LOCOMOTIVES

of the

WESTERN PACIFIC

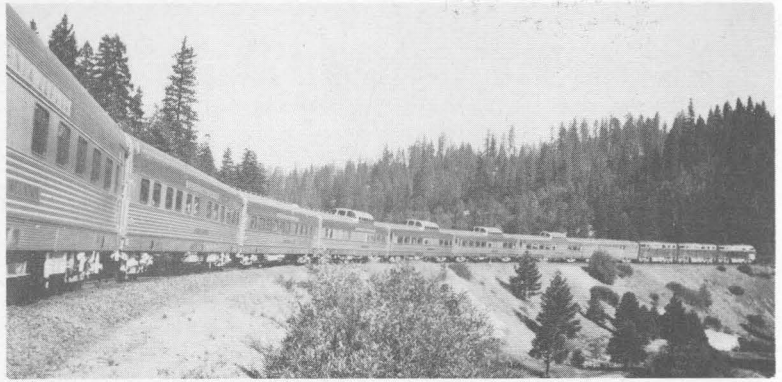
FEATHER RIVER ROUTE

A PHOTO STORY OF STEAM

Locomotives of the Western Pacific

Rapidly disappearing from the American scene is one of the most fascinating machines Man ever has been privileged to invent—the Steam Locomotive. About it hundreds of books have been written and of it, especially in the last twenty years, an incalculable number of photographs have been taken. This book will deal with one group of these machines—those of the Western Pacific Railroad.

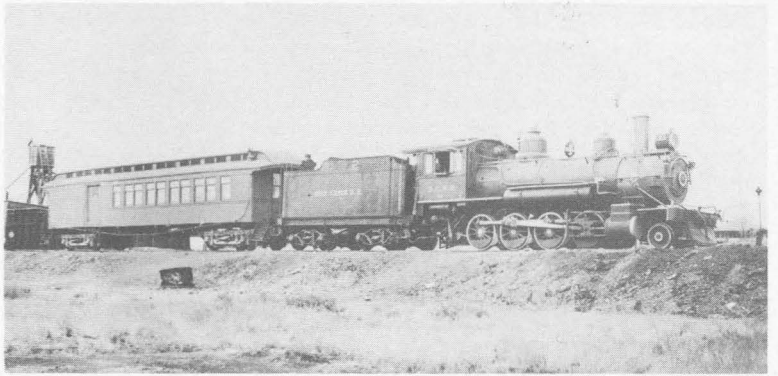
The Western Pacific of today, which extends from Salt Lake City, Utah to Oakland and San Francisco, California, is one of the world's most modern and efficient railroads, completely dieselized except for nine steam engines temporarily retained as emergency power, with centralized traffic control over 916 miles of its 924.5 miles of main line (exclusive of 178 miles of paired track operation with the Southern Pacific in Nevada), and operates along with the Denver & Rio Grande Western and Chicago, Burlington & Quincy, one of the country's most spectacular and successful trains, the California Zephyr. But is is not the



Western Pacific of today about which we are writing. With full knowledge of the diesel's efficient but uninteresting supremacy, we are writing of the glamorous yesteryear of the Western Pacific when Steam was king.

As is probably commonly known, the Western Pacific is the youngest of the so-called transcontinental railroads, having been organized on March 3, and incorporated March 6, 1903. Construction began in Oakland, California and at Salt Lake City, Utah in January of 1906. The last spike was driven on a high bridge in the California mountains at Keddie, near Mile Post 281, on November 1, 1909 and the first passenger train arrived in Oakland August 22, 1910, although the road was not formally turned over to the Operating Department until July 1, 1911. In addition to the main line, several branches and smaller railroads occupy prominent places in the Western Pacific story and about them there follows a brief outline, considering them from east to west. Detailed information about any locomotives involved is shown on page 30.

DEEP CREEK RAILROAD: 46 miles south from Wendover to Gold Hill, Utah incorporated October 11, 1916 to serve the gold mining territory and opened for traffic March 12, 1917. Owned by the Western Pacific. Road had two engines, one passenger and three freight cars. Was abandoned July 29, 1939, the last train operating the previous day.



RENO BRANCH and the NEVADA-CALIFORNIA-OREGON RAILWAY (Three-foot gauge)

Essentially the present-day 33 mile branch from Reno Junction (formerly Rainbow) to Reno, Nevada, is related to the N-C-O only by use of two segments, aggregating fifteen and a half miles, of that road's

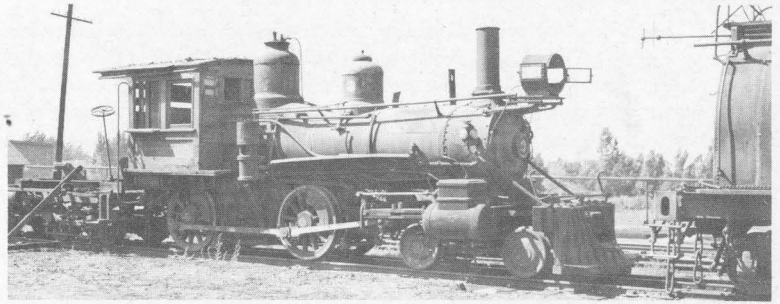
former narrow gauge right of way, but the story back of it is quite involved and interesting.

In 1917, the year the Western Pacific entered the Reno picture, the Nevada-California-Oregon Railway had trackage from Reno north 235.71 miles to Lakeview, Oregon, via Plumas Junction (formerly "Junction," "Moran," and "Cuba"), Doyle, Hackstaff, now Herlong, Wendel, Madeline and Alturas, California. There was also a 39.4 mile branch, then known as the Sierra Valley Branch of the N-C-O, extending west from Plumas Junction to Davies Mill, now known as Graeagle, near Blairsden. Originally this line had been projected to Quincy and construction authorized to Mohawk, but was never constructed beyond Davies Mill. On March 24, 1917 an agreement was reached to sell to the Western Pacific the 64.42 mile section between Reno and Hackstaff and the 39.4 mile branch from Plumas Junction to Davies Mill and the sale of the total 103.82 miles took place on June 11, 1917 for a price of $700,435.00.

The WP then started construction of the standard gauge line. Commencing from the east entrance of the Chilcoot tunnel a new right-of-way was laid out in a southeasterly direction 2.61 miles to Mile Post 35.00 on the N-C-O just eight-tenths of a mile north of Plumas Junction. (The Sierra Valley Branch west from Plumas Junction followed a longer course via Dinwiddie Creek and on up over Beckwourth Pass.) They then standard gauged the N-C-O track 7.5 miles to Purdy, now Peavine, on the California- Nevada state line which was Mile Post 27.5 on the N-C-O, constructed a new and shorter (by 5.04 miles) line along the south side of Lemmon Valley via Copperfield and Anderson to the top of the hill at Mile Post 8.0 on the N-C-O, then standard gauged and followed the old winding N-C-O line, except for changing the alignment of the curves, into Reno. Standard gauging of the narrow gauge line was done by laying rails outside of both narrow gauge rails and narrow gauge operation continued while standard gauge construction was in progress.

The old N-C-O route from Mile Post 8.0 to Purdy originally followed along the north side of Lemmon Valley via Summit, Mile Post 9.75, Cedar, Mile Post 15.61, and Francis, Mile Post 21.40, but had been shortened 1.5 miles around 1888 with a change near Summit account of bad snow conditions.

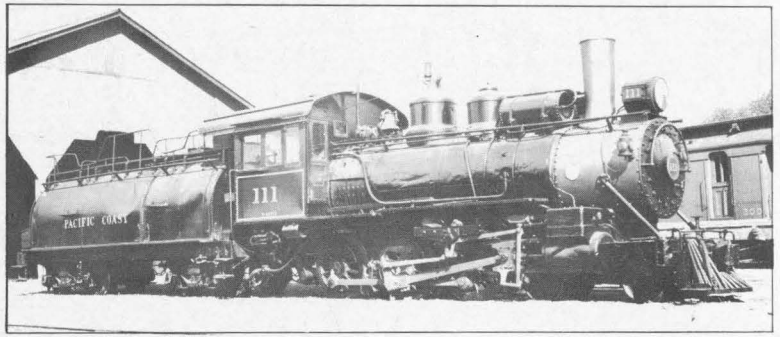
On January 30, 1918 the last narrow gauge train left Reno and this must have been quite a sight to have seen. All locomotives and equipment were placed in one train bound for the new terminal at Alturas and with blaring of trumpets and roll of drums the train started. Engines that had not had steam in their boilers for years hissed and



puffed and "got 'er rolling," but the long train failed to make the grade out of Reno. The second try, though, after backing down the hill, was successful and thus, during the height of World War I, came the end of slim gauge operation into Nevada's largest city, and standard gauge operation commenced February 4.

All the N-C-O track south of Hackstaff and west of Plumas Junction was then abandoned as these lines roughly paralleled the WP's own standard gauge route, leaving the N-C-O operating only from Hackstaff, which was formerly known on the WP as "NCO Transfer," to Lakeview, a distance of 172.06 miles. In 1922 the 16-mile section between Hackstaff and Wendel was abandoned, and the remaining mileage was taken over by the Southern Pacific and standard gauged to Alturas by September 29, 1927 following ICC approval on May 3, 1926. Southern Pacific engines 1618, 1667 and 1670, all 2-6-0's, became standard gauge N-C-O numbers 24, 25 and 26 in October, 1927, but were returned to the SP when the line from Fernley to Klamath Falls (crossing the WP at Flanigan) was completed and opened for traffic on September 15, 1929.

