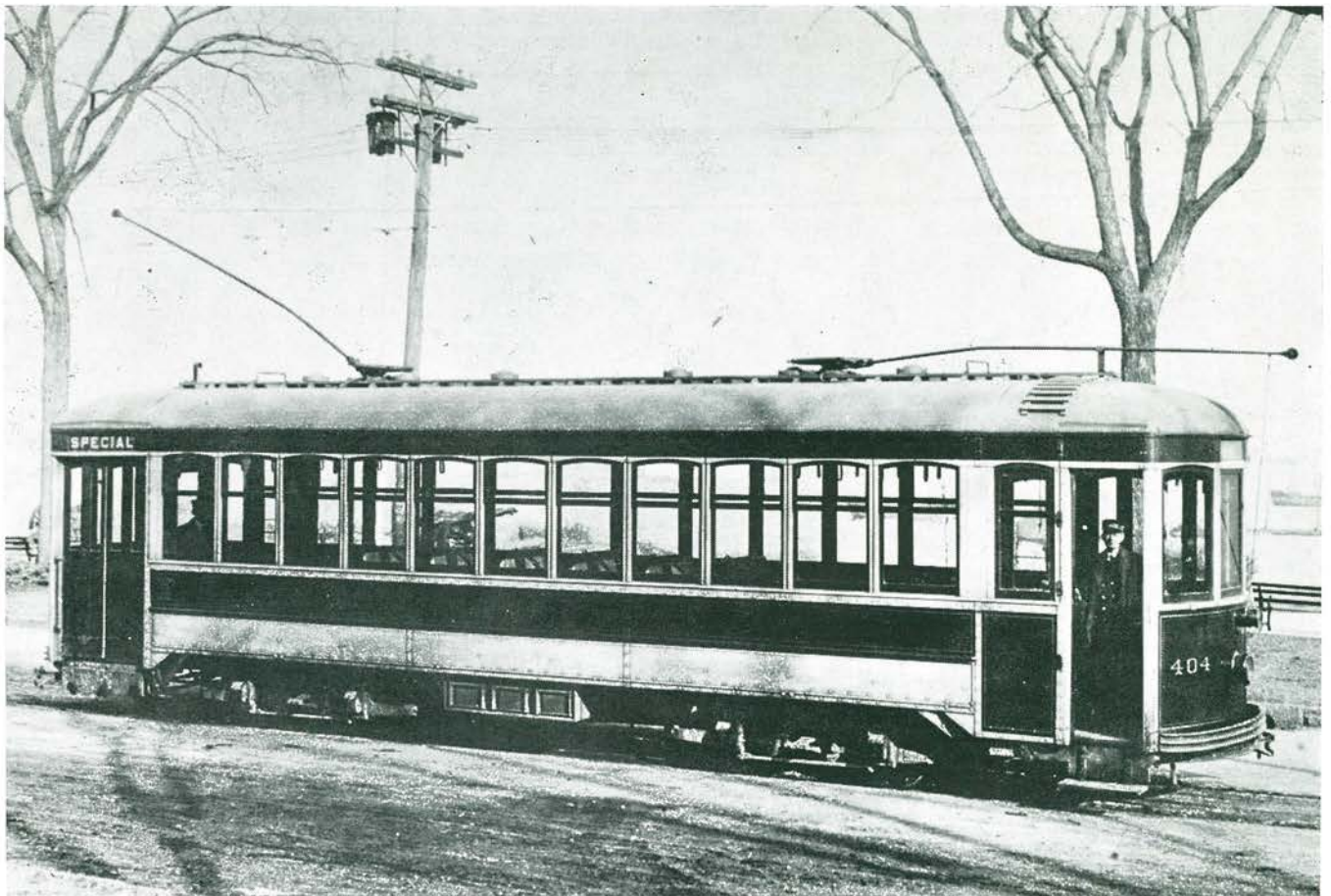
Assigned to the Union Station-Munjoy Hill line, the 400s were immediately successful. However, they were awkward and ugly in exterior appearance and promptly were dubbed "Gunboats" by railway employees and the public alike. One car, No. 404, was equipped for a time with a new type of non-rigid wheels, invented by one Edwin C. Madden. Rubber packing was used to reduce noise and shock. Though the new wheels proved very efficient, no other cars were equipped and conventional steel wheels were subsequently re-installed on 404.

Three 21-foot single truck closed cars, built by Laconia in 1911, were acquired second-hand from the

Lewiston, Augusta & Waterville Street Railway about 1915. They were numbered 306, 308 and 310 and were used mostly on the South Portland Division. One car, No. 306, was one-man operated on the Pond Cove line in 1918. All three were later converted to sand cars.

Car No. 173 of the Saco Division was destroyed by fire January 22, 1915, when a broken trolley wire fouled the car body. Its trucks, motors and controllers were salvaged and used to equip a double truck arch roof semi-convertible purchased from Wason later that year. This new car, No. 502, was the longest on the Portland system and was sufficiently fast to make special trips over the Portland-Lewiston at different times.

In 1915, the Maine Legislature passed a law requiring all street cars in the state to be equipped with fenders no later than March 1, 1916. The Libby basket fender, with bumper protector, was chosen by the Portland Railroad and No. 404



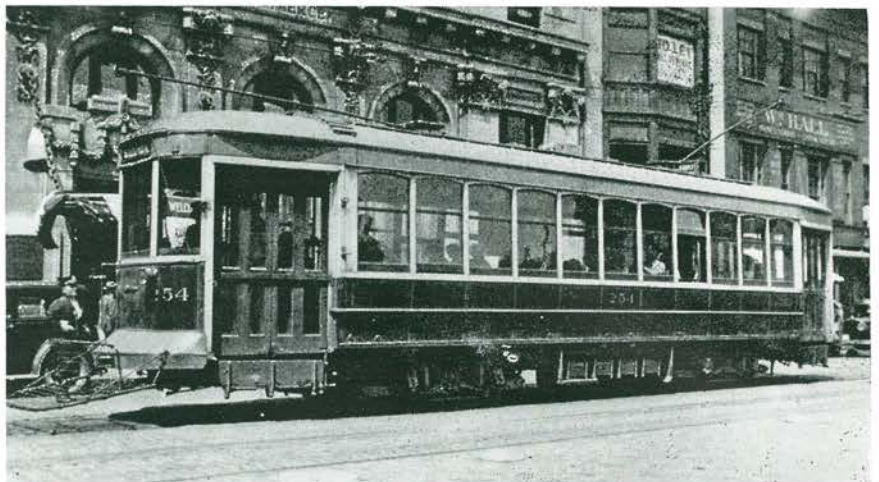
NO. 404, one of the Wason 30-ft. arch roof closed cars purchased for the Union Station-Munjoy Hill line in 1914, is shown in its original cream color scheme. Locally known as the "Gunboats," the single doors at right front and left rear later were replaced with double folding doors for one-man service.

was the first car so equipped. About 200 cars eventually were fitted with fenders at a cost of \$10,000.

Six 20-foot single truck closed cars, 14 28-foot double truck closed cars and two semi-convertible cars (Nos. 254 and 255) were rebuilt for prepayment service in 1916. Bulkheads were removed, folding steps were installed and door control stands with brackets to hold fare boxes were provided for conductors. (Nos. 254 and 255 had been built as prepayment cars and the conversion was simply a modification of their original design).

At about the same time, the old parlor car "Bramhall" was converted to a prepayment car and numbered 500. A Brill Radiax truck replaced the old maximum traction trucks with which the car was originally equipped.

During 1917, the railroad added four single truck arch roof semi-convertibles to the roster (Nos. 312-318). Built by Wason, these cars were equipped with Brill Radiax trucks and had side seats, with a capacity of 32 passengers. Operated as prepayment cars, they were assigned primarily to the Spring Street-Grand Trunk Station line, although they occasionally saw service on other routes. The Radiax trucks were none too satisfactory, tending to derail easily, and the



FIRST PREPAYMENT CARS on the Portland Railroad were Nos. 253-255, Wason semi-convertibles built in 1912. No. 254 rebuilt as a one-man car is shown in this photo taken by George Votava.

cars were retired after only a few years of use, giving way to Birneys.

Another car added in 1917 was No. 700, a double truck center-entrance type built in the company shops from two single truck closed cars formerly operated on Congress Street. It had a seating capacity of 48 and the conductor's stand, complete with fare box and overhead register, was located in the center compartment. The center doors were air-operated from the conductor's position.

While no more center entrance motor cars were acquired, the Port-

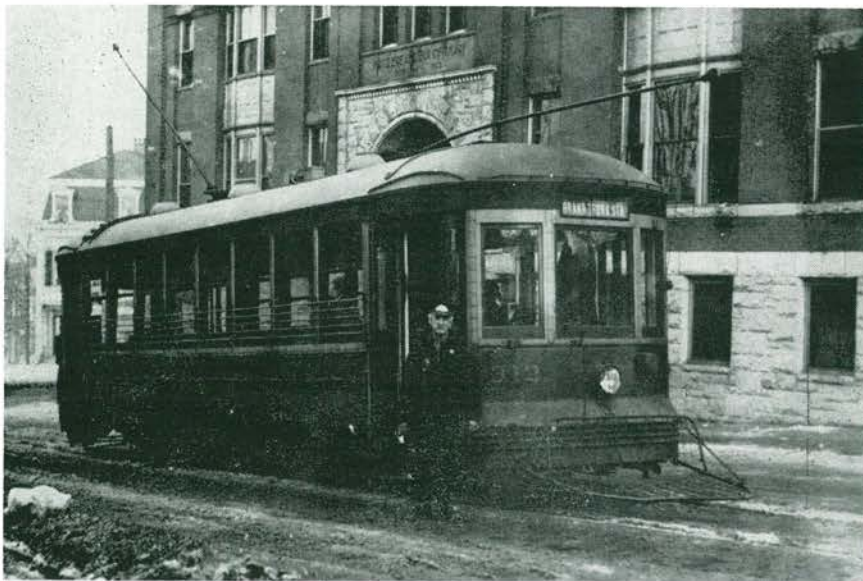
land Railroad purchased 8 double truck arch roof center entrance trailers from Wason in early 1918. Numbered 760-767, they were yellow and green in color and were bought for use on the Westbrook Division.

These trailers were hauled by the semi-convertibles of the 190 class, fitted with Tomlinson couplers and train air for the purpose. The trailers were equipped with single trolley poles which were raised to provide light and heat while awaiting pick-up by the motor cars at the Westbrook barn.

It is said that some attempt was made to use the trailers on the Saco Division but they did not prove satisfactory there.

Three of the Saco Division semis (the 173-180 class) were equipped with PC control and automatic air brakes for multiple unit operation in 1917, the plan being to operate a 2 or 3-car train on the Portland-Old Orchard Beach run on busy summer Sundays. The plan did not develop and multiple unit equipment was removed from the cars.

Portland was a busy place during World War I years as warships of the U. S. Navy's Atlantic Fleet were based there and much activity took place in the South Portland shipyards. The Portland Railroad had need of more cars to handle the heavy volume of riding and it purchased two Brill double truck railroad roof closed cars (Nos. 504 and 506) from the New Jersey & Pennsylvania Traction Company. And in addition, many single truck closed cars long in storage were returned to service.



WASON 24-foot semi-convertibles (Nos. 312, 314, 316 and 318) built in 1917 were used only a few years by the Portland Railroad, running on the Spring Street-Grand Trunk Station line. The radiax trucks derailed easily and the cars were never rebuilt for one-man operation. No. 312 is shown at Bramhall Square, end of the Spring Street line, with the Maine Eye and Ear Infirmary in background.

One-Man Operation

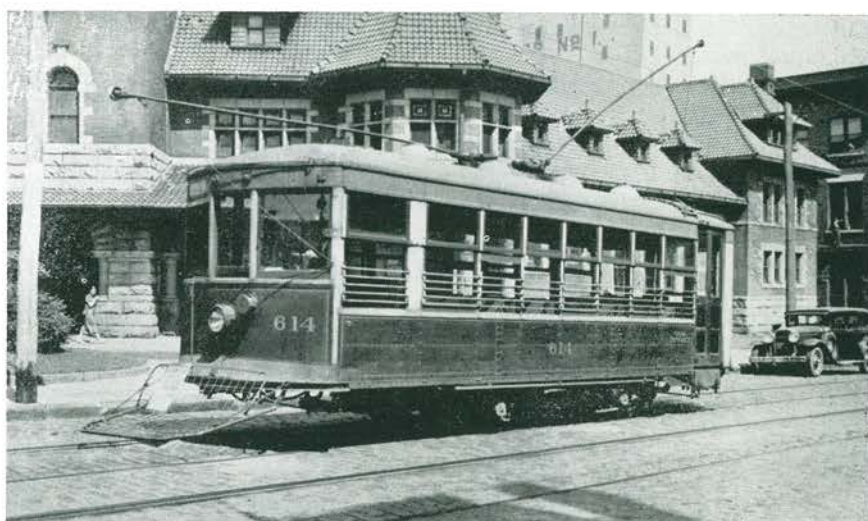
ALTHOUGH one-man operation had been introduced on the Pond Cove line in 1918, it was but a temporary wartime expedient. The single truck closed car (No. 306) was simply equipped with a fare box and the motorman was given a coin changer and a ticket punch.

After the war, however, one-man operation became a necessity and 4 Brill 20-foot single truck closed cars were converted in 1918, with air brakes and standard safety devices being installed.

At the same time, 15 Birney safety cars (Nos. 600-614) were ordered from Wason. The first was tested May 13, 1919 on the Spring Street-Grand Trunk Station line, with Mayor Clarke of Portland and Mayor Hinckly of South Portland taking turns at the controls. All 15 cars went into service May 15th, but at first the Birneys were operated with two men until the public became familiar with the new equipment.

Another 8 Birneys (Nos. 615-622), also built by Wason, were added in 1920.

The Birneys were operated on practically every city line and they occasionally saw service on some of the suburban routes. For a time, a Birney was operated between Dunstan Corner, Scarborough, and Saco while Saco Division cars were running through to Old Orchard. A Birney also was kept at the Yarmouth carhouse to serve as a set-back when regular cars were late.



GRAND TRUNK STATION on India Street is the background for this picture of Portland Birney car No. 614 by George E. Votava.

All of the double truck side-seat city cars, the 10 "Gunboats" and some suburban cars were converted for one-man operation in 1921 and 1922. Dead-man controllers and other safety devices were installed on most of them, but on some cars the conversion involved only the installation of an emergency valve. This was true of the Saco Division semis (the 190 class cars and Nos. 206 and 207) when they were converted about 1932.

Bars were placed across the left hand doors of many of the one-man cars, but these could easily be removed if a particular car was to be used on a line where passengers were loaded or unloaded from either side.

The last cars purchased by the

Portland Railroad were 6 double truck Birneys (Nos. 800-805) from Wason in 1922. Three were assigned to the Cape Cottage line and three to the Brighton Avenue route, and they remained in service on these routes until 1940 and 1941, respectively. They were equipped for either one or two-man operation but customarily were run as one-man cars.

Retirements

DURING the years immediately following World War I, many old single truck open and closed cars were withdrawn from service, and in 1921 some 60 of them were sold for junk. The proceeds were used to purchase new motors and

DOUBLE TRUCK BIRNEY No. 802, one of 6 (Nos. 800-805) bought by the Portland Railroad in 1922, usually ran on Brighton Avenue-Cape Cottage line. Photo shows car at end of Brighton Avenue run ready to go through to Cape Cottage terminus.



other electrical equipment for the remaining cars.

As the 'Twenties passed, all operation became one-man and the use of open cars in regular service was discontinued. Some of the 14-bench opens were retained for use as special cars and 7 of the 12-bench type were sold to the Biddeford & Saco Railroad, all others being scrapped.

By 1927, the Portland Railroad owned only 113 passenger cars of all types. It had owned 219 in 1914.

Abandonments began in 1931 and as lines were discontinued, surplus cars were scrapped at the Deering carhouse. All but two of the single truck Birneys were sold to the

Biddeford & Saco Railroad in 1936 and 1937, and one double truck side-seater (No. 204) was sold to the Berlin Street Railway in Berlin, New Hampshire.

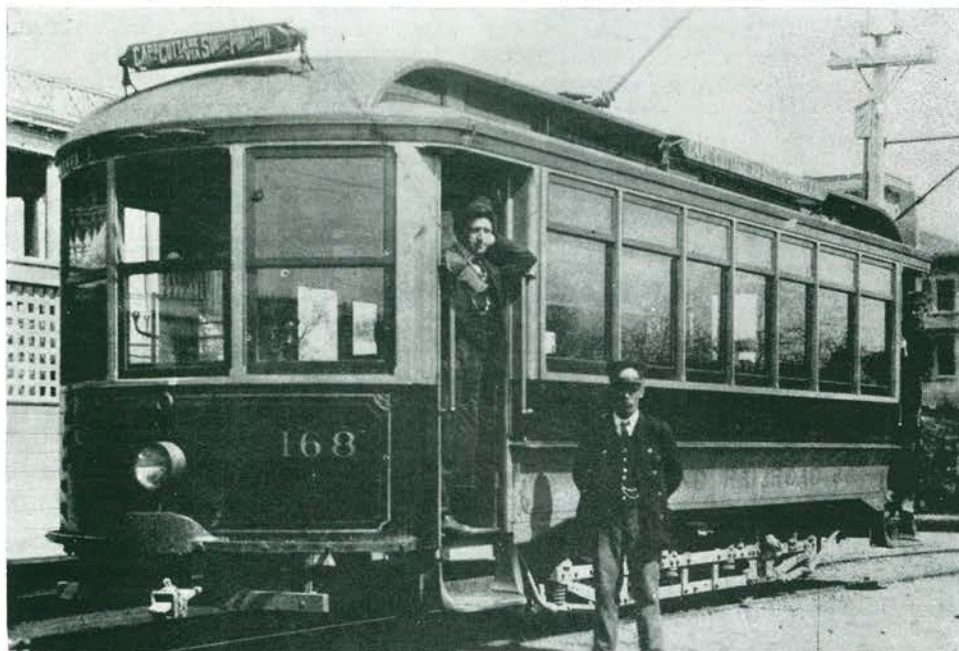
As of August 15, 1937, there were only 66 double truck closed cars on the property and some of these were in storage. By January 1, 1939, the number of cars had been reduced to 60. Additional cars were placed in storage after the motorization of several lines in April and September of that year.

Wholesale scrapping of surplus cars commenced at Deering in early 1940 and continued throughout the entire year so that by December 1 only 31 cars remained. Ten of these — the "Gunboats" — were scrapped

after the Congress Street line was motorized on Christmas Eve, leaving only 21 cars to provide service on the four remaining rail lines.

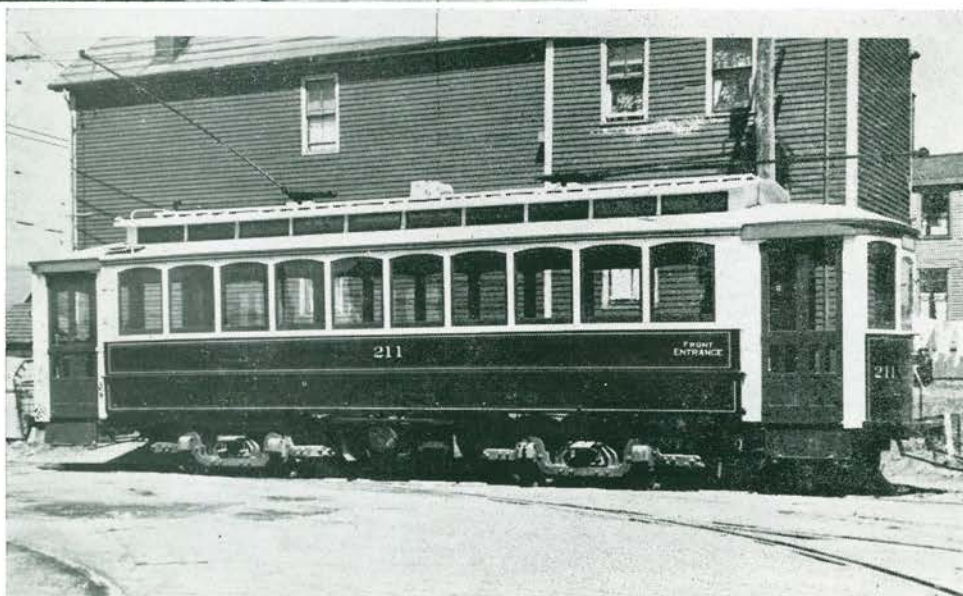
Strange as it may seem, only one car body was sold. This was No. 238, an ex-Portland & Yarmouth car, which became a workman's shanty for the Portland Gas Company. It was junked shortly after World War II.

The last 21 cars were scrapped in May 1941, and that was the end of the passenger equipment of the Portland Railroad Company. The only ex-Portland car remaining is Birney No. 615, sold to the Biddeford & Saco in 1936 and now the property of the Seashore Electric Railway museum.



TWO WASON - BUILT single truck closed cars, Nos. 167 and 168, were purchased by Portland Railroad in 1901. Shown in this picture is No. 168 at Cape Cottage.

ANOTHER of Portland Railroad's side-seaters, No. 211, is shown at the St. John Street carhouse in the 1920s. Car had been freshly painted.



PORTLAND RAILROAD

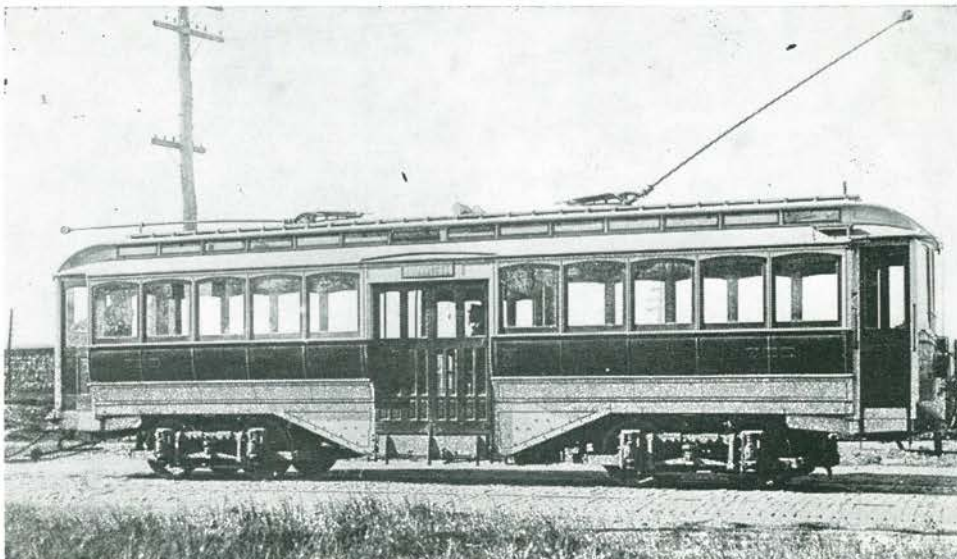
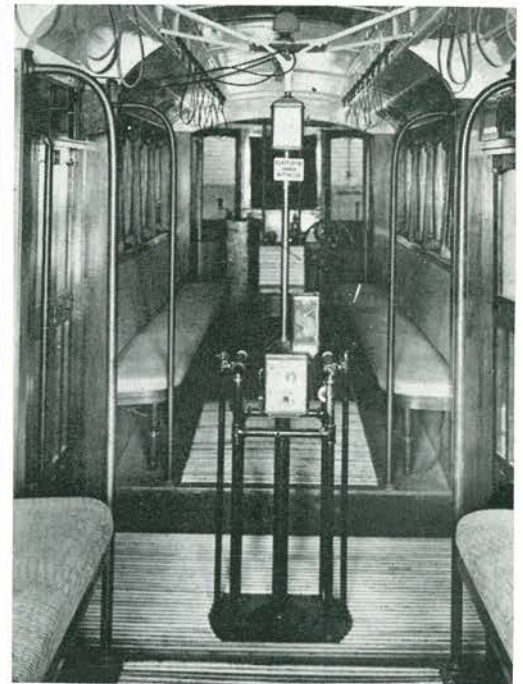
Passenger Cars Purchased or Built — 1900-1923

Year	No. of Cars	Car Numbers	Type of Car	Builder
1900	None			
1901	3	65, 107, 108	28-ft. closed	Brill
	1	112	20-ft. closed	Brill
	1	99	12-bench open	Brill
	3	155-157	14-bench open	Brill
	3	158-160	28-ft. closed	Brill
	2	161-162	12-bench open	Brill
	4	163-166	10-bench open	Brill
	2	167-168	20-ft. closed	Wason
1902	2	169-170	25-ft. closed	Brill
	2	171-172	12-bench open	Brill
	8	173-180	34-ft. semi-convertible	Brill
	9	181-189	14-bench open	Brill
	4	190-193	30-ft. semi-convertible	Brill
	2	194-195	28-ft. closed	Brill
	6	196-201	30-ft. semi-convertible	Brill
1905	4	202-205	28-ft. closed	Stephenson
1906	2	206-207	31-ft. semi-convertible	Brill
1908	4	208-211	28-ft. closed	Portland Railroad
1910	3	212-214	28-ft. closed	Brill
	2	215-216	12-bench open	Brill
	3	217-219	28-ft. closed	Portland Railroad
1911	1	244	28-ft. closed	Portland Railroad
	3	245-247	12-bench open	Brill
	3	248-250	28-ft. closed	Brill
	2	251-252	28-ft. closed	Portland Railroad
1912	3	253-255	30-ft. semi-convertible	Wason
1913-14	10	400-418	30-ft. closed (even Nos. only)	Wason
1915	1	502	35-ft. semi-convertible	Wason
	3*	306-310	21-ft. closed	Laconia
1916	4	312-318	24-ft. semi-convertible	Wason
1917	1	700	Center entrance (motor)	Portland Railroad
1918	8	760-767	Center entrance (trailer)	Wason
1919	15	600-614	Birney safety	Wason
1920	8	615-622	Birney safety	Wason
1922-23	6	800-805	30 ft. safety	
Total	138			

*Second-hand cars

RECAPITULATION

10-bench open	4
10-bench open	4
12-bench open	10
14-bench open	12
20-ft. closed	1
20-ft. semi-convertible	2
24-ft. semi-convertible	4
25-ft. closed	2
28-ft. closed	28
30-ft. semi-convertible	13
31-ft. semi-convertible	2
34-ft. semi-convertible	8
35-ft. semi-convertible	1
30-ft. closed	10
30-ft. safety	6
Center entrance motor	1
Center entrance trailer	8
Birney safety	22
	138



PORTLAND'S ONLY center entrance motor car was No. 700 (left) built in the company shops in 1917 from two single truck cars. Above picture shows interior.

PORTLAND RAILROAD**Single Truck Closed Cars**

Car Number	Type of Car	Builder	Year Built	Trucks	Motors	Control	Remarks
3-4	20-ft. box	American	1899	Peckham	2-WH		Ex-Westbrook, Windham & Naples
16-23	18-ft. box	Jones	1895	Bemis	2-GE		Ex-Portland & Cape Elizabeth Railway
34-37	18-ft. box	Jones	1896	Bemis	2-GE		Ex-Portland & Cape Elizabeth Railway
53-54	21-ft., 3-in. box	Brill	1895	Peckham			
65	20-ft. box	Brill	1895	Peckham			Burned in St. John Street fire in 1901
80-81	18-ft. box	Portland Railroad	1894				
88	19-ft., 6-in. box	Portland Railroad					
100-108	20-ft. box	Brill	1895	Brill 21C	2-GE800	K-2	Nos. 107, 108 burned St. John St. fire
110-111	20-ft. box	Wason	1895	Peckham	2-GE800	K-2	No. 111 burned in Yarmouth fire, 1920
112	20-ft. box	Wason	1895	Peckham	2-GE800	K-2	Burned in St. John Street fire in 1901
112	20-ft. box	Brill	1901	Peckham			
113	20-ft. box	Wason	1895	Peckham	2-GE800	K-2	First vestibuled car
114-115	20-ft. box	Brill	1895	Brill 21C			Six Brill 20-ft. closed cars were converted to pre-payment in 1917. Four of them equipped for one-man in 1918.
123-124	20-ft. box	Brill	1896	Brill 21C			
132-133	20-ft. box	Brill	1897	Brill 21E			
138-139	20-ft. box	Brill	1897	Brill 21E			
142	20-ft. box	Brill	1897	Brill 21E			
144-150	20-ft. box	Brill	1897	Brill 21E			
167-168	20-ft. semi-convertible	Wason	1898	Peckham			
236-237	20-ft., 9-in. semi-convertible	Brill	1901	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
239-240	20-ft., 9-in. semi-convertible	Brill	1898	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
242-243	20-ft., 9-in. semi-convertible	Brill	1898	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
306	21-ft. box	Laconia	1898	Brill 21E	2-GE800	K-11	Purchased from Lewiston, Maine
308	21-ft. box	Laconia	1911	Brill 21E	2-GE800	K-11	Purchased from Lewiston, Maine
310	21-ft. box	Laconia	1911	Brill 21E	2-GE800	K-11	Purchased from Lewiston, Maine
312	24-ft. box	Wason	1911	Brill Radiax			Spring Street cars
314	24-ft. box	Wason	1917	Brill Radiax			Spring Street cars
316	24-ft. box	Wason	1917	Brill Radiax			Spring Street cars
318	24-ft. box	Wason	1917	Brill Radiax			Spring Street cars
600-614	Birney Safety	Wason	1919	Brill 78M	2-GE258C	K-63	
615-622	Birney Safety	Wason	1920	Brill 79E	2-GE258C	K-63	

Nos. 306, 308 and 310 converted to sand cars.