Practically all of the narrow gauge engines went to the Southern Pacific, two to the now-abandoned Pacific Coast Railroad at San Luis Obispo, California and the others scrapped. No N-C-O engines ever went to the **Western Pacific.**

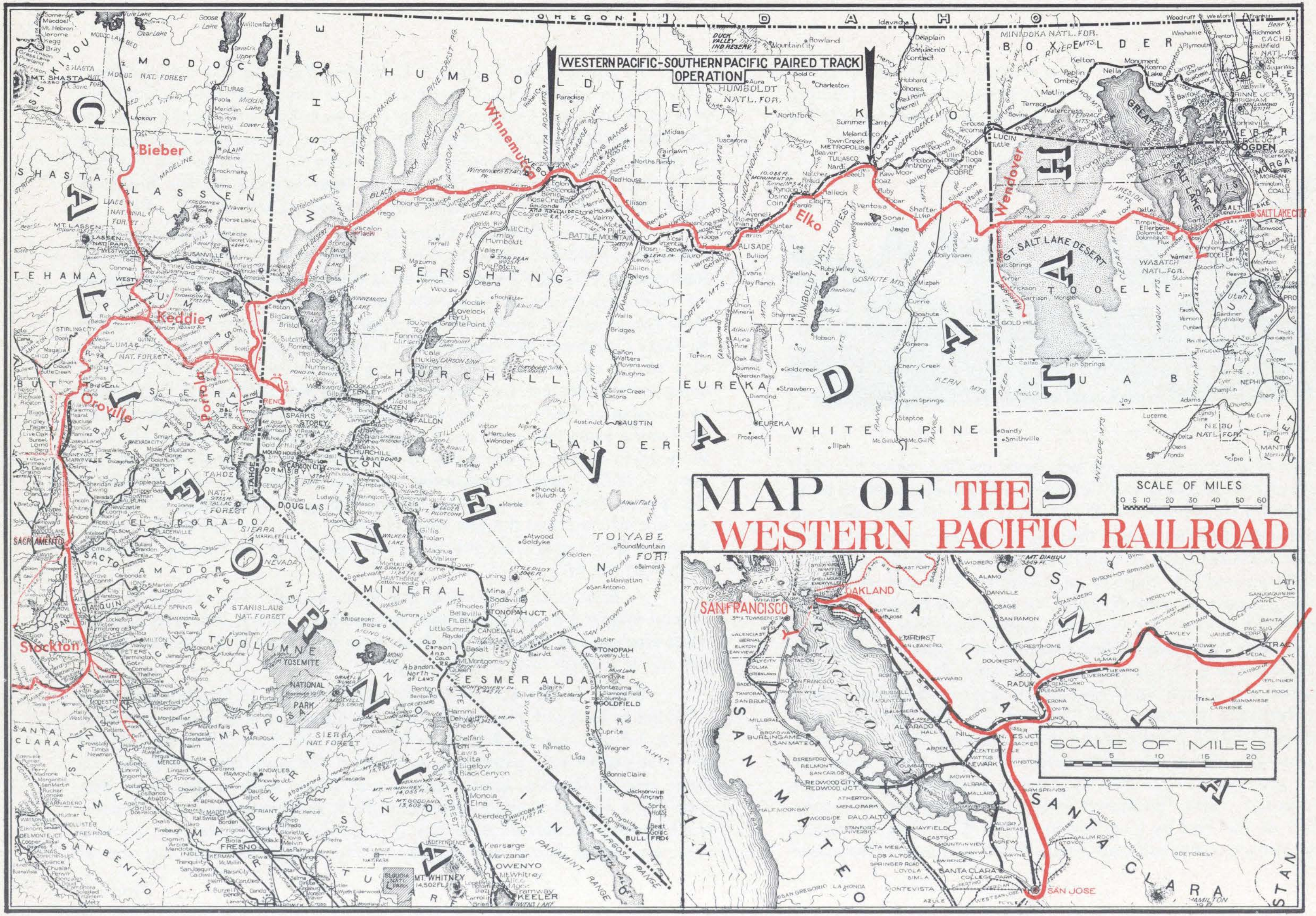


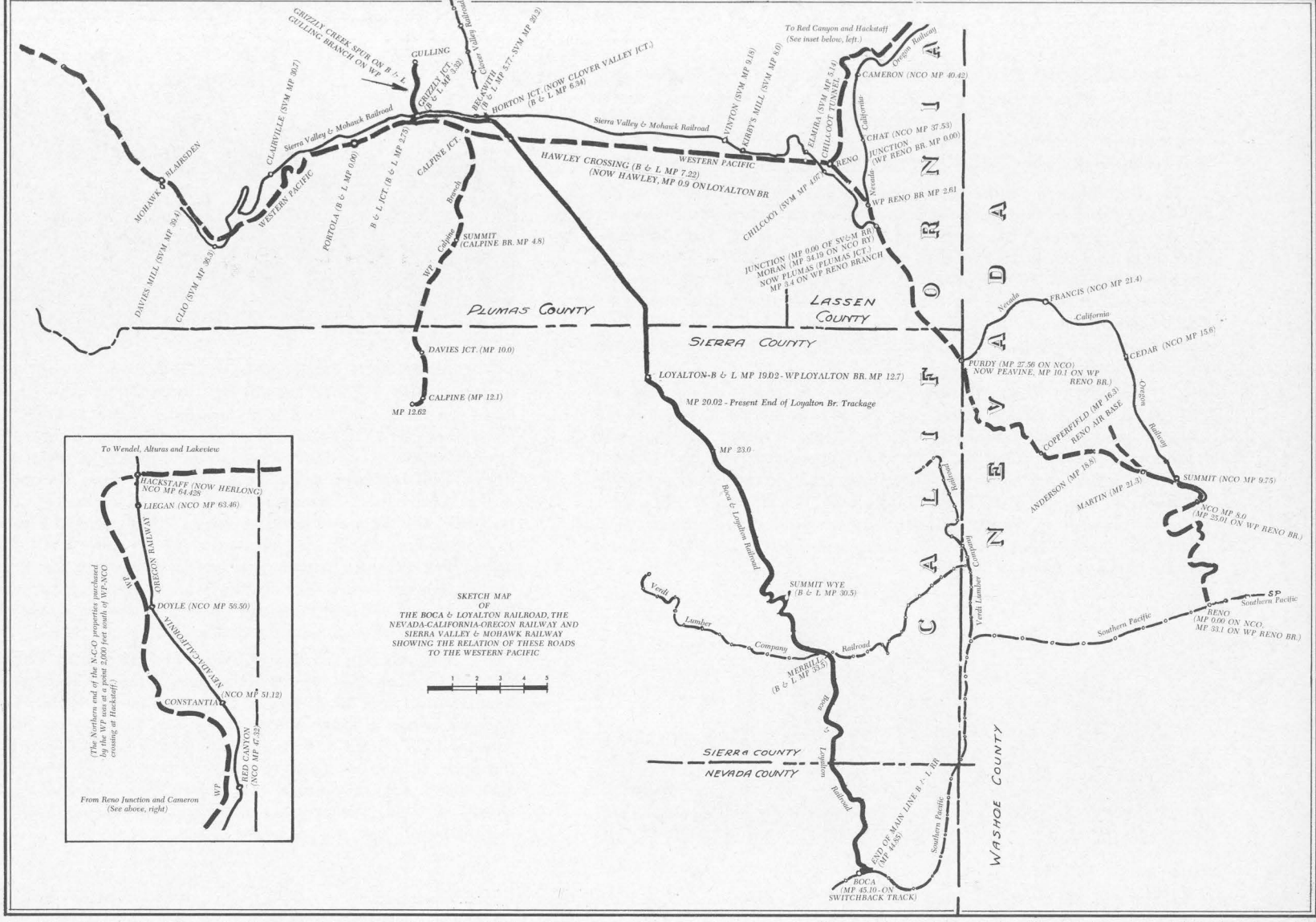
The start of the narrow gauge was back on December 12, 1879 when the *Western Nevada Railroad Company* was incorporated to build a line from Wadsworth, Nevada south to a point near Walker Lake and eventually to Bodie, California but this never got beyond the paper stage and plans were changed to build from Reno to Oregon and later Reno south to Bodie and *The Nevada and Oregon Railroad* was incorporated for this purpose on June 5, 1880. Ground was broken at Reno on December 22 of that year, but work was suspended after a few miles of grading had been completed. New management took over and incorporated the *Nevada & Oregon Railroad* on April 25, 1881. The first rail was laid about a month later and construction proceeded slowly amid great difficulties. However, on October 2, 1882 regular train service started over the 31 miles of road just completed to Oneida. In a few months, though, operations were suspended and after extensive litigation the road was sold under foreclosure to Moran Brothers of New York on April 17, 1884. The Moran Brothers had supplied the money for construction of the line by purchasing the N & O First Mortgage Bonds. As new owners of the railroad, they placed it in operation again under the name of the *Nevada & California Railroad* (not incorporated) and the line was extended northward. The Moran Brothers formed the *Nevada-California-Oregon Railway* (known colloquially as the "Narrow, Crooked and Ornery") on March 31, 1888 and transferred the property of the N & C to this corporation on January 1, 1893. The line reached Hackstaff, the point where the WP was later to cross, by the middle of 1889, Alturas by 1908 and Lakeview, Oregon on January 10, 1912.

The Sierra Valley & Mohawk Railroad Company was chartered October 1, 1885 to build a line from Junction on the Nevada & California Railroad (N-C-O) to Quincy, California and fifteen miles were completed by 1888. The following year rails were extended eight miles to Kirby's Mill. The road was reorganized January 5, 1895 as the *Sierra Valleys Railway Company* and opened for traffic on June 1, 1895. About the turn of the century it came under the control of the N-C-O, but was separately operated. On January 3, 1909 it was sold under foreclosure to a trustee of the N-C-O and on June 11, 1911 a new charter was taken out for the same line of railroad under the name of the *Sierra & Mohawk Railway Company* as successor to the Sierra Valleys Railway. On January 1, 1915 it was consolidated with the N-C-O becoming known as the Sierra Valley branch. The original project of building to Quincy was abandoned and the line was built only as far as Davies Mill, a distance of 39.4 miles from the point now known as Plumas on the Reno branch of the WP.