Nos. 602-614 sold to Biddeford & Saco Railroad in 1937.

Nos. 615-622 sold to Biddeford & Saco Railroad in 1936.

Single Truck Open Cars

Number	Type	Builder	Year Built	Trucks	Motors	Control	Notes
1-2	10-bench	Laconia	1899	Peckham	2-WH	K-10	Ex-Westbrook, Windham & Naples Ry.
70-71	10-bench	Portland Railroad	1891	Peckham			First open electrics
90-99	10-bench	Brill	1895	Brill 21C	2-GE800	K-2	
129	10-bench	Brill	1896	Brill 21E	2-GE800	K-2	
130-131	10-bench	Brill	1897	Brill 21E	2-GE800	K-2	
140-141	10-bench	Brill	1897	Brill 21E		K-2	
163-166	10-bench	Brill	1901	Brill 21E	2-GE1000	K-10	
220	10-bench	Laconia	1897	Bemis			Ex-Portland & Yarmouth Electric Ry.
221	10-bench	Brill	1897	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
222	10-bench	Laconia	1897	Bemis			Ex-Portland & Yarmouth Electric Ry.
223	10-bench	Brill	1897	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
224	10-bench	Laconia	1897	Bemis			Ex-Portland & Yarmouth Electric Ry.
225-227	10-bench	Brill	1897	Brill 21E			Ex-Portland & Yarmouth Electric Ry.
232-235	10-bench	Brill	1897	Bemis			Ex-Portland & Yarmouth Electric Ry.
260-279	10-bench	Jones	1895-98	Bemis	2-GE		Ex-Portland & Cape Elizabeth Railway

The majority of the single truck open cars were retired in 1921.

No. 99 was destroyed in St. John Street carhouse fire of 1901.

Double Truck Open Cars

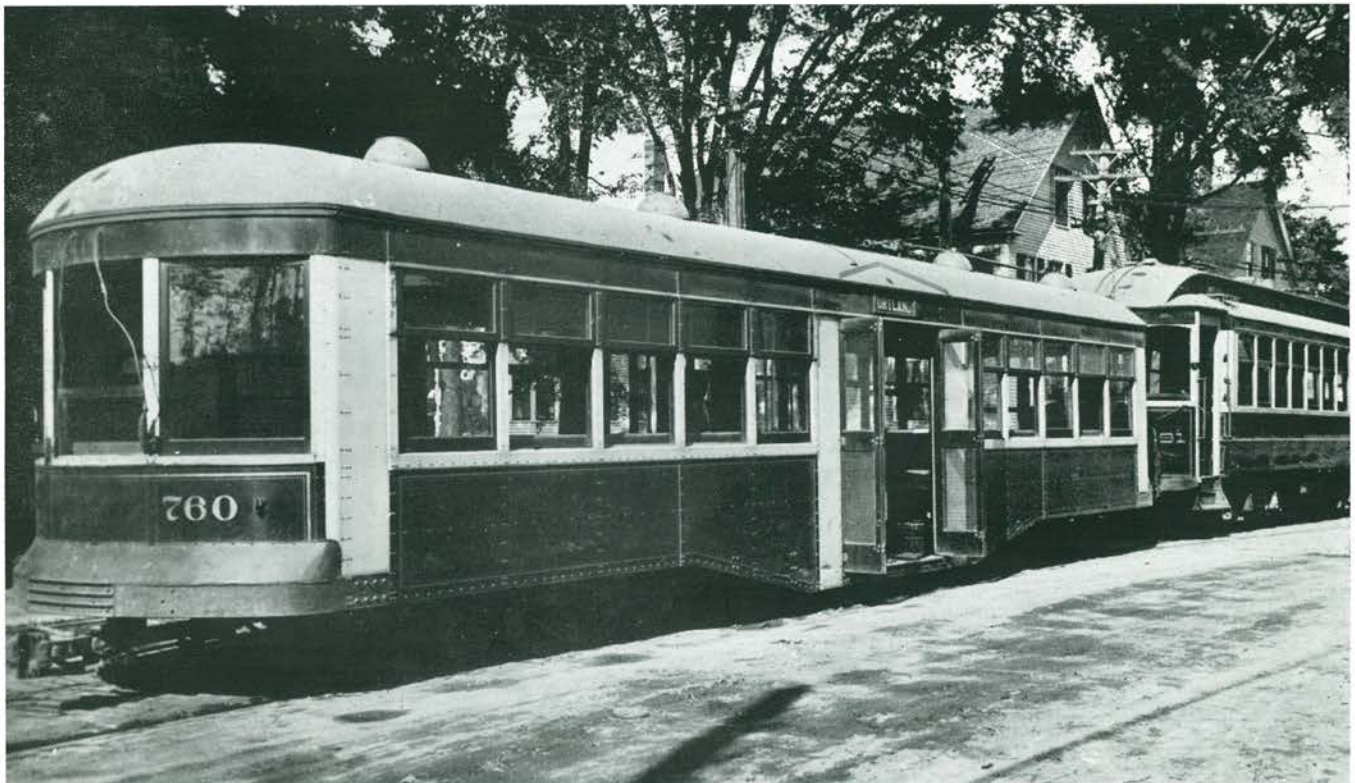
Number	Type	Builder	Year Built	Trucks	Motors	Control	Notes
76-79	12-bench	Portland Railroad	1892	Maximum traction			Westbrook Division cars
99	12-bench	Brill	1901	Brill 22E			City car
116-122	12-bench	Brill	1896	Brill 22E	2GE-800	K-2	City cars
125-128	12-bench	Brill	1896-97	Brill 22E			City cars
134-137	12-bench	Brill	1898	Brill 22E			City cars
151-154	12-bench	Brill	1899	Brill 22E			City cars
155-157	14-bench	Brill	1901	Brill 27G	2-GE80	K-6	Westbrook Division cars
161-162	12-bench	Brill	1901	Brill 22E			City cars
171-172	12-bench	Brill	1902	Brill 22E			City cars
181-189	14-bench	Brill	1902	Brill 27G			Saco Division cars
215-216	12-bench	Brill	1910	Brill 39E			City and suburban cars
228-231	14-bench	Brill	1899	Brill 27G			Ex-Portland & Yarmouth Electric Ry.
245-247	12-bench	Brill	1911	Brill 27G			City and suburban cars

Cars 153, 154, 215, 216, 245, 246 and 247 sold to Biddeford & Saco Railroad.

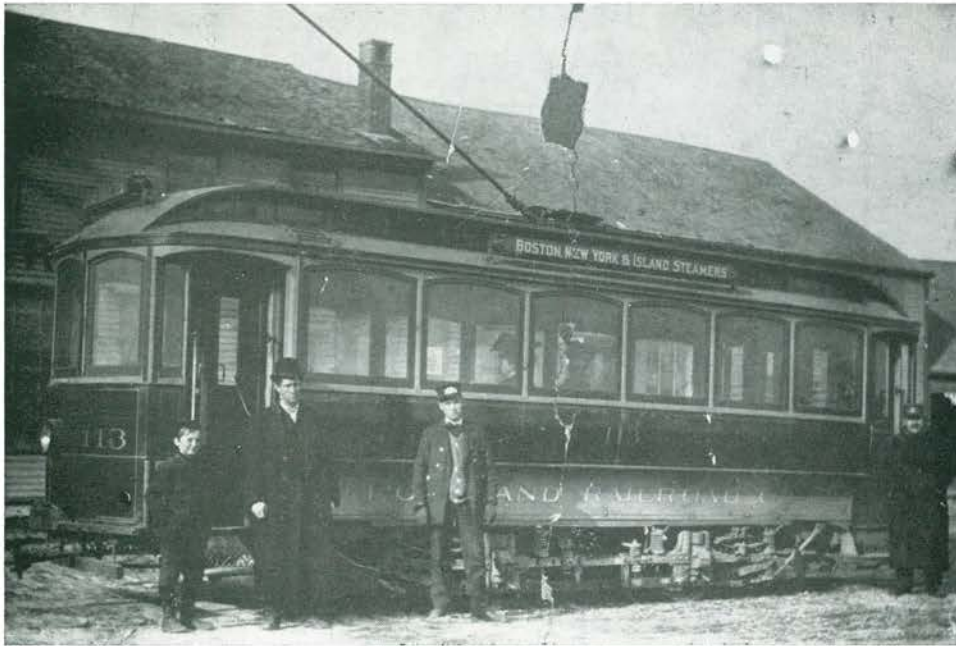
PORTLAND RAILROAD

Double Truck Closed Cars

Number	Type of Car	Builder	Year Built	Trucks	Motors	Control	Notes
65	28-ft. box	Brill	1901	Brill 27G			
72-73	25-ft. box	Portland Railroad	1891	Robinson Radial	2-WP		Built for Deering line
74-75	25-ft. box	Portland Railroad	1892	Maximum traction	2-WP		Built for Westbrook line
107-108	28-ft. box	Brill	1901	Brill 27G			
109	22-ft. box	Brill	1895	Brill 22E			
143	25-ft. box	Brill	1897	Brill 22E			
158-160	28-ft. box	Brill	1901	Brill 27G	4-GE80 or 4-GE203A	K-6	Westbrook Division cars
169-170	25-ft. box	Brill	1902	Brill 27G			
173-180	34-ft. 4-in. semi-convertible	Brill	1902	Brill 27A	4-GE201	K-35	Saco Division cars (No. 173 destroyed by fire in 1915)
190-193	30-ft. 8-in. semi-convertible	Brill	1902	Brill 27G	4-GE201	K-35	Westbrook Division cars
194-195	28-ft. box	Brill	1902	Brill 27G	4-GE80	K-6	
196-201	30-ft. 8-in. semi-convertible	Brill	1902	Brill 27G	4-GE201	K-35	Westbrook Division cars
202-203	28-ft. box	Stephenson	1905	Brill 27G	4-GE80	K-28	
204-205	28-ft. box	Stephenson	1905	Brill 27G	4-GE80	K-6	No. 204 sold to Berlin Street Railway
206-207	31-ft. 9-in. semi-convertible	Brill	1906	Brill 27E	4-GE201	K-35	Yarmouth Division cars
208-209	28-ft. 2-in. box	Portland Railroad	1908	Standard O-50	4-GE80	K-28	
210-211	28-ft. 2-in. box	Portland Railroad	1908	Standard O-50	4-GE203A	K-28	
212-214	28-ft. box	Brill	1910	Brill 27G	4-GE80	K-28	
217-219	28-ft. box	Portland Railroad	1910	Standard O-50	4-GE80	K-6 or K-28	Ex-Portland & Yarmouth Electric Ry.
238	28-ft. semi-convertible	Brill	1900	Brill 27G	4-GE80	K-6	Ex-Portland & Yarmouth Electric Ry.
241	28-ft. box	Brill	1900	Brill 27G			Car burned in Yarmouth carhouse fire
244	28-ft. box	Portland Railroad	1911	Brill 27G	4-GE80	K-6	
248-250	28-ft. box	Brill	1911	Brill 27GE	4-GE80	K-28	
251-252	28-ft. box	Portland Railroad	1911	Brill 27GE	4-GE80	K-28	
253-255	30-ft. 8-in. semi-convertible	Wason	1912	Brill 27GE	4-GE203A	K-35	
400-413 even nos.	30-ft. 8-in. box	Wason	1914	Brill 51E	4-GE203P	K-6	
500	25-ft. box	Portland Railroad	1915				Ex-"Bramhall" Parlor Car
502	34-ft. 4-in. semi-convertible	Wason	1915	Brill 27A	4-GE201	K-35	
504, 506	30-ft. 8-in. box	Brill	1908	Brill 27G	4-GE203	K-6	Ex-New Jersey & Pennsylvania Trac.
700	Center-entrance	Portland Railroad	1917				
760-767	Center-entrance trailer	Wason	1918	Brill 53F	None	None	Built for Westbrook Division
800-805	30-ft. safety	Wason	1922	Brill 77E1	2-GE247B	K-35	
Bramhall	Parlor	Brill	1896	Brill 22E			Rebuilt to No. 500 in 1915

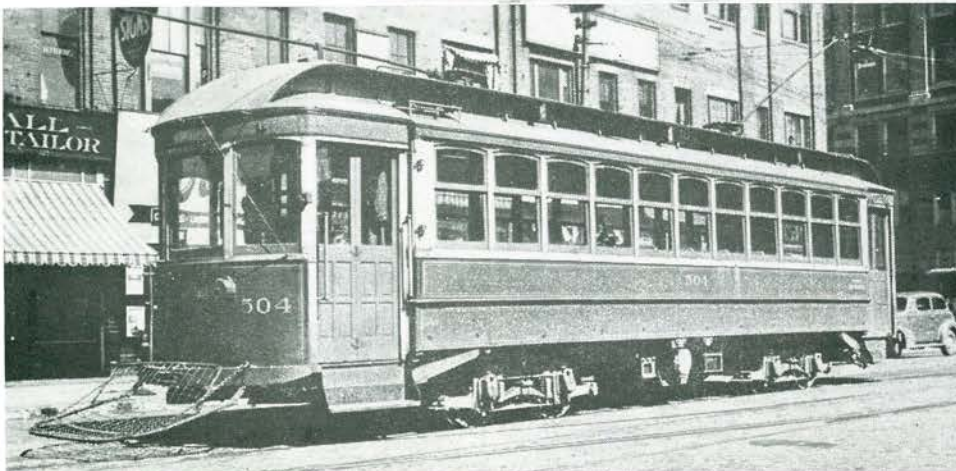


PORTLAND had 8 of these center-entrance trailers, Nos. 760-767. They were used primarily on the Westbrook line. Trolley pole was used to provide heat and light during layover at Westbrook barn.



FIRST VESTIBULED
car was No. 113, built
by Wason in 1895 and
shown here at the end
of the Stroudwater line.

BRILL-BUILT NO. 150,
a 20-ft. 4-wheel closed
type, is shown at the old
type, is shown at the
old Westbrook carbarn.
This type of car was
used on the Westbrook
line prior to the opening
of the extension to the
town of Gorham in 1901.



SECOND-HAND CAR
No. 504 (and also No.
505) came from New
Jersey & Pennsylvania
Traction Company in
1918 to handle heavy
war-time traffic on the
Portland Railroad lines.

PORTLAND RAILROAD**Cars Constructed in St. John Street Shops**

Car No.	Type of Car	Year Built	Notes
208	28-ft., 2-in. closed	1908	
209	28-ft., 2-in. closed	1908	
210	28-ft., 2-in. closed	1908	
211	28-ft., 2-in. closed	1908	
217	28-ft. closed	1910	
218	28-ft. closed	1910	
219	28-ft. closed	1910	
244	28-ft. closed	1911	
251	28-ft. closed	1911	
252	28-ft. closed	1911	
500	25-ft. closed	1915	Rebuilt from "Bramhall"
700	Center-entrance	1917	Rebuilt from 2 single truck closed
4	Box express	1909	
5	Box express		
6	Box express	1910	
7	Box express	1910	
8		1915	
1000	Motor flat		Crane car
1002	Motor flat		Crane car

Passenger Cars Sold

Car Number	Type of Car	Builder	Sold to	Year Sold
153	12-bench open	Brill	Biddeford & Saco Railroad	1923
154	12-bench open	Brill	Biddeford & Saco Railroad	1923
204	12-bench open	Stephenson	Berlin Street Railway	1934
215	12-bench open	Brill	Biddeford & Saco Railroad	1924
216	12-bench open	Brill	Biddeford & Saco Railroad	1924
245	12-bench open	Brill	Biddeford & Saco Railroad	1924
246	12-bench open	Brill	Biddeford & Saco Railroad	1927
247	28-ft. closed	Brill	Biddeford & Saco Railroad	1927
602-614	Birney Safety	Wason	Biddeford & Saco Railroad	1937
615-622	Birney Safety	Wason	Biddeford & Saco Railroad	1936

Cars Lost in Carhouse Fires**St. John Street Carhouse****July 9, 1901**

Car No.	Type of Car	Builder	Year Built
65	20-ft. closed	Brill	1895
99	10-bench open	Brill	1895
107	20-ft. closed	Brill	1895
108	20-ft. closed	Brill	1895
112	20-ft. closed	Wason	1895

(All except No. 112 were replaced with double truck cars of the same numbers)

Yarmouth Carhouse**February 13, 1920**

Car No.	Type of Car	Builder	Year Built
111	20-ft. closed	Wason	1895
241	28-ft. closed	Brill	1900

(No cars were lost in the Westbrook carhouse fire of December 31, 1905)

Freight and Express Cars

THE Portland Railroad owned 6 express and freight motors—5 double truck and one single truck, Nos. 3-8.

No. 3 was the double truck combination mail, baggage and passenger car from Portland & Yarmouth Electric Railway. It was completely rebuilt in the Portland Railroad shops, the passenger compartment being eliminated and conventional center doors being installed in each side of the car.

Similar in design to the rebuilt No. 3 was No. 4, another double truck railroad roof express motor constructed about 1909 in the shops of the Portland Railroad.

No. 5 was the single truck car. It was equipped with a roof platform so that it might be used for line work if necessary.

Nos. 6, 7 and 8 were practically identical. They all were double truck cars with plain arch roofs and were built in the company shops, two in 1910 and one in 1914.

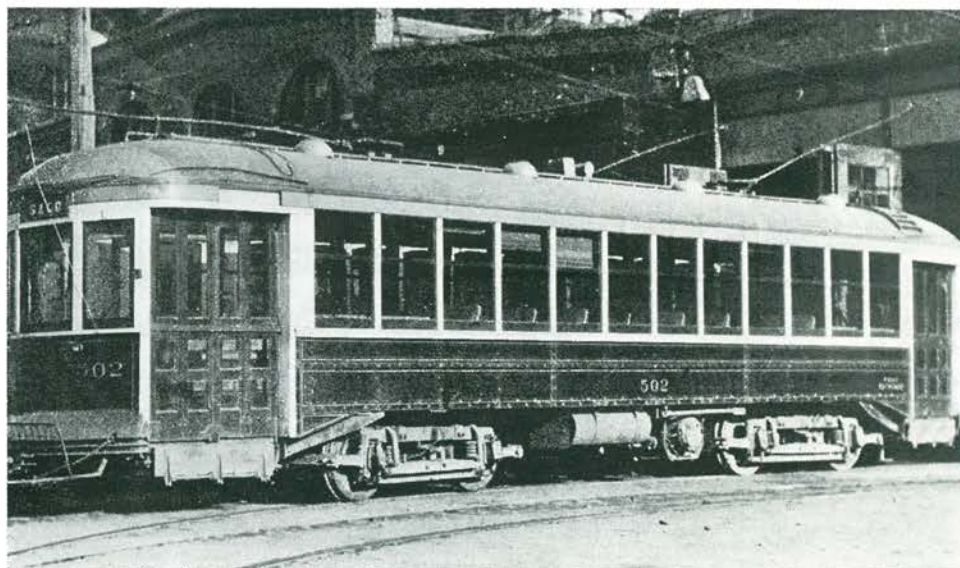
Other freight equipment included about 12 single truck flat trailers and a number of 4-wheel side dump cars.

About 1918, the Portland Railroad purchased two double truck box trailers from Wason. Numbered 1001 and 1003, they were fitted with end doors so that automobiles and heavy machinery could be handled.

After discontinuance of the freight business in 1920, the freight

(Please turn to Page 23)

LARGEST and fastest car on the Portland system was No. 502, Wason-built in 1915. Trucks and electrical equipment originally were on No. 173, the Saco Division semi-convertible destroyed by fire at Oak Hill in Scarborough in 1915. No. 502 also was used for occasional trips over the Portland - Lewiston Interurban, as it was very well adapted to fast running. Photo at St. John St. barn.



PORTLAND RAILROAD

Equipment Owned, 1891-1915

	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Closed Cars, Trailer	22	18	13	13	13	12	10	9	7	6										
Closed Cars, Electric	32	37	40	55	56	45	77	80	90	90	94	95	96	97	95	97	106	106	115	111
Open Cars, Trailers	20	20	20	23	22	20	22	22	21	14										
Open Cars, Electric	29	36	42	65	66	74	98	99	99	99	99	99	99	99	103	104	104	104	104	104
TOTAL Passenger Cars	103	111	115	156	157	151	207	210	217	209	193	194	195	196	198	201	210	210	219	215
Work Cars	4	4	4	8	8	8	13	16	17	17	16	18	18	18	19	23	22	22	22	11
Snow Plows	15	13	13	15	17	17	17	20	19	19	19	20	20	20	20	17	18	18	17	17
Box Freight Cars	—	—	—	—	—	—	1	1	1	1										
Express Cars											1	1	1	4	4	5	5	5	6	6
Freight Cars																				11
Miscellaneous																			1	1

1891 — 52 passenger, 4 gravel cars
 1892 — 64 passenger, 4 gravel cars
 1893 — 67 passenger, 4 gravel cars
 1894 — 70 passenger, 4 gravel cars
 (42 horsecars, 19 electric, 8 trailers)
 1895 — 70 passenger, 4 gravel cars

Passenger Car Roster, January 1, 1939

107* 158 159 160 174 175 176 177 178
 179 180 191 192 193 194* 195* 196 197
 198 199 200 201 202* 205 206 207 210
 211 212 213 214 217 238 248 249 250
 251 252* 253 254 255 400 402 404 406
 408 410 412 414 416 418 502 504 506
 800 801 802 803 804 805

*In storage at Deering barn.

Passenger Cars Scrapped in 1939, 1940

107 158 159 160 191 192 193 194 195
 196 197 198 199 200 201 202 205 210
 211 212 213 214 217 248 249 250 251
 252

Body of No. 238 sold to Portland Gas Company for use as workmen's shanty.

Passenger Cars in Active Service December 1, 1940

174 175 176 177 178 179 180 206 207
 253 254 255 400 402 404 406 408 410
 412 414 416 502 504 506

Remarks

Cars 400, 402, 404, 406, 408, 410, 412, 414, 416 and 418 scrapped in January 1941. All remaining cars scrapped in May and June.

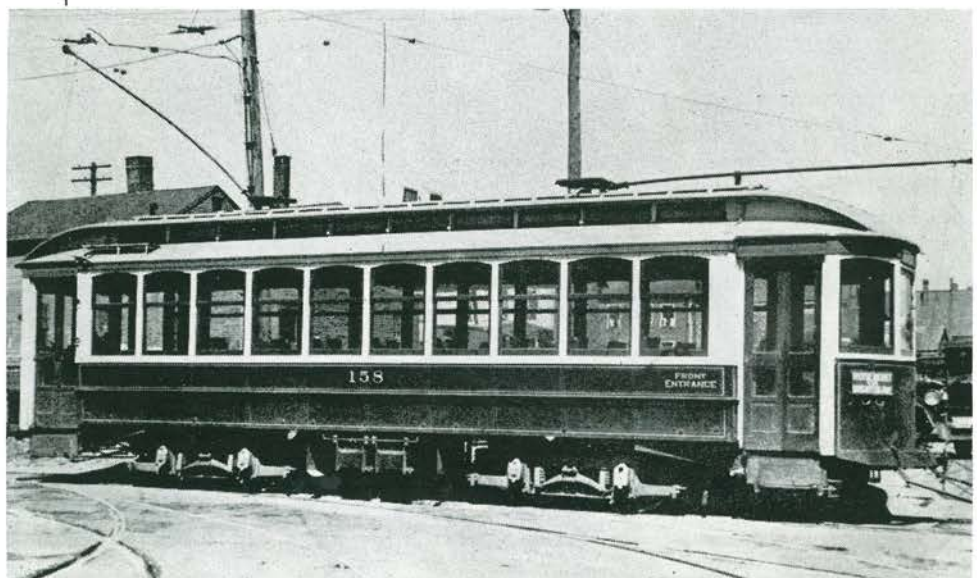
Double Truck Closed Cars Converted For One-Man Operation

Car Numbers	Type of Car	Builder	Year Built	Equipped with
65	28-ft. box	Brill	1901	Safety control
107-108	28-ft. box	Brill	1901	Safety control
158-160	28-ft. box	Brill	1901	Safety control
169-170	25-ft. box	Brill	1902	Safety control
174-180	34-ft., 4-in. semi-convertible	Brill	1902	Emergency valve
190-193	30-ft., 8-in. semi-convertible	Brill	1902	Emergency valve
194-195	28-ft. box	Brill	1902	Safety control
196-201	30-ft., 8-in. semi-convertible	Brill	1902	Emergency valve
202-205	28-ft. box	Stephenson	1905	Safety control
206-207	31-ft., 9-in. semi-convertible	Brill	1906	Emergency valve
208-211	28-ft., 2-in. box	Portland Railroad	1908	Safety control
212-214	28-ft. box	Brill	1910	Safety control
217-219	28-ft. box	Portland Railroad	1910	Safety control
238	28-ft. semi-convertible	Brill	1900	Safety control
244	28-ft. box	Portland Railroad	1911	Safety control
248-250	28-ft. box	Brill	1911	Safety control
251-252	28-ft. box	Portland Railroad	1911	Safety control
253-255	30-ft., 8-in. semi-convertible	Wason	1912	Safety control
400 even thru 418	30-ft., 8-in. box	Wason	1914	Safety control
502	34-ft., 4-in. semi-convertible	Wason	1915	Safety control
504	30-ft., 8-in. box	Brill	1903	Emergency valve
506	30 ft., 8-in. box	Brill	1903	Emergency valve

NOTE:

Fourteen of the 28-ft. box cars and Nos. 254 and 255 were converted for pre-payment service in 1917. Bulkheads were removed and the cars with fixed steps were re-equipped with folding steps.

NO. 158, one of the first three air-braked cars on the Portland Railroad's roster (Nos. 158-160) is shown at St. John Street barn after conversion to a one-man car. Note the bar across the door in the rear.



PORTLAND RAILROAD**Freight & Express Cars**

Number	Type of Car	Builder	Year Built	Trucks	Motors	Control	Notes
3	Box express		1897				Ex-Portland & Yarmouth
4	Box express	Portland Railroad	1909	Brill 27G	4-GE1000	K-6	Converted to wrecker
5	Box express	Portland Railroad		Brill 21E	4-GE800	K-11	Converted to tow car
6	Box express	Portland Railroad	1910	Brill 27G	4-GE1000	K-6	Converted to wrecker
7	Box express	Portland Railroad	1910	Brill 27G	4-GE1000	K-6	Converted to line car
8	Box express	Portland Railroad	1915	Brill 27G	4-GE1000	K-6	
1001	Box trailer	Wason	1918	Arch bar			
1003	Box trailer	Wason	1918	Arch bar			

Service Cars

Number	Type of Car	Builder	Year Built	Trucks	Motors	Control	Notes
1	18-ft. motor flat						
2	16-ft. flat trailer						
4	Wrecker	Portland Railroad	1909	Brill 27G	4-GE1000	K-6	Former express car
5	Tow car	Portland Railroad		Brill 21E	2-GE800	K-11	Former express car
6	Wrecker	Portland Railroad	1910	Brill 27G	4-GE1000	K-6	Former express car
7	Line car	Portland Railroad	1910	Brill 27G	4-GE1000	K-6	Former express car
38	Vacuum cleaner car						
39	18-ft. line car						
55	21-ft. line car						
61	18-ft. line car						
69	16-ft. line car						
80	18-ft. sand car						
306	20-ft. sand car	Laconia	1911	Brill 21E	2-GE800	K-11	Ex-Portland & Brunswick St. Ry.
308	20-ft. sand car	Laconia	1911	Brill 21E	2-GE800	K-11	Ex-Portland & Brunswick St. Ry.
310	20-ft. sand car	Laconia	1911	Brill 21E	2-GE800	K-11	Ex-Portland & Brunswick St. Ry.
1000	Flar car with crane	Portland Railroad		Brill 27G	4-GE1000	K-6	
1002	Flar car with crane	Portland Railroad		Brill 27G	4-GE67	K-6	
1004	Flat trailer	Portland Railroad		Arch bar			