A final note concerning the Reno branch: Not shown on any official map is the Lemmon Valley Branch built during World War II 4.2 miles eastward to the Reno Air Base from Mile Post 21.3, Martin. Tracks are still in though now seldom used.

BOCA & LOYALTON RAILROAD: Portola, California eastward 5.7 miles to Beckwith then south 40 miles to Boca on the Southern Pacific, with a 1.6 mile branch known as Grizzly Creek Spur (later part of the WP Gulling Branch) extending north from the main line at a point 3.3 miles east of Portola. Engine house and shops were at Loyalton, Mile Post 19, a wye at Summit , Mile Post 30.5, the Verdi Lumber Company track crossed at Merrill, Mile Post 33.5 and at Boca there was another wye, an engine house and a quarter-mile switchback from the end of

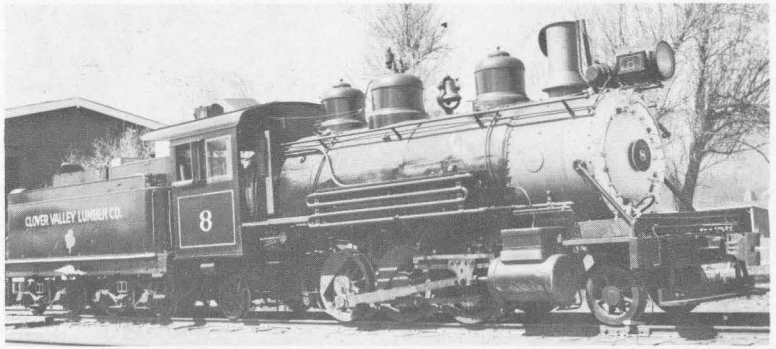

MAP OF THE WESTERN PACIFIC RAILROAD
WESTERN PACIFIC-SOUTHERN PACIFIC PAIRED TRACK OPERATION
SCALE OF MILES
0 5 10 20 30 40 50 60
SCALE OF MILES
0 5 10 15 20
CALIFORNIA
NEVADA
UTAH
OREGON
IDAHO
Bieber
Keddie
Portola
Oroville
Reno
Winnemucca
Elko
Wendover
Sacramento
Stockton
Salt Lake City
Ogden
Oakland
San Francisco
San Jose
GREAT SALT LAKE
GT. SALT LAKE DESERT
HUMBOLDT
ELKO
PERSHING
CHURCHILL
LANDER
EUREKA
WHITE PINE
MINERAL
ESMERALDA
DOUGLAS
BOX ELDER
TOOELE
JUAB
ALAMEDA
CONTRA COSTA
SANTA CLARA
SAN MATEO


GRIZZLY CREEK SPUR ON B & L
GULLING BRANCH ON WP
GULLING
Clover Valley Railroad
GRIZZLY JCT. (B & L MP 3.22)
BECKWITH (B & L MP 5.77, SVM MP 20.2)
HORTON JCT. (NOW CLOVER VALLEY JCT.) (B & L MP 6.34)
To Red Canyon and Hackstaff (See inset below, left.)
Oregon Railroad
CAMERON (NCO MP 40.42)
CLAIRVILLE (SVM MP 30.7)
Sierra Valley & Mohawk Railroad
VINTON (SVM MP 9.18)
KIRBY'S MILL (SVM MP 5.0)
ELAMIRA (SVM MP 5.14)
CHILCOOT TUNNEL
California
CHAT (NCO MP 37.53)
JUNCTION (WP RENO BR. MP 0.00)
BLAIRSDEN
MOHAWK
Sierra Valley & Mohawk Railroad
WESTERN PACIFIC
PORTOLA (B & L MP 0.00)
B & L JCT. (B & L MP 2.75)
CALPINE JCT.
HAWLEY CROSSING (B & L MP 7.22) (NOW HAWLEY, MP 0.9 ON LOYALTON BR
WESTERN PACIFIC
RENO
Nevada
WP RENO BR MP 2.61
CHILCOOT (SVM MP 4.9)
JUNCTION (MP 0.00 OF SV&M BR.) MORAN (MP 34.19 ON NCO RY.) NOW PLUMAS (PLUMAS JCT.) MP 3.4 ON WP RENO BRANCH
DAVIES MILL (SVM MP 39.4)
CLIO (SVM MP 38.9)
WP Calpine Branch
SUMMIT (CALPINE BR. MP 4.8)
PLUMAS COUNTY
LASSEN COUNTY
SIERRA COUNTY
FRANCIS (NCO MP 21.4)
Nevada
California
DAVIES JCT. (MP 10.0)
CALPINE (MP 12.1)
MP 12.62
LOYALTON-B & L MP 19.02 - WP LOYALTON BR. MP 12.7)
MP 20.02 - Present End of Loyalton Br. Trackage
PURDY (MP 27.56 ON NCO) NOW PEAVINE, MP 10.1 ON WP RENO BR.)
CEDAR (NCO MP 15.6)
Virginia
Truckee
COPPERFIELD (MP 16.3) RENO AIR BASE
ANDERSON (MP 18.8)
MARTIN (MP 21.3)
SUMMIT (NCO MP 9.75)
NCO MP 8.0 (MP 25.01 ON WP RENO BR.)
MP 23.0
Boca & Loyalton Railroad
Fernley
Verdi Lumber Company
SUMMIT WYE (B & L MP 30.5)
Verdi
Lumber
Company
Railroad
SP
Southern Pacific
RENO (MP 0.00 ON NCO, MP 33.1 ON WP RENO BR.)
Southern Pacific
MERRILL (B & L MP 33.5)
Boca
SIERRA COUNTY
NEVADA COUNTY
Loyalton
Railroad
END OF MAIN LINE B & L RR (MP 44.5)
Southern Pacific
BOCA (MP 45.10 - ON SWITCHBACK TRACK)
WASHOE COUNTY
CALIFORNIA
NEVADA
To Wendel, Alturas and Lakeview
HACKSTAFF (NOW HERLONG) NCO MP 64.428
LIEGAN (NCO MP 63.46)
WP
OREGON RAILWAY
DOYLE (NCO MP 56.50)
NEVADA-CALIFORNIA
CONSTANTIA (NCO MP 51.12)
RED CANYON (NCO MP 47.32)
WP
From Reno Junction and Cameron (See above, right)
(The Northern end of the N-C-O properties purchased by the WP was at a point 2,000 feet south of WP-NCO crossing at Hackstaff.)
SKETCH MAP OF THE BOCA & LOYALTON RAILROAD, THE NEVADA-CALIFORNIA-OREGON RAILWAY AND SIERRA VALLEY & MOHAWK RAILWAY SHOWING THE RELATION OF THESE ROADS TO THE WESTERN PACIFIC
1 2 3 4 5

the main line at Mile Post 44.85 down the hillside to a connection with the Southern Pacific. Equipment as of June 30, 1909 included 7 active engines and as of June 30, 1914, six engines. The Boca & Loyalton was incorporated September 24, 1900 and opened in 1902 and at that time was controlled by the D&RG thru ownership of 51% of capital stock.

The Western Pacific purchased the B&L on November 30, 1916 but never operated into Boca for authority had been granted November 25, 1916 to abandon the portion south of Mile Post 23 and the tracks and other facilities were removed in the summer of 1917. During construction westward in 1909 the WP had rebuilt the B&L right of way between B&L Junction and Portola, 2.7 miles and later it abandoned the B&L trackage between Grizzly Junction and Beckwith, 2.4 miles, the rails being taken up in August 1920, and in 1939 the 2.4 mile Gulling Branch was abandoned.

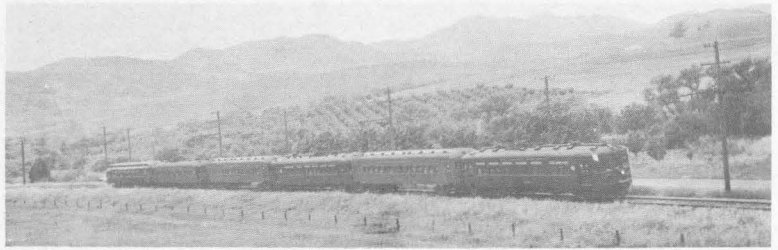
The Clover Valley Lumber Company, operators of a large mill at Loyalton, has trackage rights over the Loyalton Branch, which is the present name of the remaining B&L trackage between Loyalton and Hawley, near which latter point their own track connects and extends fifteen miles or so north into the timber area. The Clover Valley presently has two steam engines, a 2-6-6-2 saddle tank, No. 4, and No. 8, a little 2-6-2 obtained from the old Hobart Southern Railroad at Hobart Mills, California. Such information as is available on Boca & Loyalton engines will be found on Page 31.



NORTHERN CALIFORNIA EXTENSION: Known as the "Inside Gateway" this 112 mile section thru some of the most rugged and isolated parts of California was completed from Keddie to Bieber on November 10, 1931 to give the Western Pacific, in connection with the Great Northern, a north-south route competitive with the Southern Pacific. This has been the last piece of major new railroad construction in the West except for line relocations. Comprising a part of the NCE is a 5.27 mile section of track between Westwood and Mason belonging to the Southern Pacific, but over which the Western Pacific has trackage rights. The Western Pacific also has but does not use trackage rights north 11 miles from Bieber on the Great Northern main line to Lookout thence over the Great Northern branch to Hambone, an additional 34 miles, to a connection with the McCloud River Railroad.