12 — Single truck flat cars

4 — Single truck dump cars

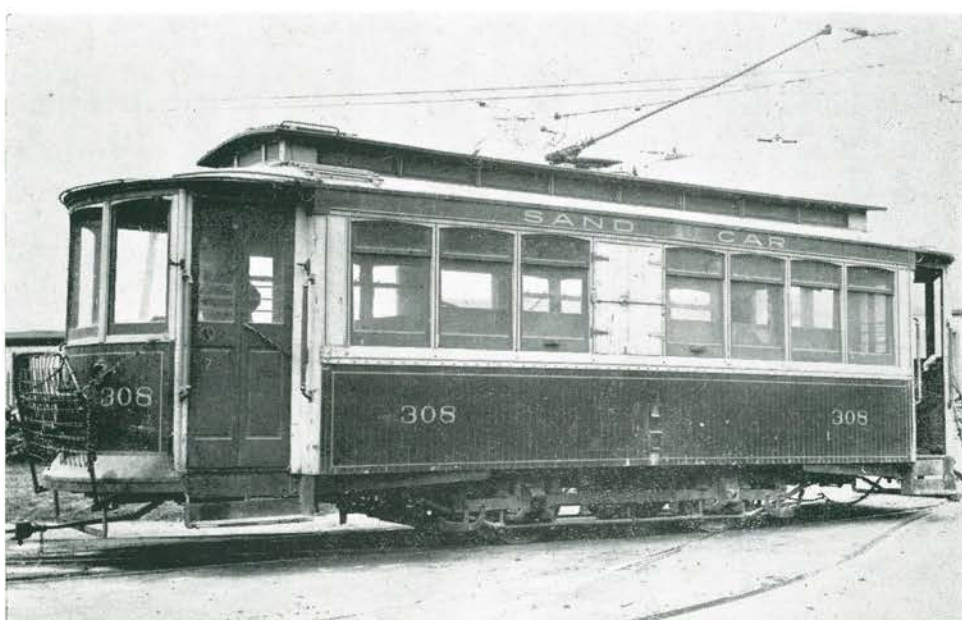
Snow Plows & Sweepers

Number	Type of Plow	Builder	Year Built	Trucks	Motors	Control	Notes
1-5	Horse plow						
1	Single truck shear	Brill	1895				Ex-Portland & Cape Elizabeth
2	Single truck shear	Taunton	1898	Taunton	2-GE80	K-28	Ex-Portland & Yarmouth
3	Root scraper						Former express car No. 3
5	Single truck shear	Brill		Brill	2-GE80	K-11	
6	Single truck nose	Taunton					First electric plow on Portland R.R.
7	Single truck shear	Taunton					Originally nose plow
8	Single truck shear	Brill		Brill	2-GE80	K-28	
9	Single truck nose	Taunton	1899				Ex-Westbrook, Windham & Naples
10	Single truck shear	Brill					Ex-Portland & Cape Elizabeth
11	Single truck shear						
12	Single truck shear	Brill					
13	Double truck nose	Taunton					
14	Single truck shear	Taunton		Taunton	2-GE80	K-28	
15	Single truck shear	Taunton		Taunton	2-GE80	K-28	
16	Single truck shear	Taunton		Taunton	2-GE80	K-28	
17	Double truck nose	Taunton		Taunton	4-GE67	K-6	
18	Double truck shear	Wason					
18	Double truck nose	Standard	1919	Standard	4-GE80	K-6	
19	Double truck nose	Standard					Retired 1919
19	Double truck nose	Wason	1919	Taunton	4-GE67	K-6	
20	Double truck nose	Russell		Wason	4-GE80	K-6	Used as freight locomotive
1	Single truck rotary	Ruggles	1898	Peckham			Ex-Portland & Yarmouth
01	Single truck sweeper	Russell	1920	Russell	4-GE201G	2 K-36 & 2 R-17	
02	Single truck sweeper	Russell	1920	Russell	4-GE80	2 K-36 & 2 K-11	
03	Single truck sweeper	Russell	1920	Russell	4-GE80	2 K-6 & 2 K-11	
04	Single truck sweeper	Russell	1920	Russell	4-GE80	2 K-6 & 2 K-11	
P-21	Single truck shear	Wason		Wason	2-GE80	K-6	Ex-Eastern Mass. St. Ry.
P-22	Single truck shear	Wason		Wason	2-GE80	K-6	Ex-Eastern Mass. St. Ry.
P-23	Single truck shear	Wason		Wason	2-GE80	K-6	Ex-Eastern Mass. St. Ry.

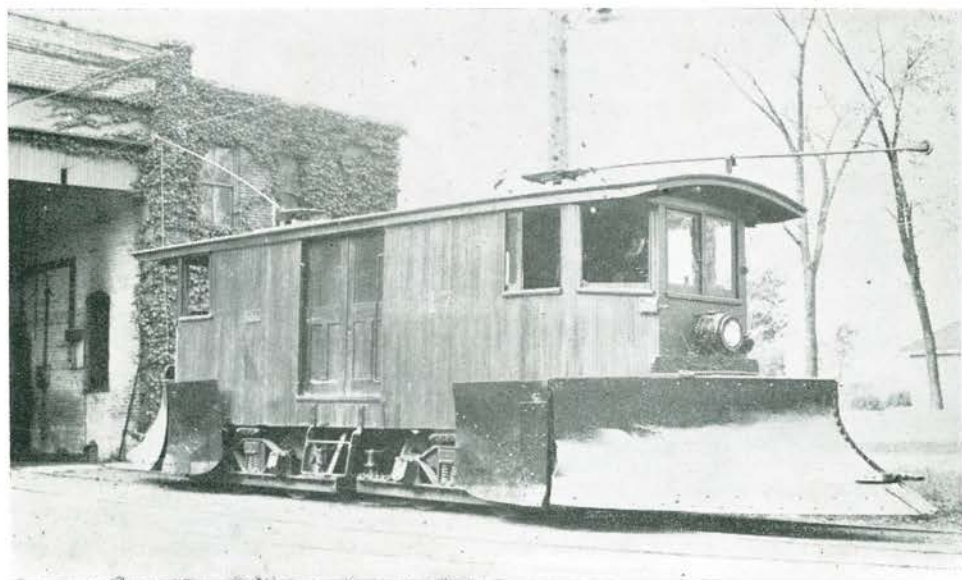
FREIGHT MOTOR NO. 6,
in later years a wrecker,
photographed at the rear
of the Deering carhouse.



SAND CAR NO. 308
which came with Nos. 306
and 310 as passenger cars
from Lewiston, Augusta &
Waterville Street Railway
about 1915. The three cars
were built by Laconia for
the Portland & Brunswick
Street Railway in 1911.



**TAUNTON double truck
nose plow No. 17** pictured
at the Deering carhouse.



(Continued from Page 19)

and express cars were converted to service equipment. No. 3 was fitted with Root scrapers and kept at Dunstan; Nos. 4 and 6 became wrecking cars and No. 7 became a line car. The fate of No. 8 is unknown. Little No. 5 was used as a shop car for many years and was scrapped in 1940. One of the flat trailers was fitted with a frame to hold reels of trolley wire and was in use until 1940 or 1941.

When the switching service was established in South Portland in 1917, No. 20, a Russell double truck snow plow, had its blades removed and was equipped with standard MCB couplers for use as a locomotive. It was replaced in 1925 by No. 90, the Baldwin-Westinghouse steeple cab locomotive of the Portland-Lewiston Interurban, and this was used for 8 years.

The Portland - Lewiston system was abandoned in 1933 and its equipment was sold for junk. An attempt was made by the Portland Railroad to purchase No. 90 from the scrap dealer, but his price was too high. This meant a return to the converted snow plow which was used until the end of switching operations in 1939.

Service Cars

EARLY service equipment of the Portland Railroad was mostly horse drawn and consisted of various types of wagons and carts.

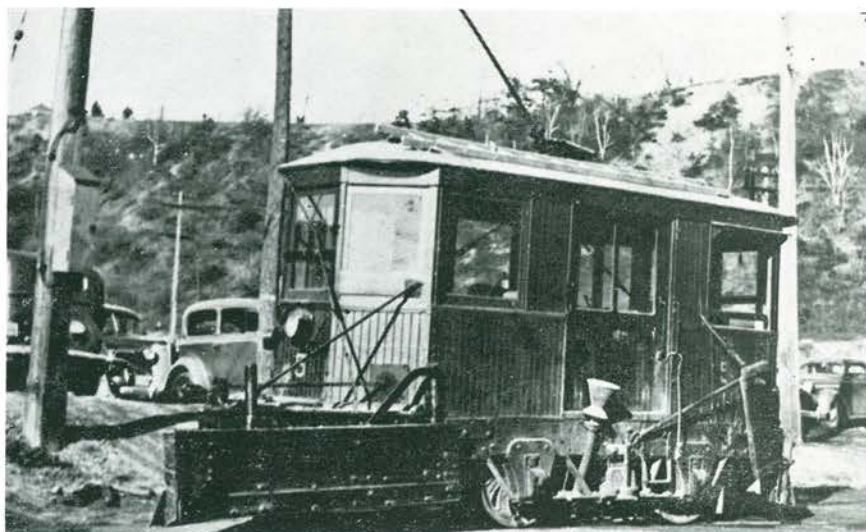
Later, older single truck closed passenger cars (including some former horse cars) were converted for construction and maintenance purposes. One was equipped as a vacuum cleaner car, which made periodic visits to each carhouse on the system to give complete interior cleanings to all closed cars.

There were several 4-wheel motor flat cars, taken over from the Portland & Cape Elizabeth, the Westbrook, Windham & Naples and the Portland & Yarmouth, and several 4-wheel flat trailers.

Cars Nos. 306, 308 and 310, single truck closed cars built by Laconia, were converted to sand cars and three of the old express cars were used for service purposes.

There were also two double truck crane cars, Nos. 1000 and 1002, and one double truck flat trailer, No. 1004.

Two 14-bench open cars of the



BRILL 4-wheel shear plow at Portland's St. John Street carhouse.



FREIGHT MOTOR No. 20 at the St. John Street carhouse in 1934 when regularly used as a switcher in South Portland. The car originally was built as a snow plow. Photo by G. F. Cunningham.

Saco Division, Nos. 185 and 189, were occasionally used to haul gravel cars. They were the last open cars on the Portland Railroad and their final use was to carry workmen while the Saco and the Old Orchard lines were being taken up in 1932.

Snow Plows

SNOW FIGHTING equipment of the Portland Railroad varied over the years, the first plows being

five horse-drawn affairs purchased before the road was electrified.

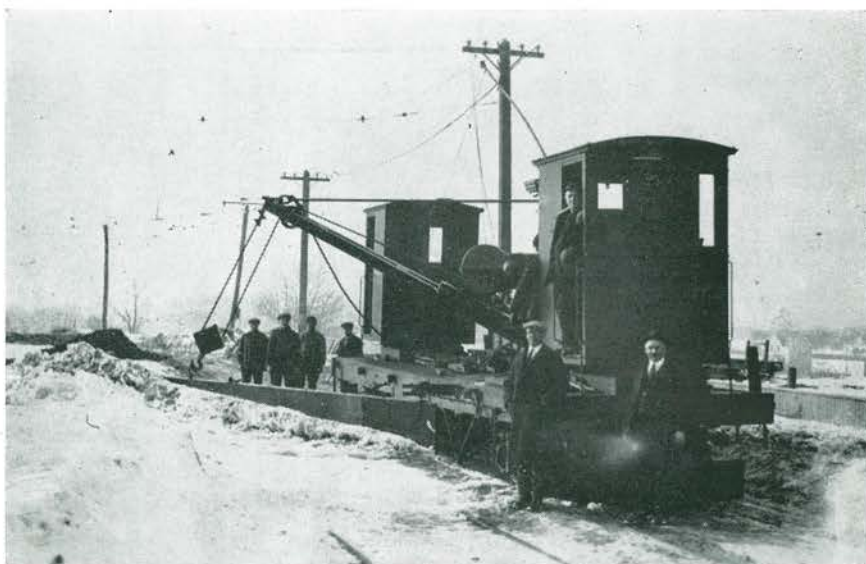
Both single and double truck nose and shear plows were owned by the company and in 1920, the first of four Russell single truck snow sweepers was received.

For a number of years, crane car No. 1000 was equipped with a long wing and was used for snow plowing on the Saco line where the trolley tracks paralleled the main highway. It also saw service on the South Portland and the Westbrook

Divisions, and occasionally it was hired by the Biddeford & Saco Railroad to clear Main Street, Saco. One winter it was used in Biddeford.

The Portland Railroad also had a Ruggles single truck rotary plow, No. 1, taken over from the Portland & Yarmouth Electric Railway. This was used on suburban lines exclusively and then only when the snow was too deep for the conventional plows to handle. There was usually a lot of window breakage when the rotary went out on the line.

The last new plow purchased by the Portland Railroad was built by Wason in 1918 and was a double truck affair with detachable noses and wings. For a number of years it was fitted with standard MCB couplers and was used as a freight locomotive in South Portland.

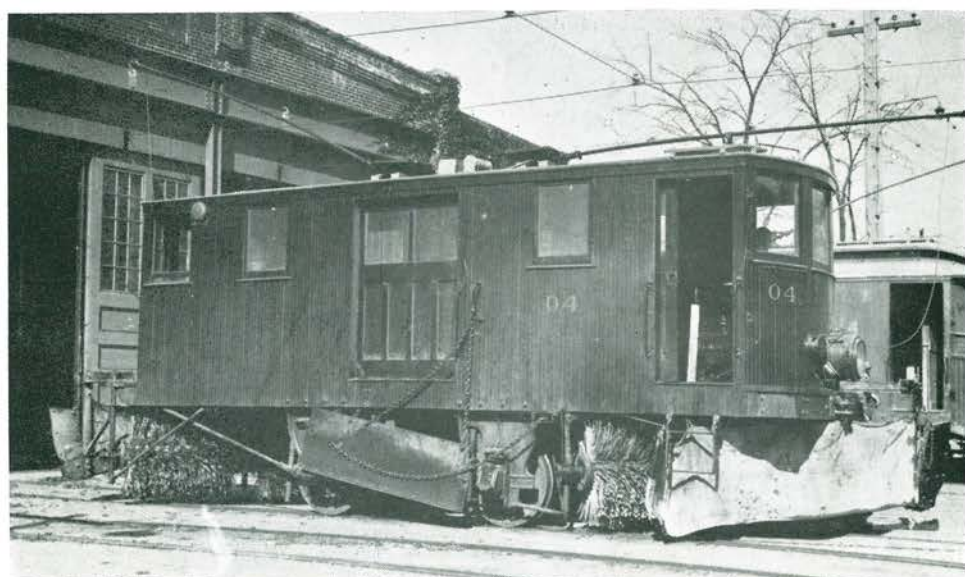


CRANE CAR NO. 1000 is shown as a wing plow clearing snow from Route 1 along the tracks between South Portland and Saco.

THE RUGGLES ROTARY plow No. 1 is shown as a Portland & Yarmouth car at the Yarmouth carhouse.



RUSSELL sweeper No. 04 at the Deering carhouse.



Three Wason-built 4-wheel shear plows are said to have been bought second-hand from the Eastern Massachusetts Street Railway in the early 'Twenties. Numbered P-21, P-22 and P-23, they were extensively rebuilt in the company shops before being placed in service.

For a time, a Taunton double truck plow, believed to have been No. 13, had its noses removed and was used as an express motor. As previously stated, express car No. 3 was fitted with Root scrapers and was kept at the Dunstan carhouse for use at Old Orchard Beach and in Saco.

Most of the Portland Railroad's plows and sweepers were scrapped at Deering during the summer of 1940, only a few being retained for use during the winter of 1940-41. These few were junked in the spring of 1941.