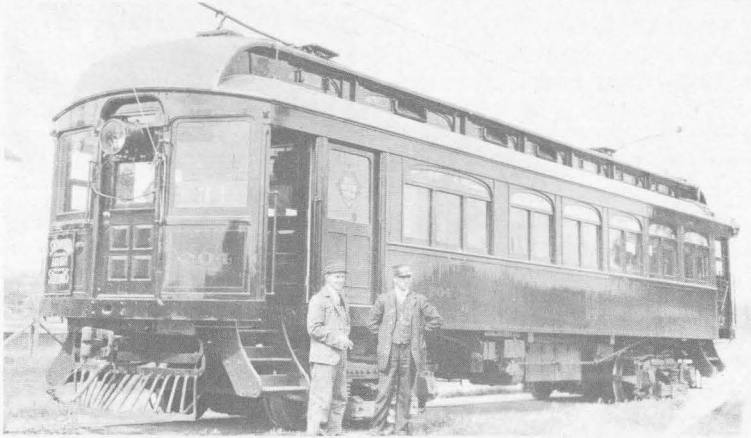
INDIAN VALLEY RAILROAD: 21.6 miles from Paxton northeast through Crescent Mills on the Bieber line of the WP to Engles, California. Incorporated June 30, 1916 and controlled jointly by the Western Pacific and the Engles Copper Mining Company. Construction was finished in June of 1917. Road had two former D&RG engines, two flat cars from the Boca & Loyalton (B&L Numbers 408 and 409) and two passenger cars. Road was abandoned in October 1938 and rails removed in the spring of 1939. The engines sat derelict at Crescent Mills for several months before being scrapped.

SACRAMENTO NORTHERN RAILWAY: A line formerly operating electric passenger service between San Francisco and Sacramento, Woodland, Marysville, Colusa, Oroville and Chico, California, now a freight-only road operating both electric and diesel locomotives. A complete history of this line and its several predecessor companies has been published by "INTERURBANS," the National Electric Railway News Digest, 1416 South Westmoreland Avenue, Los Angeles 6, California, and no further information will be attempted here except to say that the properties between Sacramento and Chico, the former Northern Electric,



have been owned by the Western Pacific since October 18, 1921, and those between Oakland and Sacramento, the former Oakland, Antioch & Eastern and later the San Francisco-Sacramento Railroad (Sacramento Short Line), since February 1, 1927. Some steam engines were used during the construction of the OA&E and in the early days three steam engines were operated by the Northern Electric, but aside for a short time during construction, none were ever used on the Western Pacific.

CENTRAL CALIFORNIA TRACTION COMPANY: 53.7 miles between Sacramento, Lodi and Stockton, California. Incorporated August 7, 1905. Formerly operated frequent passenger service with electric cars and owned several electric locomotives. Passenger service was discontinued before the War and all freight trains are now handled by diesel locomotives. Road became jointly owned by the Western Pacific, Southern Pacific and Santa Fe on January 1, 1928 and has never owned any steam locomotives.

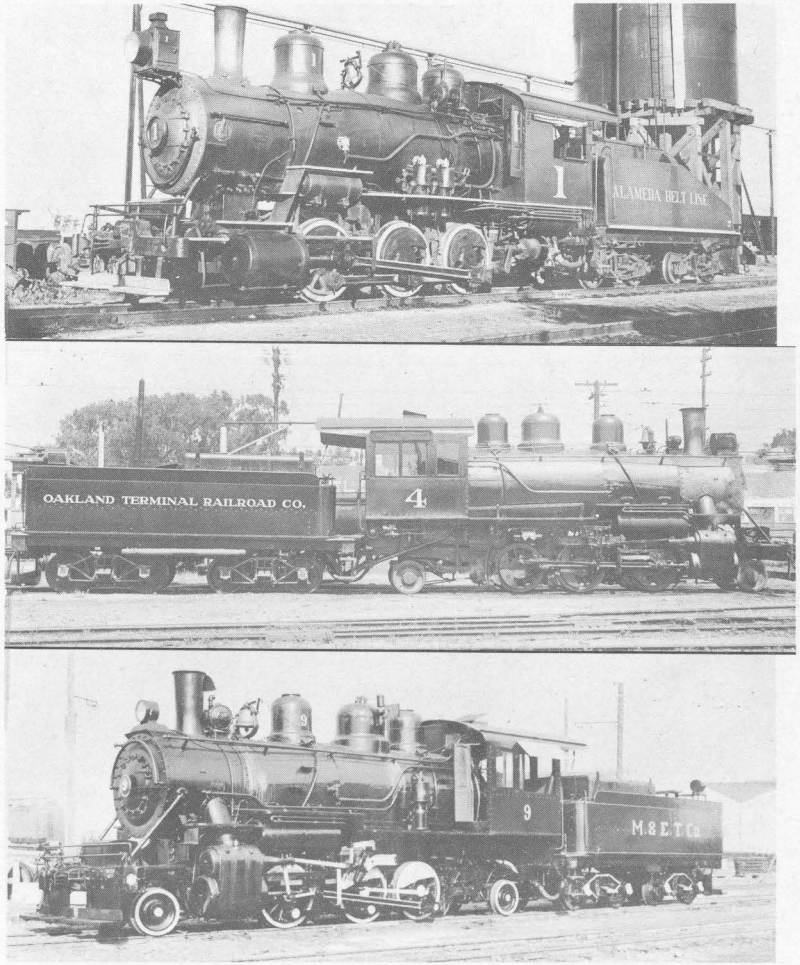


TIDEWATER SOUTHERN RAILWAY: Incorporated March 11, 1912, succeeding Tidewater & Southern incorporated October 4, 1910 and Tidewater and Southern Transit Company, February 16, 1912. Extends 33 miles south from Stockton to Modesto and an additional 16 miles to Turlock. Formerly operated frequent electric car service between Stockton and Modesto but is now a freight-only line handled by diesel locomotives. Prior to dieselization, though, it used two electric freight motors and has had three steam engines on its roster in addition to use of various Western Pacific locomotives during the fruit season. Western Pacific acquired the line in March of 1917.

ALAMEDA & SAN JOAQUIN RAILROAD: Organized May 1, 1895 and completed July, 1, 1896 Stockton west to Tesla, California, 36 miles. It was built for the specific purpose of hauling coal from what were thought to be very fine deposits in Corral Hollow valley. The Western Pacific purchased this line July 25, 1903 and the portion of the road from Carbona to Ortega on the southern edge of Stockton is the present main line of the Western Pacific. From Ortega the A&SJ went along what today is known as Hunter Street to Hazelton Street and turned west until it reached Mormon Channel and followed Mormon Channel to Stockton Channel. It was at this point where the coal was transferred to barges and river boats and was the Stockton terminal of the A&SJ. The distance from Carbona to Tesla was 13 miles but the branch has been cut back to 2.3 miles from Carbona. Poors Manual of Railroads for 1900 states that the A&SJ had three engines, of which two became WP 121 and 122, but we have been unable to locate any information whatsoever about the third engine.

ALAMEDA BELT LINE: Serves various industries on the Alameda side of the Oakland Estuary. It was originally owned by the City of Alameda which owned no engines and had to look to the Southern Pacific to perform the switching work. In 1926 the Western Pacific and Santa Fe got together and purchased the line from the City, though the Southern Pacific continued to do the switching until 1928 at which time an enginehouse was constructed and two Santa Fe 0-6-0's, 2036 and 2039, were bought and numbered 1 and 2. Later a third engine, Santa Fe 2045 becoming ABL No. 3, was purchased, and all three served until the close of the War when diesel power made its typical intrusion. Western Pacific engines were used occasionally on the ABL when its own engines were being shopped, but no ABL engines were ever used on the Western Pacific.

OAKLAND TERMINAL RAILWAY: Has various industrial tracks in Emeryville. Formerly owned by the Railway Equipment & Realty Company, a Key System holding company, the line was taken over December 2, 1942 by the Western Pacific and Santa Fe. One steam engine, No. 4, had become Santa Fe 2447 and was later sold to the Modesto & Empire Traction Company as No. 9 who sold it for scrap in April of 1952.



The present operational set-up of the Western Pacific consists of two divisions, each with four districts or subdivisions, the Western, extending from San Francisco to Portola and Bieber with headquarters at Sacramento, and the Eastern, from Portola to Salt Lake City, with headquarters at Elko. The districts are:

WESTERN DIVISION

Dist.	Between	And	Miles	Miles from SF
1st	*San Francisco	Stockton	93.8	93.8
2nd	Stockton	Oroville	111.3	205.1
3rd	Oroville	Portola	116.3	321.4
4th	Keddie	Bieber	111.8	392.7

EASTERN DIVISION

Dist.	Between	And	Miles	Miles from SF
1st	Portola	Winnemucca	210.9	532.3
2nd	Winnemucca	Elko	133.1	665.4
3rd	Elko	Wendover	140.9	806.3
4th	Wendover	*Salt Lake	121.4	930.4

*Mileage computed from San Francisco, 3.5 miles west of Oakland, to Roper Yard at Salt Lake City, 2.4 miles east of the Union Station. Distance from Oakland Pier to Salt Lake Union Station is 5.9 miles less, or 924.5 miles.

The line goes through forty-three tunnels, three of which are over a mile long, (Spring Garden, Chilcoot and Hogan) aggregating almost 46,000 feet, rises from an elevation of 7 feet at Oakland with a ruling grade of just 1 percent to 5018 feet at Reno Junction, the highest point in California, to 5866 feet at Jasper, Nevada, highest point on the line, at Mile Post 752.7, thirteen miles west of Shafter. Between Weso, 3.5 miles east of Winnemucca, and Alazon, near Wells, the WP and SP have paired track operation, all eastbound traffic of both roads being over the Western Pacific and westbound over the Southern Pacific.

Previously mentioned have been the Reno, Loyalton and Carbona branches. In addition to these and considerable industrial trackage in San Francisco, Oakland, San Jose, Stockton, Sacramento and Oroville and long spurs at Blairsden (See Note), Gray's Flat and Camp Rodgers, the following branches should be shown.

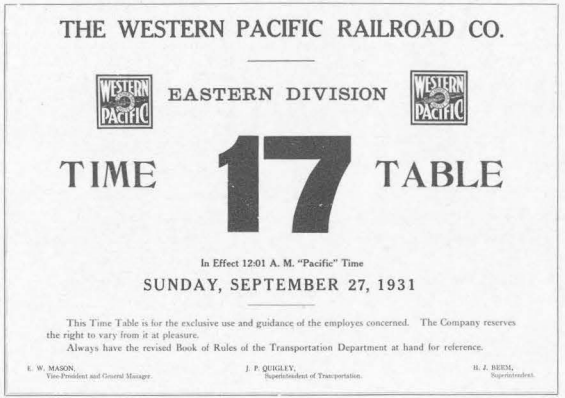
Name of Branch	Connection with Main Line at	To	Miles
Tooele	Burmester, Utah	Warner	15.5
Ellerback	Ellerback, Utah	Dolomite and Flux	4.7
(1) Calpine	Calpine Junction, California	Calpine	12.1
(2) Gulling	B&L Junction, California	Gulling	2.4
(3) Bidwell Bar	Land	Bidwell Bar	1.9
Terminous	Terminous Junction	Terminous	7.8
San Jose	Niles Junction	San Jose	23.8

(1) Constructed with new 75 lb. rail by the WP and opened for traffic May 14, 1923. Used principally to serve the lumber mill at Calpine. Abandoned in May of 1940.

(2) See Boca & Loyalton Railroad.

(3) Not operated by the Western Pacific, but by the Feather River Railway Company, which has trackage beyond Bidwell Bar to Feather Falls, Rogersville and into the timber area. Piers and part of the trestle of the abandoned 3-foot gauge Swayne Lumber Company Railroad can be seen on the east side of the WP tracks at Land.

NOTE: Graeagle (Grayeagle) Spur. Extends approximately a mile and a half southeast to the lumber mill at Graeagle, formerly Davies Mill, which was on the old Sierra Valleys Branch of the Nevada California Oregon.


THE WESTERN PACIFIC RAILROAD CO.

EASTERN DIVISION

TIME 17 TABLE

In Effect 12:01 A. M. "Pacific" Time

SUNDAY, SEPTEMBER 27, 1931

This Time Table is for the exclusive use and guidance of the employes concerned. The Company reserves the right to vary from it at pleasure.

Always have the revised Book of Rules of the Transportation Department at hand for reference.

E. W. MASON, Vice-President and General Manager.

J. P. QUIGLEY, Superintendent of Transportation.

H. J. BEEM, Superintendent.

The Western Pacific interchanges (or has interchanged) traffic at points and with railroads as shown below:

POINT	NOTE	WITH
Salt Lake City		Bamberger Electric (Via UP)
		Denver & Rio Grande Western
		Salt Lake, Garfield & Western
		Salt Lake & Utah
		Union Pacific
Garfield		Union Pacific
Garfield Junction		Bingham & Garfield
Warner		Union Pacific (Via TVRR)
		Tooele Valley
Wendover		Deep Creek
Shafter		Nevada Northern
Wells		Union Pacific
Palisade	(1)	Eureka Nevada
Golconda	(2)	Golonda & Adelaide
Gerlach		U. S. Gypsum Company
Flanigan	(3)	Southern Pacific
Hackstaff, California	(1)	Nevada California Oregon
Reno, Nevada		Southern Pacific
		Virginia & Truckee (Via SP)
B&L Junction, California		Boca & Loyalton
Quincy		Quincy Railroad
Paxton		Indian Valley
Crescent Mills		Indian Valley
Clear Creek Junction	(4)	Almanor Railroad
Bieber		Great Northern
Westwood and Mason	(5)	Southern Pacific
Land		Feather River Railroad
Oroville		Sacramento Northern
Marysville		Sacramento Northern
		Southern Pacific
Sacramento		Central California Traction
		Sacramento Northern
		Southern Pacific
Stockton		Santa Fe
		Central California Traction
		Southern Pacific
		Stockton Terminal & Eastern
		Tidewater Southern
Lyoth		Southern Pacific
Oakland		Santat Fe (via SP)
		Howard Terminal (via SP)
		Oakland Terminal (via SP)
		Sacramento Northern (via SP and OT)
		Southern Pacific
San Francisco		Santa Fe
		Northwestern Pacific (barge—via State Belt)
	(6)	Ocean Shore
		Petaluma & Santa Rosa (via barge)
		Southern Pacific
		State Belt
San Jose		Southern Pacific
Alameda		Alameda Belt Line (via SP and barge)

(1) Narrow gauge. Transfer of lading only. No interchange of cars.

(2) Not much is known about this railroad. It was built about 1910 and extended about twelve miles south from Golconda, probably following Rock Creek in its ascent to Adelaide Mine on the eastern face of the Sonoma Range, and was used to haul gold and copper ore to a small smelter at Golconda located between the SP and WP tracks. The mine was owned by Noble Getchell and George Wingfield who held patented claims and it is our understanding that former President, Herbert Hoover, worked as a mucker in the mine. Rolling stock of the railroad, which was narrow gauge, consisted of a number of ore cars and two locomotives.
We are indebted to Mr. George E. White, analytical chemist ot Lovelock, Nevada, for this information. Railroad was abandoned in 1917 or 1918.

(3) Track connection and crossover, but no interchange of cars.

(4) This point was formerly known as Red River Junction and traffic was interchanged with the Red River Lumber Company.

(5) Trackage rights. No interchange of traffic.

(6) The Western Pacific took over the Ocean Shore main line from Alemany Boulevard and San Bruno Avenue in San Francisco to Potrero and 25th Street and their industrial lead from Jerrold Avenue to Illinois Street paralleling Army Street. Today this section is referred to by the WP as their Ocean Shore Lead.

The foregoing pages have shown how the Western Pacific is made up and now, before turning to a discussion of the locomotives themselves, here is a look at the places where they were serviced.

With the construction of the main line, nine roundhouses were built and except where otherwise indicated each had eight 95-foot stalls and an 80-foot turntable. Other engine facilities were also used and will be described in east to west geographical order along with the regular roundhouses.

SALT LAKE CITY: Western Pacific used the roundhouse of the D&RGW.

KNOLLS, UTAH: Located 39 miles east of Wendover, a small roundhouse was constructed here in 1909, but when the first engine was put in a stall it sank but finally raised and recovered after much difficulty. Inspection showed that the ground was soft and entirely unusable so roundhouse was torn down without ever being used.

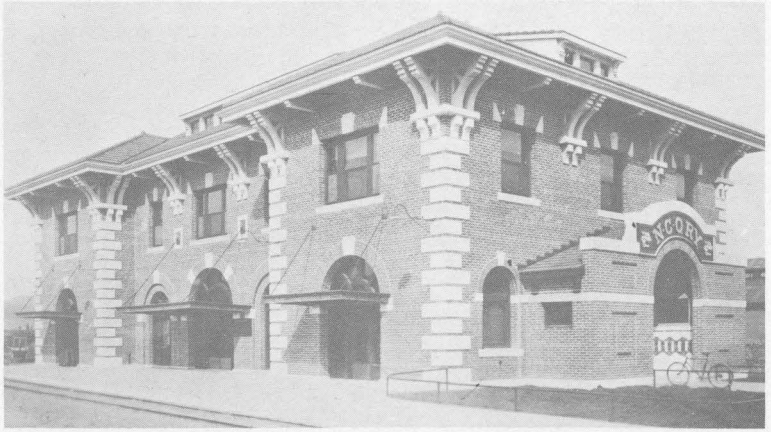
WENDOVER, UTAH: Built in 1910. Three garden tracks added in 1911. In 1937 two stalls were extended to 140 feet to accomodate the forthcoming articulated engines (401-407) and the turntable replaced with a 120-foot unit. Boiler from engine 75 was installed to replace one of the original stationary boilers. Two more garden tracks were added in 1945 and in 1949 the boiler from engine 10 was installed to replace the other original boiler. In 1951 a one-stall diesel engine house was built near the depot and the entire roundhouse facility was retired.

ELKO, NEVADA: Built in 1909. In 1937 a 120-foot table was installed, two new 140-foot stalls built and one stall lengthened to 140 feet. In 1943 four additional 140-foot stalls were constructed and in 1944 two garden tracks were added. In 1952 half of the roundhouse was removed to make room for the construction of a new diesel maintenance building having two tracks with a capacity of two units each. In 1953 the remaining half of the roundhouse was dismantled.

WINNEMUCCA, NEVADA: Only change made here was the installation in 1942 of a 120-foot table. Original roundhouse was built in 1909. In 1951 a one-stall diesel engine house was built near the depot and the engine terminal retired and dismantled.

GERLACH, NEVADA: Built in 1909. Until 1932 this was the junction of the Eastern and Western Divisions. The original roundhouse was destroyed by fire October 30, 1914 and a new 7-stall house constructed on the same site in 1915. On April 22, 1927 this too was destroyed by fire and never rebuilt. Roundhouse tracks etc. were taken up in 1939 and water facilities retired in 1950.

RENO, NEVADA: With the purchase in 1917 of the Reno to Hackstaff and Plumas Junction to Mohawk sections of the Nevada-California-Oregon Railway, the Western Pacific also acquired the terminal facilities of that road at Reno which included an 8-stall brick narrow gauge roundhouse and a 55-foot turntable and a fine brick station. The WP never used the roundhouse for engines although in 1917



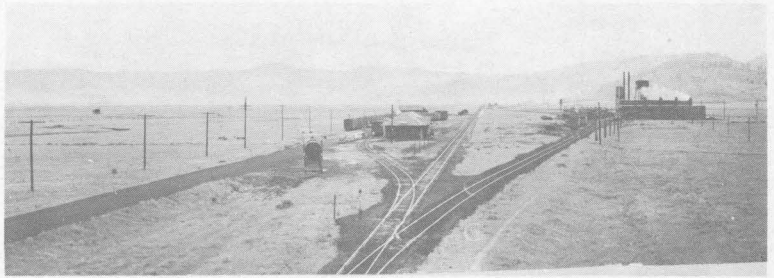
the narrow gauge turntable was replaced with an 80-foot standard gauge unit. The roundhouse and adjoining industrial buildings were desroyed by fire in 1940.