The Last Cars

THE LAST active cars of any type in Portland were crane car No. 1002 and line car No. 7, both of which were used for removing rail and wire following motorization of

PORTLAND RAILROAD

Roster of Passenger Cars — August 15, 1937

Number	Type of Car	Builder	Year Built	Remarks
107	28-ft. closed	Brill	1901	Side seats
158-160	28-ft. closed	Brill	1901	Cross seats
174-180	34-ft., 4-in. semi-convertible	Brill	1902	Cross seats
190-193	30-ft., 8-in. semi-convertible	Brill	1902	Cross seats
194-195	28-ft. closed	Brill	1902	Side seats
196-201	30-ft., 8-in. semi-convertible	Brill	1902	Cross seats
202-203	28-ft. closed	Stephenson	1905	Side seats
205	28-ft. closed	Stephenson	1905	Side seats
206-207	31-ft., 9-in. semi-convertible	Brill	1906	Cross seats
208-211	28-ft., 2-in. closed	Portland Railroad	1908	Side seats
212-214	28-ft. closed	Brill	1910	Side seats
217-219	28-ft. closed	Portland Railroad	1910	Side seats
238	28-ft. semi-convertible	Brill	1900	Cross seats
248-250	28-ft. closed	Brill	1911	Side seats
251-252	28-ft. closed	Portland Railroad	1911	Side seats
253-255	30-ft., 8-in. semi-convertible	Wason	1912	Cross seats
400 even thru 418	30-ft., 8-in. closed	Wason	1914	Cross seats
502	34-ft., 4-in. closed	Wason	1915	Cross seats
504	30-ft., 8-in. closed	Brill	1908	Cross seats
506	30-ft., 8-in. closed	Brill	1908	Cross seats
800-805	30-ft. Safety	Wason	1922	Cross seats

NOTE:

Many of the cars with side seats were out of service and in storage at the Deering carhouse at this time.

Cars Nos. 190, 203, 208, 218 and 219 were scrapped between August 15, 1937, and January 1, 1939.

the last four trolley lines. Housed at the old Portland-Lewiston Inter-urban terminal on Portland Street, they were in service until mid-

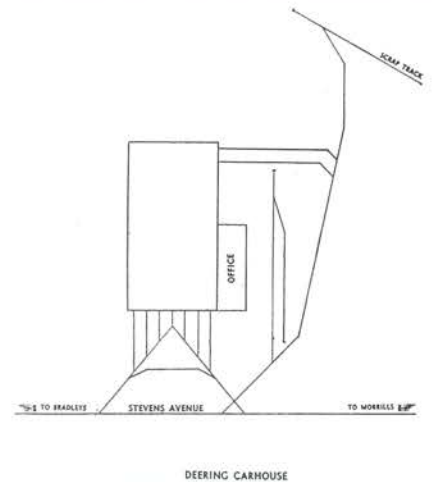
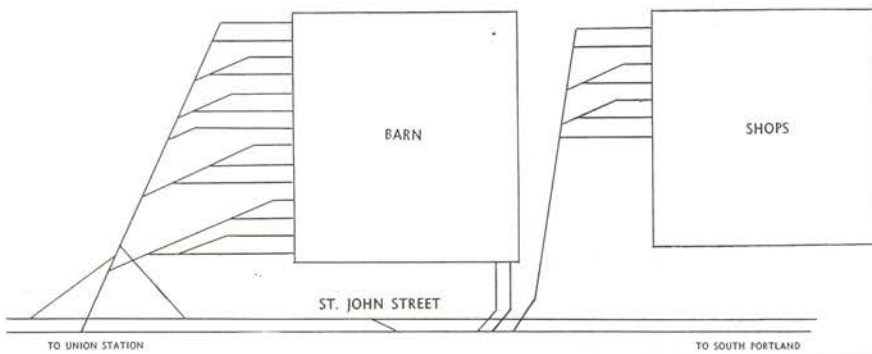
summer of 1941 and were then taken to a spur track at the rear of the Forest Avenue power station and scrapped.



BIRNEY CAR No. 169 outside the Deering carhouse awaiting shipment in 1936 to the Biddeford & Saco Railroad. Twenty-one of Portland's 23 Birney cars went to neighboring road in 1936 and 1937.

Portland Railroad Carhouse Track Layouts

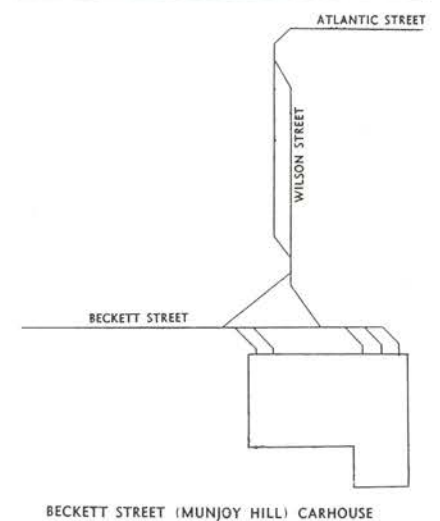
ST. JOHN STREET CARHOUSE AND SHOPS



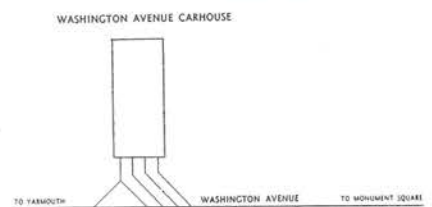
PORTLAND RAILROAD

Roster of Service Cars — July 1940

Car No.	Type	Builder	Year Built	Remarks
4	Wrecker	Portland Railroad	1909	Scrapped in 1940
5	Tow car			Scrapped in 1940
7	Line car	Portland Railroad	1910	Scrapped in 1941
20	Freight motor	Wason		Scrapped in 1940
306	Sand car	Laconia	1911	Scrapped in 1941
308	Sand car	Laconia	1911	Scrapped in 1941
310	Sand car	Laconia	1911	Scrapped in 1941
1002	Crane car	Portland Railroad		Scrapped in 1941
1004	Flat trailer	Portland Railroad		Scrapped in 1940
—	Wire car			Scrapped in 1940
01	Sweeper	Russell	1920	All snow plows retired and scrapped in 1940 and 1941.
02	Sweeper	Russell	1920	
03	Sweeper	Russell	1920	
04	Sweeper	Russell	1920	
2	Shear plow	Taunton	1898	
5	Shear plow	Brill		
8	Shear plow	Brill		
14	Shear plow	Taunton		
15	Shear plow	Taunton		
16	Shear plow	Taunton		
17	Nose plow	Taunton		
18	Nose plow	Standard	1919	
19	Nose plow	Standard	1919	
P-21	Shear plow	Wason		
P-22	Shear plow	Wason		
P-23	Shear plow	Wason		

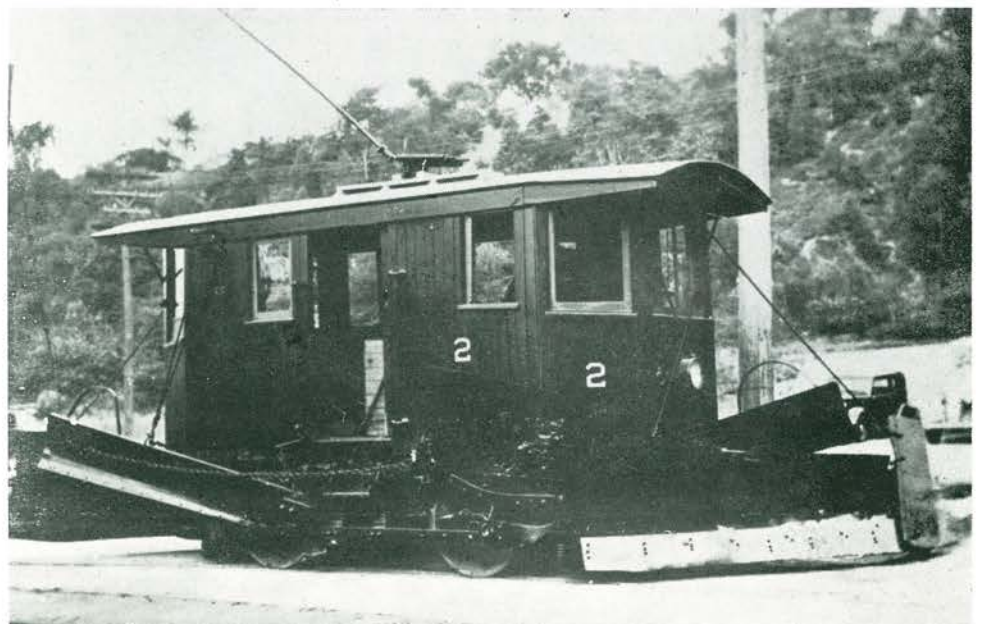


BECKETT STREET (MUNJOY HILL) CARHOUSE



WASHINGTON AVENUE CARHOUSE

NO. 2 TAUNTON 4-wheel shear plow which came originally from the Portland & Yarmouth Electric Railway is pictured at the St. John Street carbarn.



Wrecks and Accidents on the Portland Railroad

THE PORTLAND RAILROAD had its share of wrecks and accidents, inasmuch as the human factor is always involved in the operation of a street railway. In the early years, only the South Portland Division had a telephone dispatching system and there were no block signals until 1912. Thus, it was very easy for a car off schedule to become involved in a collision if both the motorman and conductor weren't careful. There also were about 17 railroad grade crossings, some of which were not any too well protected.

A standard rule of the Portland Railroad was that when time for leaving a turnout had arrived and an expected opposing car was not in sight or hearing, the car could proceed with caution to the next turnout. If the cars met on the single iron, the car closest to a turnout would back up. As might be expected, this resulted in more than one accident.

What might have been a nasty incident occurred in March 1891 on a horsecar bound for Munjoy Hill. An off-duty police officer boarded the car and the conductor stepped forward in an attempt to collect a fare. The patrolman refused to pay and dragged the unfortunate conductor to the rear platform, there threatening to beat the latter's brains out with a nightstick. The officer completed his ride and the conductor missed one fare.

In 1893, the motorman of a Deer-

ing car narrowly averted an accident when the headlight showed the body of a drunken woman sprawled across the rails. The car was stopped promptly and the woman wound up in the hoosegow.

In that same year, Engine 4 of the Portland Fire Department, responding to a blaze, crashed into an inbound Stroudwater horsecar near Brown Street. The fire engine horses bolted but were stopped by the driver of the chemical cart. Two firemen were slightly injured.

The first serious accident following complete electrification took place June 22, 1897. A car returning to the Deering car barn struck a circus wagon on Forest Avenue, the driver of the wagon suffering a broken leg.

AN EARLY grade crossing mishap took place December 4, 1899, when a light engine of the Boston & Maine struck and demolished the rear platform of a Westbrook trailer at the Woodfords Street crossing. (The press report of this accident did not explain what a B&M locomotive was doing on the Maine Central main line).

In October 1900, car No. 73 of the Riverton line was struck by a switcher at Morrill's Corner. Nobody was hurt as there weren't any passengers on the car and the crew jumped in time. A signal at this crossing was later provided.

Car No. 23 of the Yarmouth Division jumped the rails at Mill

Creek and hurtled down an embankment on February 19, 1902, several persons receiving injuries. In October of that same year, Motorman Flack of the Westbrook Division was seriously injured when his car encountered a train on the private steam railroad operated by the Warren Paper Mill in Westbrook. Gates which had been provided at this point were not in use at the time of the crash.

A week later, there was a collision between cars of the Portland Railroad and the Biddeford & Saco Railroad on Main Street, Saco. The Portland motorman was hurt. To wind up the year 1902, two South Portland Division cars collided headon near the Cliff House on the Meetinghouse Hill line. A misunderstanding of meeting places, established in a new schedule, was the cause of this accident.

Three men were seriously hurt when construction car No. 69 and a motor flat collided on the Yarmouth line near No. 2 turnout in May 1903. No. 69 had just been rebuilt as a work car and, fresh from the shops, was being delivered to the Yarmouth barn for service there.

PERHAPS the most noted of all wrecks on the Portland Railroad was that of No. 147, a special car bringing passengers home from a dance on the night of November 9, 1924. It was after the hours when electric cars usually operated and

COMPLETELY off the iron is No. 22 of the Portland & Yarmouth Electric Railway one winter day shortly after turn of the century.



the crew of an outbound light engine was not looking for a trolley car to be crossing the tracks.

And the crew of the inbound special trolley, knowing that no steam trains were due at that time of night, merrily approached Coyle Street crossing on Forest Avenue. The result is shown in a widely-circulated photograph wherein the entire right side of No. 147 is stripped clear. The locomotive hit the car a glancing blow on the front end, and threw the car across the street where it snapped off a fire hydrant.

Although the car was carrying standees, the motorman with a broken nose was the most seriously injured. The Railroad Commission found both the steam road and the electric railway negligent and ordered that additional crossing protection be maintained.

★

TWO PERSONS were killed in a headon collision January 22, 1906, between Nason's Corner and the Brighton turnout on the Westbrook line, the accident occurring during a heavy fog in the early morning hours.

Car No. 159, running 10 minutes late from Westbrook to Portland, was slated to meet the outbound car, No. 192, at the Sandpit turnout near the Portland-Westbrook city line. No. 192 wasn't there and after a few minutes' wait, No. 159 proceeded toward Portland, stopping at the Nason's Corner turnout for another brief wait. Hearing nothing, the crew surmised the outbound car

would be waiting at the Brighton turnout, so they continued onward.

Meanwhile, No. 192 had run into a section of track where the overhead wire had broken loose and the crew had been forced to use an alternate route. Thus, this car also was behind schedule. After waiting at the Brighton turnout for the inbound car, No. 192 headed for Nason's Corner.

The two cars met in a valley between two steep grades, about midway between the two turnouts. Because of the thick fog, the motormen were unable to see each other until it was too late to stop. In addition to two persons killed, 11 were seriously injured.

An investigation of the wreck by the Railroad Commissioners came up with the profound report that "one of the cars should not have been on the track."

Car No. 232 rammed the rear of No. 171 on the Riverton line on July 19, 1907. Nine were hurt, none seriously.

A interesting accident was reported in the press for January 18, 1908, when Mrs. N. E. Tarling of South Portland sued the Portland Railroad, charging she had been walking in the center of the trolley tracks and had fallen, breaking her ankle. Mrs. Tarling was awarded the sum of \$500 by the court which declared that the street railway should maintain its tracks in such a manner that persons might walk in them with safety.

Frost on the rails was the cause of another crash involving Portland Railroad and Biddeford & Saco

Railroad cars on Main Street, Saco, on January 21, 1908. Several people were seriously injured. On the 5th of August 1909, car No. 201 was demolished by a railroad switcher while approaching the Portland end of the South Portland bridge.