LOYALTON, CALIFORNIA: The Boca & Loyalton maintained a 4-stall engine house and machine and car shops inside the wye at this point, there being no turntable, but the Western Pacific abandoned these facilities after it bought the road in 1916. The original station is still in use but the shops and enginehouse have been dismantled.

PORTOLA, CALIFORNIA: Built in 1910. In 1923 four additional stalls were constructed and in 1925 the original 80-foot table was replaced with a 110-foot unit. A two-track 8-unit capacity diesel house has just been completed and the steam roundhouse and other facilities dismantled. Portola has been the junction of the Eastern and Western Divisions since April 24, 1932.

KEDDIE, CALIFORNIA: A 4-stall wooden-frame corrugated iron sheathed roundhouse with 120-foot table was built here in 1931 and is still in use, though of course not by steam engines.

BIEBER, CALIFORNIA: The 4-stall engine house is owned by the Great Northern, though Western Pacific engines were serviced here. Diesel engines now run through to Klamath Falls on the Great Northern.



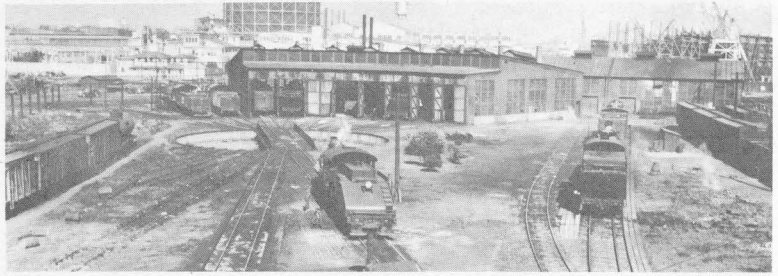
OROVILLE, CALIFORNIA: Built in 1910. In 1926 a 110-foot turntable replaced the original 80-foot unit. 6 stalls were added in 1937 and in 1943 four more were added along with a shop area and the shop area was extended in 1947. Aside from the shops at Sacramento, Oroville is the principal diesel maintenance point on the railroad.

SACRAMENTO, CALIFORNIA: This is the site of Jeffery Shops. Original plant had an erecting shop with ten transverse pits and a machine bay. This was extended in 1924 by the addition of five new pits and a longer machine bay. In 1938 the facilities were again expanded by construction of a new three-track longitudinal erecting shop and machine bay adjoining the old shop on the west side. Also at Sacramento at the same location are car shops and other general shop facilities.

STOCKTON, CALIFORNIA: Built in 1910, the original three-stall wooden roundhouse with 80-foot table was located at Sacramento and Acacia Streets at the old Flora Street yards. The roundhouse was destroyed by fire on December 13, 1914 and a temporary new structure was built on the same site and was used until about 1925 when the Flora Street yards were retired and yard and engine terminal facilities moved to the present location south of town where a ten-stall reinforced concrete house with 80-foot table was built. In 1938 the table was replaced with a 110-foot unit and in 1943 one stall of wooden construction and a leanto cleaning room were added. Entire unit is still in use and Tidewater Southern engines, as well as WP, are serviced here.

TESLA, CALIFORNIA: A 57-foot turntable was installed by the A&SJ in 1896 which was retired by the Western Pacific in 1939. There was no roundhouse at this point.

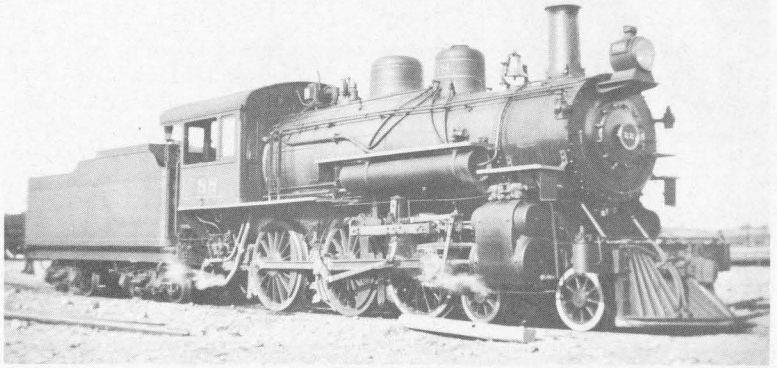
OAKLAND, CALIFORNIA: A two-stall addition was constructed in 1943 for servicing diesel engines and the turntable was replaced with a 110-foot unit.



SAN JOSE, CALIFORNIA: A 4-stall roundhouse with an 80-foot turntable was built in 1923 and is still in use, though by diesel engines.

SAN FRANCISCO, CALIFORNIA: In 1910 a 48 x 95 foot frame engine house was constructed which was retired and dismantled in 1923. In 1944 a 25 x 70 foot diesel engine house was erected. Western Pacific trackage in San Francisco is isolated from the rest of the railroad, cars being barged between there and Oakland.

Of the 208 steam locomotives that have been on the rolls of the Western Pacific, all but thirty-one of them were delivered new. Of these 208, the railroad started business in 1909 with just over half this many, not considering engines used in construction which did not become a part of the regular roster. There were sixty-five 2-8-0's, numbers 1-65; thirty-six 4-6-0's, numbers 71-106 and twelve 0-6-0's, numbers 151-162,



all new machines, plus two second-hand 4-6-0's acquired with the Alameda & San Joaquin Railroad , a total of 115 engines. The succeeding years saw the acquisition of the only 2-6-0, three more 4-6-0's, one more 2-8-0 and four more 0-6-0's to round out the smaller power. Later forty-one 2-8-2's were purchased of which five were disposed of within one year, ten 2-6-6-2's, ten 2-8-8-2's, ten 4-8-2's, seven 4-6-6-4's and six 4-8-4's.

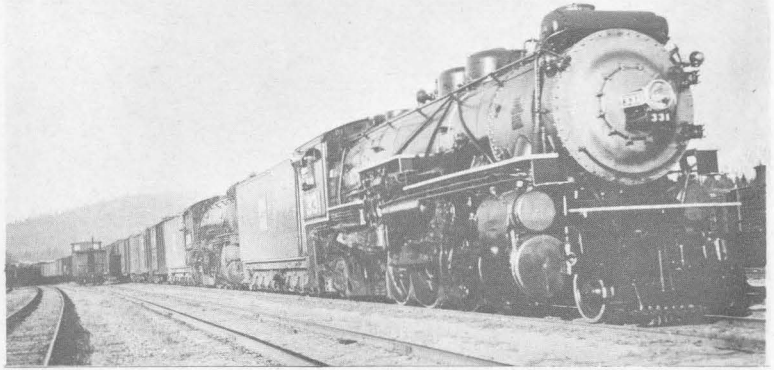
The steam engine reached its zenith on the Western Pacific in 1938 with the delivery of four 2-8-8-2's from Baldwin and seven 4-6-6-4's from Alco. (See Page 75.) But for almost thirty years the bulk of the passenger service had been handled by the 71 and 86 class 4-6-0's—trains with names typical of the era: Pacific Express, the "1915 Mail," Panama-Pacific Express, Salt Lake Passenger, Overland Express, Oroville Express, Capitol Limited, Stockton Express, Atlantic Coast Mail, Scenic Limited and Feather River Express, and in later years these engines even occasionally were used on the Exposition Flyer and Royal Gorge, although these two trains were usually hauled by the ex-Florida East Coast 4-8-2's and SP-patterned 4-8-4's. The first passenger train over the new line back in 1910 was powered by 4-6-0's, the 104 from Salt Lake to Elko (see Page 80), 89 to Winnemucca, 84 to Gerlach, 94 to Oroville and the 92 from Oroville to Oakland.

The diesel made its first appearance in 1939 in the form of three 600 HP switchers and in May of 1940 GMC's big demonstrator growler,

all four units and 193 feet of it, showed up on the WP after having exhibited its drawbar busting ability to several other western roads. An ironical passage is quoted from the May 9, 1940 Oakland Tribune. "Railroad men pointed out, however, that marvelous as the new giant is, it will never replace entirely the old 'iron horse' on the railroads. This engine would be economical for certain runs only, they said, and would not be practical for all hauls." Unfortunately, an erroneous prognostication.

This was the beginning of the end for Steam. By 1942 eight 660 HP switchers and three 5400 HP four-unit freight engines were in service. In 1943 eight 1000 HP switchers and three more big freight jobs had been added. Except for four of the oldest engines on the system and two others that had been in wrecks, the steam motive power was all intact up until the fall of 1937 at which time the Western Pacific did something it was many, many times to regret in just four years: It scrapped twenty-two of its remaining thirty-five husky little Alco (American Locomotive Company) 4-6-0's and one worn out Baldwin 2-8-0. Hirohito and Tojo must have known.

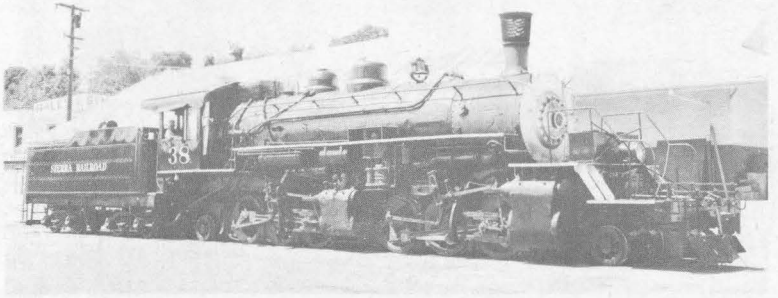
The War temporarily saved many another WP steam kettle, but by the end of 1947 time was running out and with 39 diesels then in service including the first of the three-unit passenger engines, sixteen more of the smaller steamers were condemned. Things looked up a bit in 1948 with just one engine leaving the roster, but that was just the lull before the storm, for in 1949, 1950 and 1951 the boom was lowered on eighty-one more including all the remaining 4-6-0's except No. 94. By June of 1952 all of the high-stepping 4-8-2's upon which so much care had been lavished in 1936, were gone, and all ten of the great 2-8-8-2's and all seven of the new 4-6-6-4's were eliminated practically in one blow. The close of 1953 saw only nine steam engines left on the roster: three 2-8-0's, one Mike and three 0-6-0's and two Northerns, with a total of 77



diesels in operation. Two other engines remained on WP property, No. 26 which now has been donated to Travel Town in Griffith Park in Los Angeles and was still being worked on, and 4-6-0 No. 94 which will be retained permanently for historical purposes. The nine will be held as standby power until they are due for flues.

For the next few years it will still be possible for the enterprising soul, if he likes desert driving, to see a Western Pacific steam engine in service for switchers 156 and 158 were sold to the U. S. Gypsum Company at Gerlach, Nevada and are in service there under the herald of that company.

In 1951 high hopes were held that another WP engine might be saved for it was then that the Sierra Railroad decided that it needed another unit of non-diesel power and gave serious consideration to both 203 and 334. The 334 was rejected, so we are told, because of too great axle weight, and the two roads could not get together on a price for the 203. It was also rumored that the SP wasn't too enthusiastic about ferrying either of these engines down to Oakdale on its branch line, and of course the Santa Fe branch from Riverbank with its light rail was out of the question. Both engines were in fine condition and there were many among rail enthusiasts who were mighty unhappy to see the deal fall through. The Sierra subsquently purchased a 1930 vintage Baldwin 2-6-6-2 compound from the Weyerhauser Timber interests at Klamath Falls, Oregon, and, as No. 38, it is now in service on the Sierra.



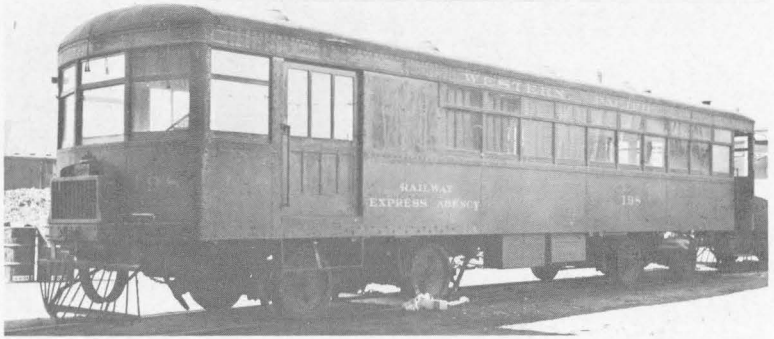
Since about 1929 there has not been much change in the appearance of the steam engines. Most of the Mikes that did not come equipped with the Elesco feed-water heaters had had them applied by that time and most of the engines had had the headlight position changed from the top of the smokebox down to the center; the enamel medallion had replaced the letters "WESTERN PACIFIC" on the tender and enamel number plates had replaced painted numberson the engine cabs. There were, though, six distinct styles in the stenciling and other appearance

of the engines from the years 1906 to 1929 which are illustrated and explained on Pages 82 and 83. Further, for comparison purposes, Page 84 shows how each of the four groups of original new engines appeared in 1906, 1908 and 1909 before any changes were made.

For fuel the Western Pacific used both oil and coal. Coal was used extensively though not exclusively Winnemucca and east and prior to 1928 many of the engines were changed back and forth between coal and oil as one particular fuel became cheaper than the other. Coal was not used west of Winnemucca and in later years all engines on the Western Pacific were oil burners except a few of the Baldwin 2-8-0's, a few 4-6-0's, eight 2-8-2's and all of the 4-6-6-4's.

Aside from steam engines there are a few other pieces of equipment that are of passing interest: Two motor cars, two Budd rail cars, two wooden coaches, five former Sacramento Northern cars and two ferry boats.

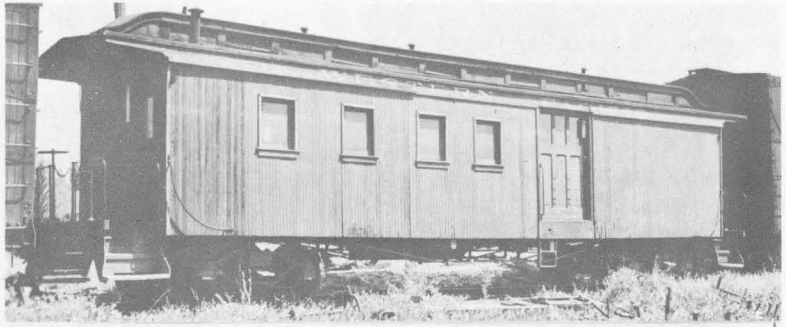
Motor cars 198 and 199 were built by Brill in 1922 and arrived at Sacramento December 7th of that year and placed in service on the San Jose Branch in May of 1923. They were sold for $415.00 each in December of 1939 to the Georgia Car and Locomotive Company.

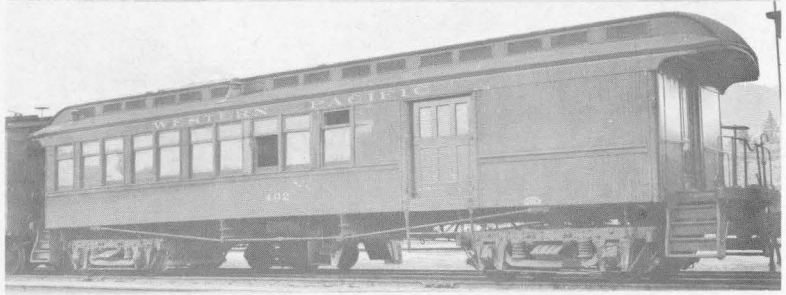


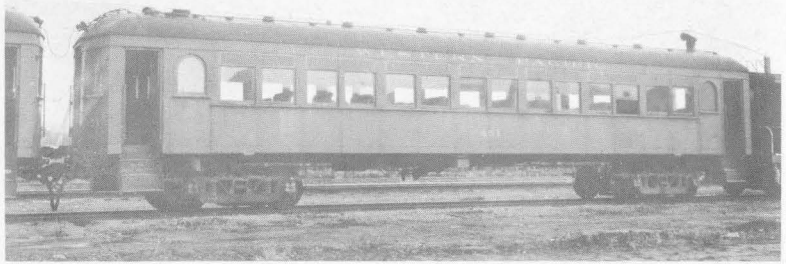
Two Budd RDC's (Rail-Diesel-Cars) called "Zephyrettes," purchased new in 1950 provide tri-weekly schedules between Oakland and Salt Lake which more or less replaces the fine but little used service offered by the Royal Gorge which was discontinued September 14, 1950.

Wooden combination car No. 401 was coach No. 2 on the Boca & Loyalton Railroad and was used on the Reno, Loyalton and Calpine branches prior to the War but was retired November 5, 1937. Car No. 402 which, along with engine 94, is being retained for historical purposes, was No. 550 of the Denver & Rio Grande and was used on that road's Farmington branch out of Durango, Colorado when it was standard gauge. The WP acquired the car on January 8, 1925 for use on the Reno branch.

Five ex-Sacramento Northern interurban trailer cars, numbers 1021-1025, were used during World War II between Halls Flat and Westwood, 37 miles to bring lumberjacks in from the woods on Friday nights and take them out again on Sunday nights. After the war the cars, numbered WP 451-455, remained at Westwood for a few years and were finally brought to Sacramento where one became an office and the others scrapped.

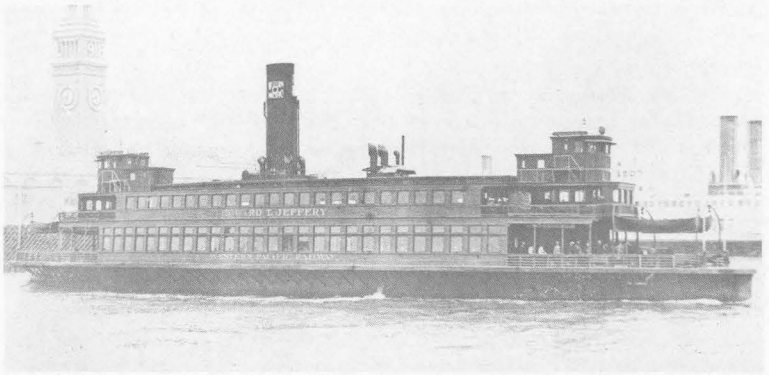




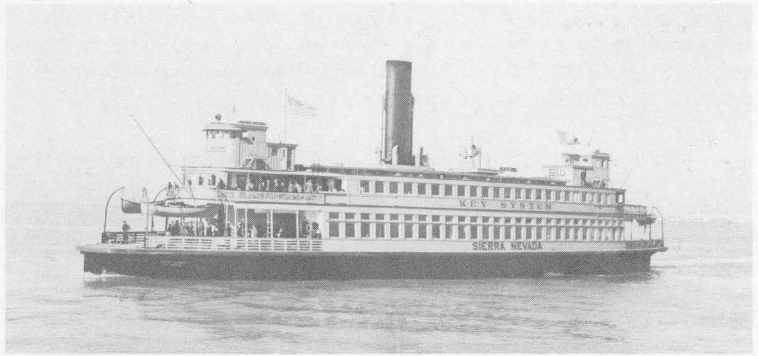


The Ferry "Telephone," an ex-Columbia River craft built at Portland in 1903 and purchased by the WP in 1909 provided the original connecting service between the Western Pacific's pier in Oakland and San Francisco. But because she was a single ender, though one of the fastest boats on the Bay, she was not altogether satisfactory for ferry service, and was retired in 1917 and dismantled in 1918. She was of wooden construction and her specifications were as follows: 632 gross tons, 565 net tons, 201 feet long at load water line, overall width 37 feet, with a 6-foot draft and stern paddle wheel.