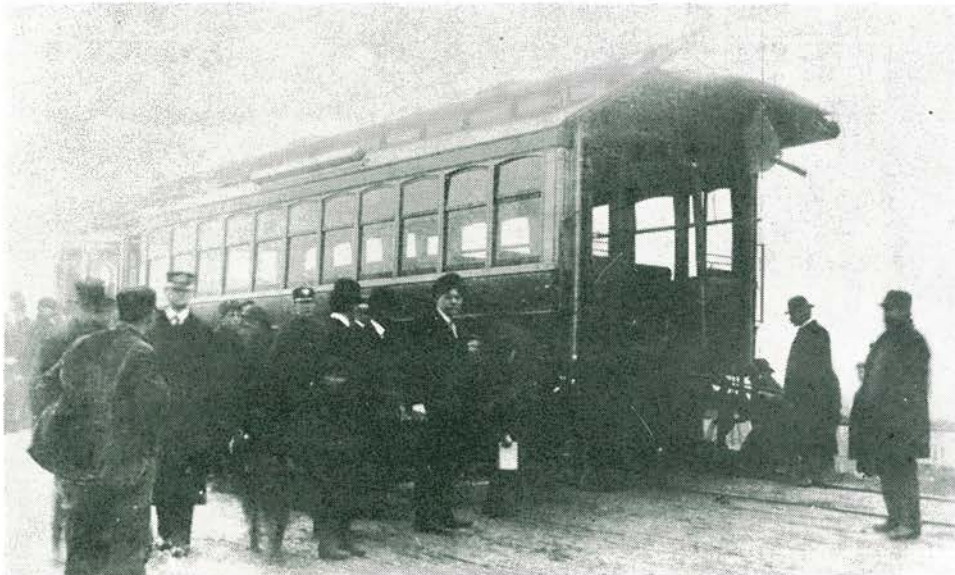
★

THE TRESTLE turnout on the Old Orchard branch was the scene of another headon collision August 21, 1910. Two inbound cars were waiting on the siding when two outbound cars passed them at the southern end of the trestle. Motorman Edmund F. Bant on the first inbound car noted a "Car Following" sign on the first outbound car but did not see one on the second. When it had passed, he pulled out onto the main line and toward the trestle. Just as he started up the incline, Car No. 187, the third of the outbound group, rolled around the curve at the top of the trestle and it was too late for either to stop. Nine persons were seriously hurt.

Three collisions within 15 minutes on the evening of September 27, 1910, must have enlivened things for the boys at the carhouses. Slippery rails were noted as the causes of all three. Several persons were bruised or shaken up and Car No. 120 was most seriously damaged.

★

JUNE 7, 1911, was the date of another serious accident on the Westbrook Division, this one taking place near the Canal turnout in Westbrook at an early hour. One car was bound from Gorham to



TWO WERE KILLED as Nos. 159 and 192 collided headon on the Westbrook line on January 22, 1906. This photo shows No. 192 shortly after the crash, with one vestibule missing. Poor quality of photo is due partially to heavy fog.

Westbrook and the other was running from Westbrook to South Windham.

The car from Gorham was about 8 minutes late and instead of stopping at the Canal turnout as it was supposed to do, it continued right through. The two trolleys, both opens, collided about 150 feet east of the siding and 37 of the nearly 100 passengers on both cars were injured, four seriously. The hood on one car was broken and the dasher of the other was bent back.

The Railroad Commissioners held their usual investigation and found that the crew of the Gorham car was at fault by reason of running by the turnout in direct violation of orders.

About three months later, on the 1st of September, a street sprinkler car broke loose while being filled with water on Vaughan Street, near Bramhall Square. The sprinkler, bumped by a Spring Street car, coasted into Bramhall Square, turned left onto Congress Street and raced down Bramhall Hill. It struck two teams during its descent and finally jumped the rails on the sharp curve at St. John Street, smashing into the fountain in Railroad Square.

One of the crew, Lawrence Eber-son, stayed with the car in an effort to stop it, but he finally "joined the birds" at Congress and Weymouth Streets. The driver of one of the teams died as a result of the crash. Fortunately, there were no passenger cars on the hill at the time.

Sliding on slippery rail, Car No. 242 of the South Portland line sped down High Street hill on January 3, 1918, and crashed into the post and bridge railing at the corner of York and High Streets. One wheel of the car dropped over the edge of the bridge, beneath which there was a 20-foot drop. Several people were slightly injured but most of the passengers were more frightened than hurt.

THESE were the major accidents and wrecks of the Portland Railroad. There were others of a less spectacular nature, to be sure, but the foregoing were those recorded by the daily press for posterity and the ones which are of most importance to this record. In later years, after automobiles became so numerous, there were frequent collisions involving autos and trolleys, with the former usually coming off second best.

One more mishap must be mentioned. In the late "Thirties, the Portland Railroad found it necessary to remove several hundred feet of rail from the end of the Stroudwater line, but left the overhead wire in place. It being only a small matter, word of the rail removal did not get passed around. The following winter, a motorman on the extra board took a snow plow over the Stroudwater line and ran right off the end of the track and as far along the former road-bed as his momentum would carry him. The wrecking crew had a busy night's work on its hands.

Carhouses and Shops

THE FIRST carhouse and stables of the Portland Railroad system were those erected at Spring and Clark Streets by the Portland & Forest Avenue Railroad in 1863. Following electrification, the carhouse was used for storage for a number of years prior to being sold to the Portland Savings Bank Association on March 7, 1906. It was subsequently converted to a garage.

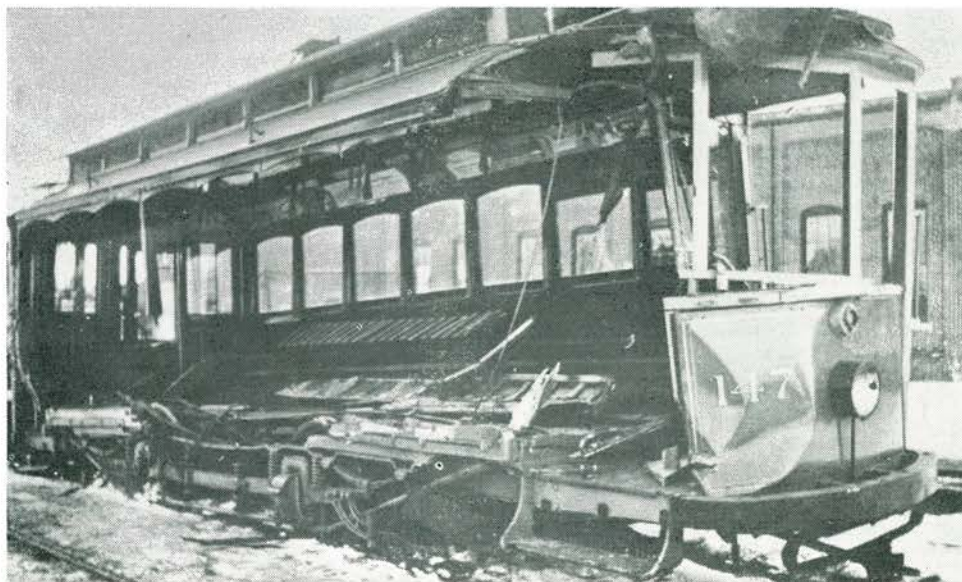
When the Deering line was constructed in 1864, a small car shed was provided near Morrill's Corner and in 1888, a 3-track wooden carhouse was built at the southwest corner of Congress and St. John Streets, just off Railroad Square.

The first modern carhouse on the system was erected at Beckett and Wilson Streets, on Munjoy Hill, in 1891 at a cost of \$23,000. This was a brick-fronted building, with a 160 by 52 foot barn for cars and a stable 120 by 60 feet in area.

There was a waiting room on the ground floor and offices were provided on the second floor. This carhouse accommodated most of the equipment on the St. John Street Division for several years and when the stables were removed after electrification, there was room for open car storage during the winter months. Five tracks led into the building from Beckett Street.

When the Westbrook line was built in 1892, a 4-track wooden car-

WHAT WAS LEFT of No. 147 after being struck by a steam locomotive at the Coyle Street crossing on Forest Avenue the night of November 9, 1924. The car was never repaired.





THE KNIGHTVILLE CARHOUSE with adjoining power station.

house was constructed on Main Street, Westbrook.

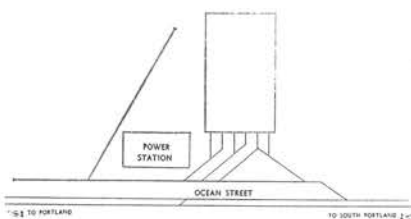
With the acquisition of the Portland & Cape Elizabeth Railway in 1899, the Portland Railroad took over the former's carhouse on Bridge Street, Knightville. This was a 6-track brick building, with power station adjoining.

Carhouses of the Portland & Yarmouth Electric Railway were located on Washington Avenue in Portland and at Yarmouth Village. The Portland barn was a brick building with four tracks and the Yarmouth carhouse, a wooden building, had three tracks.

The carhouse of the Westbrook, Windham & Naples Railway was located on Conant Street, Westbrook. It was a wooden building and had three tracks.

Fire destroyed the old St. John Street carhouse on July 9, 1901, five cars being lost in the blaze. The Portland Railroad soon acquired a large plot of land on lower St. John Street, running through to Valley Street, and constructed a modern 14-track brick and steel carhouse on the site in 1902 and 1903. During

KNIGHTVILLE CARHOUSE, SOUTH PORTLAND



1904 and 1905, a large shop building was constructed at the rear of the carhouse.

Designed by the engineering firm of Sheaff & Jaastad, the shop had seven tracks and contained a paint shop, an equipping shop, a wood-working shop, a blacksmith shop, a machine shop, brass foundry and an armature room. All types of machinery were installed so that the shops were equipped to handle any maintenance or repair job—or to build new cars if need be.

To serve the new Saco and Old Orchard lines, a 3-track wooden carhouse was built at Dunstan Corner, Scarborough, in 1902.

A new carhouse had been planned for Westbrook as early as 1901, but the old wooden building continued

to serve until December 31, 1905, when it was destroyed by fire. All of the cars were saved. In 1906, a new 8-track brick barn was built.

Steel girders and roof framing for the new barn had been purchased prior to the fire and were being stored on a vacant lot pending the start of construction. While the new Westbrook carhouse was a-building, the old Westbrook, Windham & Naples barn was used to service and house cars of the Westbrook Division.

During 1908, a large 7-track brick carhouse was erected on Stevens Avenue, near Morrill's Corner, and later a 5-track wooden annex was provided for the storage of open cars and work equipment. The annex was razed in the early 1920s after open cars were withdrawn from regular service.

The principal operating centers were the St. John Street, Deering, Westbrook and Knightville carhouses, with some runs operating from the Dunstan and Yarmouth barns. Several of the operating carhouses had facilities for light running repairs.

Washington Avenue and Beckett Street carhouses in Portland and the Conant Street carhouse in Westbrook were used primarily for storage.



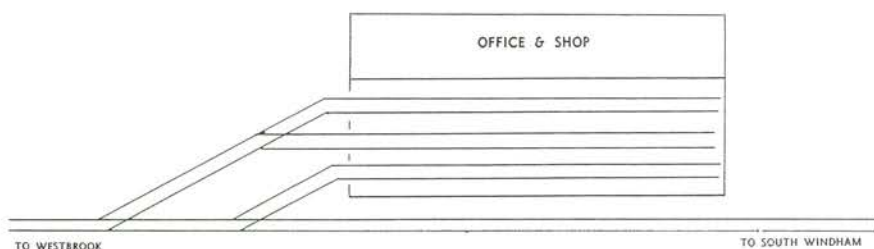
FIRE destroyed the Yarmouth carhouse and substation on February 13, 1920, two cars being lost in the blaze. The old battery house was converted to a 2-track carbarn and a new brick substation was erected.

Abandonment of the Washington Avenue carhouse took place on December 20, 1920, the building being sold for garage purposes. On July 20, 1921, workmen started to clean out the idle Beckett Street carhouse which had been leased to the government for mail truck storage.

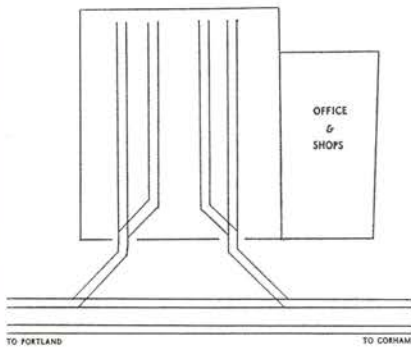
The Knightville barn was closed on May 8, 1928. With abandonment of the Gorham and South Windham lines on August 1, 1931, use of the Westbrook and the Conant Street carhouses ended. The Dunstan and Yarmouth carhouses were closed in 1932 and 1933 respectively. On the first of April 1933, the Deering carhouse was discontinued as an operating center, with all runs being transferred to St. John Street.

The Deering carhouse was used

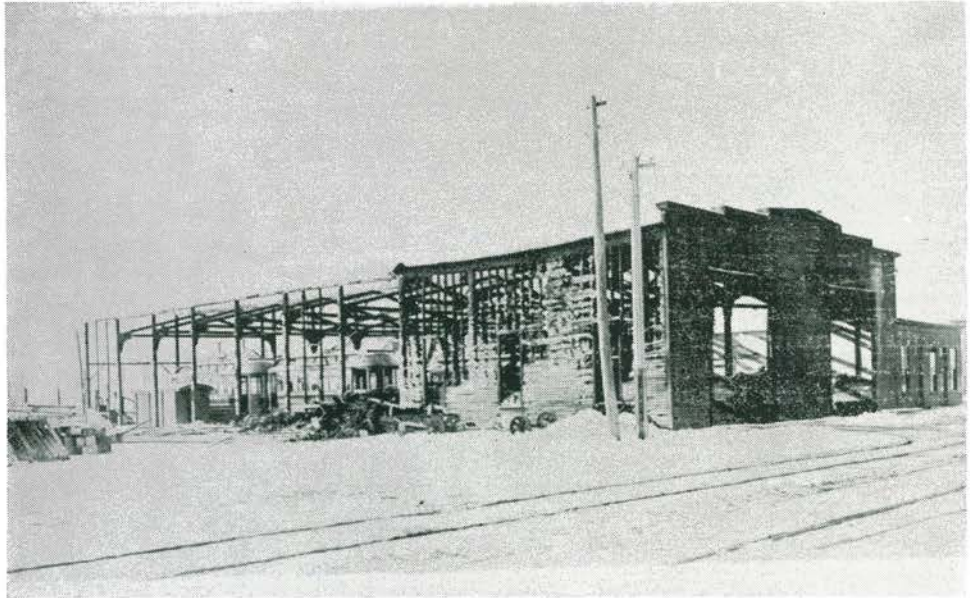
CONANT STREET CARHOUSE, WESTBROOK



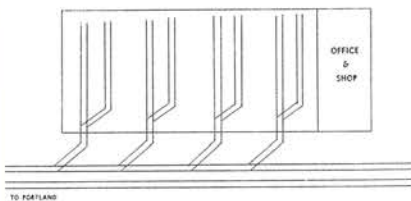
OLD WESTBROOK BARN



RUINS of the old Westbrook carhouse, destroyed by fire December 31, 1905.



NEW WESTBROOK CARHOUSE



NEW Westbrook carbarn.



for storage purposes and as headquarters for the line and track departments until 1940 when it was sold to the State of Maine and was converted to a National Guard armory.

Orphaned by sale of the Deering carhouse, the line and track departments of the railway were moved to the former Portland-Lewiston Interurban carhouse on Portland Street, near Preble Street. Tracks in this building were still in place and all the company had to do was clean out the switches on Preble Street and erect overhead wire. The old Portland-Lewiston barn continued in use until July 1941—some two months after motorization of

the last four rail lines of the system in April and May.

The St. John Street carhouse was subsequently converted to a bus garage and the shops were converted for bus maintenance. They are now owned by the Portland Coach Company, which has leased a portion of the carhouse building to mercantile interests.

At the present time (1958), the former Washington Avenue, Beckett Street, Knightville, Deering and Westbrook carhouses still stand. All except the Knightville and Deering barns are used for garage purposes. For a time the latter was headquarters for an American Legion post, but at present is vacant.

Power Stations

THE FIRST power station of the Portland Railroad was located at Morrills Corner. Little is known about the plant except that it was equipped with Ball & McIntyre and Seymour engines and General Electric generators.

The impending electrification of the entire system in 1895 necessitated the construction of a new and larger power station. The site chosen was at the corner of Forest Avenue and Marginal Way, near Back Cove, so that it would be possible to get coal by tidewater. Ground for the building was broken in April 1895,

YARMOUTH CARHOUSE
which was destroyed by a
fire on February 20, 1920.



with 1,650 piles being driven into reclaimed land as a foundation for the large brick structure.

Equipment of the station included Babcock & Wilcox boilers, supplying steam to three Allis horizontal cross-compound engines direct-connected to two 400 Kw. and one 225 Kw. General Electric multipolar generators.

Additional equipment, including one 1,500 h.p. steam engine, was installed at Forest Avenue station in 1900.

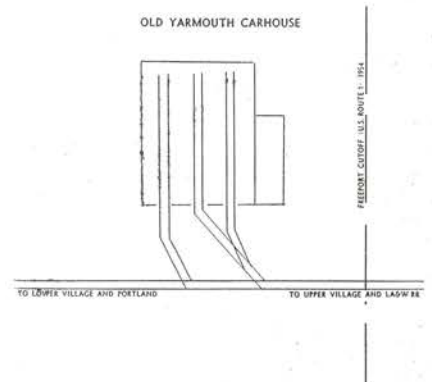
The power station taken over from the Portland & Cape Elizabeth Railway in 1899 contained American Wheelock engines and General

Electric generators with an output of 800 h.p.—or about 600 Kw.

By 1902, the power facilities of the Portland Railroad included five steam engines of 3,300 h.p. total, six direct current generators with a total output of 2,835 Kw. and a 120 Kw. booster. As of 1907, the two power plants had been largely modified and had for equipment six steam engines delivering a total of 3,775 h.p.; two steam turbines of 750 h.p. each, six generators with a total output of 2,600 Kw., one 80 Kw. booster and a storage battery of 742 cells.

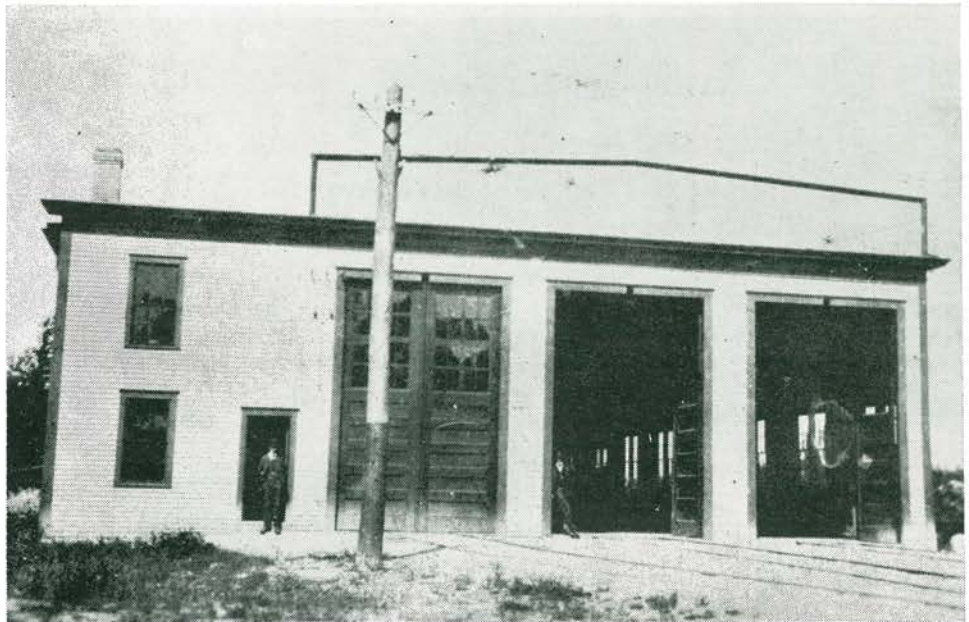
Power for the southerly end of the Saco Division was purchased

OLD YARMOUTH CARHOUSE



NEW ROTARY substation
at Yarmouth. New carbarn
converted from old battery
house appears in the rear.

DUNSTAN CARHOUSE,
built in 1902 and razed in
1932 when the Saco Divi-
sion lines were abandoned.



from the Biddeford & Saco Railroad.

A complete description of the Forest Avenue station appeared in the Electric Railway Journal of November 12, 1910 and is quoted in part as follows:

Current for the operation of the cars of the Portland Railroad Company's urban lines is supplied from a power station located about a mile north of the center of the city, on a site where tidewater is available for condensing purposes and where fuel can be delivered by barges.

This station delivers exclusively by direct current output at 550 volts, and has for several years illustrated a type of plant adapted to combined reciprocating engines and turbine operation. The company installed here two of the first direct current steam turbo-generators for 550-volt service, the machines being of the vertical type.

The company is now completing the installation of two 550 kilowatt Curtis-General Electric generators built for horizontal operation. These machines are of the four stage type and deliver current to the bus bars at 550 volts, when operating at full load and at a speed of 1,800 r.p.m.

Other units in the station consist of a 1,500 h.p. Rice-Sargent vertical cross-compound engine direct-connected to a 1,050 kw. generator and two 400 kw. generators direct-driven by horizontal cross-compound Allis-Corliss engines. The normal capacity of the station is 3,050 kw. The speed of each engine is 1,000 r.p.m. Steam is supplied from a boiler plant of 2,200 h.p. rating, there being four 250 h.p. units, two 350 h.p. units and one 500 h.p. unit. The boilers are equipped with Taylor stokers.

Further improvements to the Forest Avenue plant were made in

1911 when an Allis-Chalmers vertical cross-compound engine, direct-connected to a 1,600 Kw. General Electric direct current generator, was installed.

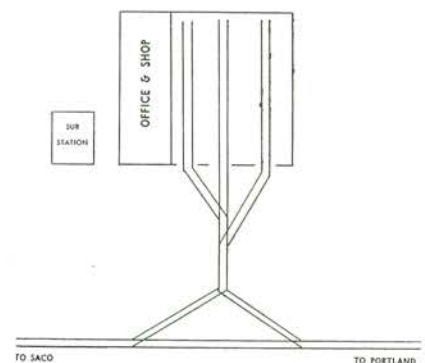
The entire power setup was changed in 1912 when the Portland Railroad was taken over by the Cumberland County Power & Light Company. Arrangements were made to operate the railway by current supplied from hydro-electric plants of the Cumberland County Power & Light Company on the Saco and Presumpscot Rivers and for this purpose, motor generator sets aggregating 5,300 Kw. were installed at Portland, Knightville, Westbrook and Dunstan.



HYDRO-ELECTRIC plants of the Cumberland County Power & Light Company were located at North Gorham (2,000 Kw.), West Buxton (3,000 Kw.), Bonny Eagle (7,200 Kw.) and Great Falls (2,400 Kw.). Another hydro station was built at Hiram in 1916.

In general, power was transmitted from the hydro-electric plants at 38,200 volts AC and converted to 550 volts DC for street railway use at the various substations. Steam plants on Forest Avenue and on Plum Street, Portland, were held in standby status in the event of low water or other difficulties at the hydro-electric stations. The Knightville power station was discontinued and the generating equipment was dismantled.

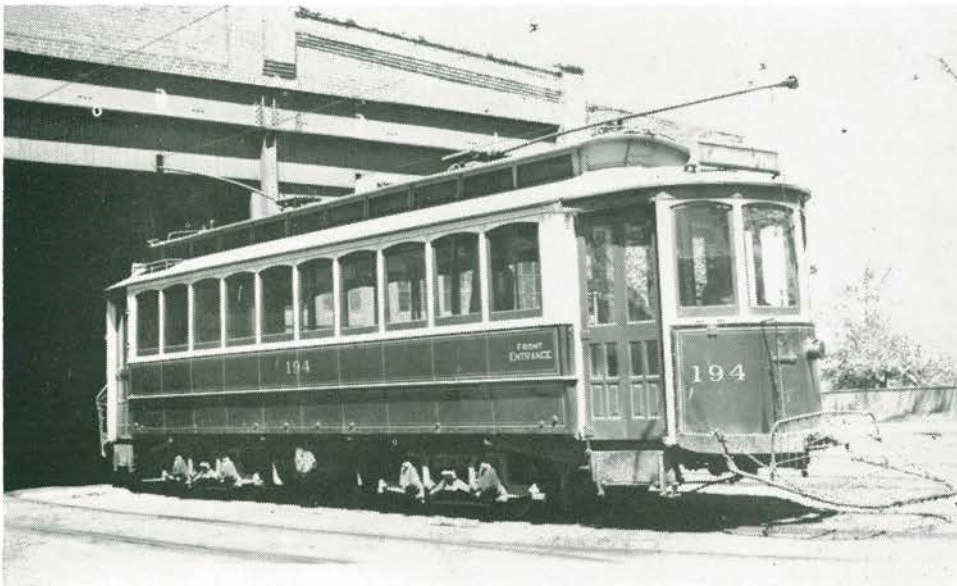
DUNSTAN CARHOUSE AND SUBSTATION



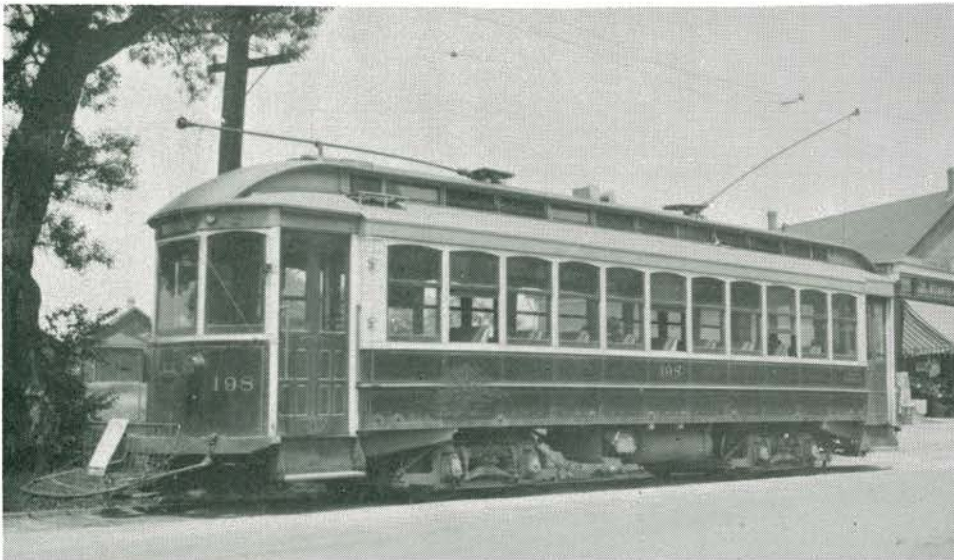
A new substation was built at Milliken's Mills, on the Old Orchard branch, in 1915. In 1920, a new substation was constructed at Yarmouth to replace the one destroyed by fire in that same year.

In 1922, a new steam plant, with an output of 10,000 Kw., was built in Portland harbor, on the old dry dock site near the South Portland bridge. This resulted in the closing of the old Forest Avenue steam plant, with only rotary converter equipment being left in the plant.

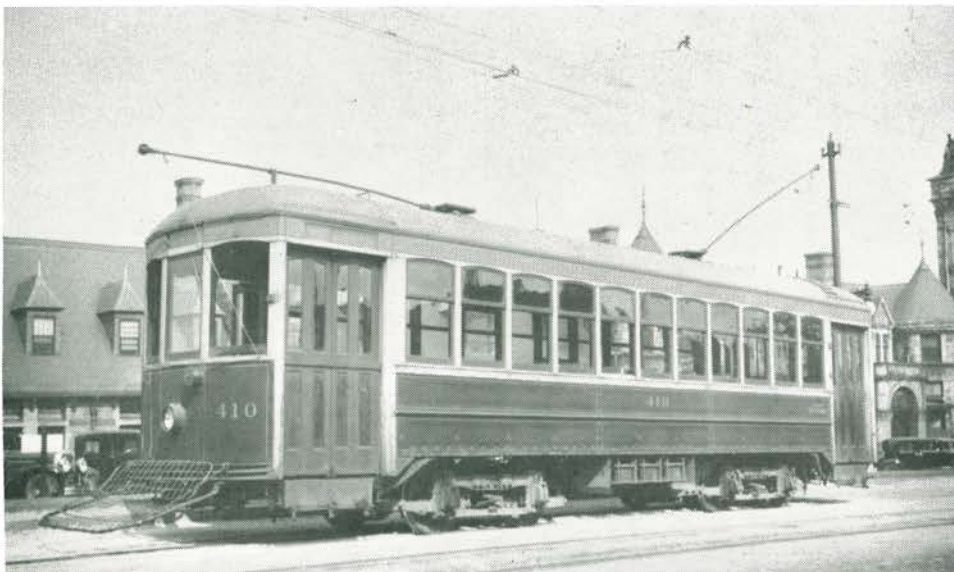
As the various street railway lines were abandoned during the 1930s, the substations were closed down one by one and by 1940, the only ones in operation were those on Forest Avenue and at Knightville. The latter substation was discontinued following motorization of the South Portland Division in July of 1940 and the Forest Avenue plant carried the entire load until final motorization in 1941.



NO. 194, a side-seater city type car of 1902 vintage is shown at the Deering car-house where it was stored during the 1930s. Even though it was equipped with full one-man safety controls, it was taken out of service when cars with cross seats became available with discontinuance of the long suburban runs.



NO. 198 on Allen Avenue near Washington Avenue, Portland, June 21, 1935—Photo by Roger Borrup.



AT UNION STATION—No. 410 photographed in June '34 by Roger Borrup.