While the Telephone was not scrapped until 1918 she had been inactive for five years due to the purchase in 1913 of a new boat, the "Edward T. Jeffery," designed especially for Bay use and built by Moore & Scott in Oakland in 1912 and 1913. She worked between San Francisco and the Western Pacific's pier in Oakland until World War I when she was assigned to the Alameda Southern Pacific Mole run by the United States Railroad Administration. During this time the Western Pacific slip was not used, WP trains, as well as Santa Fe, using the Southern Pacific pier in Oakland. With the close of the War, this steamer, later named the "Feather River," again met Western Pacific trains at their own pier

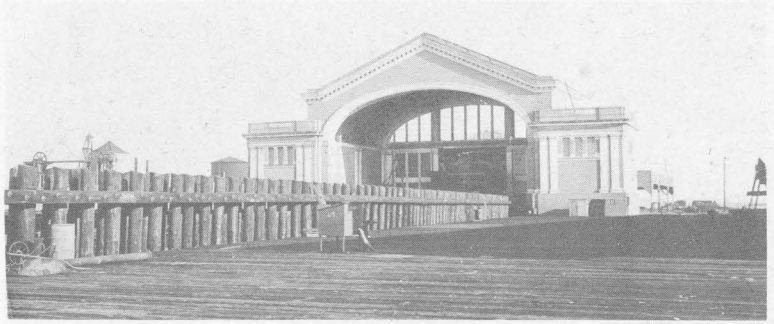


in Oakland, an arrangement that continued until May of 1933. At that time the WP and SP entered into an agreement whereby WP trains would operate in and out of the SP's pier and the ferry was turned over to the Southern Pacific who changed her name to the "Sierra Nevada."



She was used mostly between Oakland and San Francisco but occasionally saw service as a relief boat for the Northwestern Pacific between San Francisco and Sausalito, making the trip in 22 minutes compared with 32 minutes for the regular boats and was known as the fastest boat on the Bay.

She was leased to the Key System in January of 1939 and painted orange and began service from San Francisco to Treasure Island on February 27. It ran throughout both World Fairs in 1939 and 1940 then went back to the Southern Pacific and though still painted orange, was used as a relief boat. During World War II it was acquired by the United States Government, painted gray, designated as YFB 62, sent to Wilmington and operated by the Wilmington Transportation Company for the United States Maritime Commission on shipyard runs in 1942 to 1945. It was returned to the Southern Pacific at Oakland after the War and was used on relief runs, still painted gray. It was sold in 1947 to the Richmond-San Rafael Ferry Company, painted white and went into operation on May 30th. The old veteran returned once more to the Southern Pacific San Francisco-Oakland Pier run on April 5, 1954 to pinch-hit for the "Eureka" and "Berkeley" which were both tied up under repairs. She was returned on April 8, 1954 to Richmond where she is still in service. Her future, though, is very much in doubt for a bridge is being built on the ferry route. Let us hope that somehow she may escape the wrecker's crow-bar and torch. Her hull is of steel, upper works of wood, of 1587 gross tons, 1025 net tons. Length of hull at load water line is 219 feet, breadth 36 feet, draft 11 feet and overall width 62 feet 6 inches and had a seating capacity of 1150 passengers when in passenger service.



GENERAL ROSTER AND SPECIFICATIONS OF STEAM LOCOMOTIVES OF THE WESTERN PACIFIC RAILROAD.

ENGINE NUMBERS	TOTAL ENGS	TYPE	ROAD CLASS	SYMBOL	BUILDER	WORKS	YEAR	DRI.	CYLINDERS	WEIGHT ON DRI.	WEIGHT ENG TRK	WEIGHT TLR TRK	WEIGHT TOT ENG	WEIGHT TDR LDD	WEIGHT TOT E&T	STEAM	TR. EFF.	TENDER CAPACITY thousand gallons WATER	TENDER CAPACITY OIL	TENDER CAPACITY COAL	WHEEL BASE DRIVING	WHEEL BASE ENG.	WHEEL BASE TDR	WHEEL BASE OVERALL	LENGTH OVERALL
1- 20	20	2-8-0	1	C-43	Baldwin	Philadelphia	1906	57	22x30	185	22		207	157	364	200	43	8.0	3.5	16.0	15-8	24-4	20-2	58-6	68-4
21- 65	45	2-8-0	21	C-43	American	Schenectady	1909	57	22x30	184	19		203	155	358	200	43	8.0	3.0	14.0	15-8	24-4	20-10	60-0	70-5
71- 85	15	4-6-0	71	TP-29	American	Brooks	1908	67	21x26	135	46		181	138	319	200	29	6.9	3.0	12.0	13-6	24-4	20-10	57-11	68-0
86-106	21	4-6-0	86	TP-29	American	Brooks	1909	67	21x26	135	46		181	136	317	200	29	7.0	3.0	14.5	13-6	24-5	20-10	58-0	68-0
121-122	2	4-6-0	121	TF-17	Richmond	Richmond	1896	57	18x24	83	32		115	76	191	150	17	4.0	1.6		11-0	21-2	14-8	46-4	55-5
123	1	2-6-0	123	EF-14	Baldwin	Philadelphia	1876	50½	16x24	71	11		82	68	150	135	14	2.8	1.6		10-0	17-2	16-2	44-5	53-3
124	1	2-8-0	124	C-23	Baldwin	Philadelphia	1882	50	19½x24	95	13		108	70	178	150	23	4.0	2.1		13-6	21-6	16-4	47-9	56-11
125	1	4-6-0	125	TF-21	Pittsburgh	Pittsburgh	1888	51	18x24	73	28		101	60	161	160	21	3.0	1.9		10-2	20-8	15-9	46-6	55-1
126	1	4-6-0	126	TF-18	New York	Rome	1891	*60	18x24	92	22		114	84	198	160	*18	3.5	1.4	9.0	11-8	22-0	17-2	48-11	58-1
127	1	4-6-0	126	TF-19	New York	Rome	1891	55	18x24	92	22		114	84	198	160	19	3.5	1.6	9.0	11-8	22-0	17-0	48-11	58-5
151-162	12	0-6-0	151	S-31	American	Pittsburgh	1909	51	20x26	146			146	122	268	180	31	6.0	2.5	10.0	11-4	11-4	18-4	45-1	61-5
163	1	0-6-0	163	S-34	American	Schenectady	1915	51	21x26	160			160	103	263	180	34	4.5	2.1		11-6	11-6	17-10	43-10	58-9
164-166	3	0-6-0	163	S-34	American	Schenectady	1919	51	21x26	160			160	103	263	180	34	4.5	2.1		11-6	11-6	17-10	43-10	58-9
171-180	10	4-8-2	171	MT-44	American	Schenectady	1924	73	26x28	211	54	49	314	202	516	200	44	10.0	4.0		19-7	42-10	24-2	77-0	87-1
201-205	5	2-6-6-2	201	M-80	American	Brooks	1917	57	37-23½x32	356	24	49	429	213	642	200	80	12.0	4.0		31-2	49-10	26-1	86-6	97-3
206-210	5	2-6-6-2	206	M-80	American	Richmond	1924	57	37-23½x32	356	26	47	429	208	637	200	80	12.0	4.0		31-2	49-10	26-11	86-6	97-2
251-256	6	2-8-8-2	251	M-137	Baldwin	Philadelphia	1931	63	26-32x32	553	49	63	665	408	1073	235	137/151	22.0	6.0		43-10	61-5	34-0	108-0	120-5
257-260	4	2-8-8-2	256	M-137	Baldwin	Philadelphia	1938	63	26-32x32	550	48	65	663	403	1066	235	137/151	23.0	6.0		43-10	61-5	34-0	108-0	120-10
301-305	5	2-8-2	301	MK-60	American	Brooks	1918	63	28x30	242	28	46	316	216	553	190	60	12.0		21.5	16-6	35-11	26-0	73-1	84-0
306-310	5	2-8-2	306	MK-60	American	Schenectady	1919	63	27x32	239	24	57	320	211	531	190	60	12.0	4.2	19.0	16-9	36-1	23-6	71-9	82-3
311-315	5	2-8-2	311	MK-60	American	Brooks	1921	63	28x30	246	25	52	323	214	538	190	60	12.0		19.5	16-6	35-11	26-0	73-2	83-11
316-321	6	2-8-2	316	MK-60	American	Brooks	1923	63	28x30	246	25	44	315	191	506	190	60	10.0	4.0		16-6	35-11	26-0	73-2	83-11
322-326	5	2-8-2	322	MK-60	American	Brooks	1924	63	28x30	245	25	57	327	192	519	190	60/71	10.0	4.0		16-6	36-3	26-0	73-3	84-0
327-331	5	2-8-2	327	MK-60	American	Schenectady	1926	63	28x30	248	25	57	330	264	594	190	60/71	15.0	4.0		16-6	36-3	25-5	73-3	84-0
332-336	5	2-8-2	332	MK-60	American	Schenectady	1929	63	28x30	249	26	57	332	267	599	190	60/71	15.0	4.0		16-6	36-3	25-5	73-3	84-0
401-407	7	4-6-6-4	401	M-100	American	Schenectady	1938	70	22-32x32	399	79	112	590	402	992	265	200	22.0		25.0	35-1	59-11	34-0	106-7	120-0
481-486	6	4-8-4	481	GS-64	Lima	Lima	1943	73½	27x30	281	74	111	466	398	864	260	64/76	23.0	6.0		20-0	45-10	34-5	94-5	109-0
1st 321-325	5	2-8-2	321	MK-55	Baldwin	Philadelphia	1918	63	26x30	222	20	49	291	172	463	200	55	10.0		16.0	16-9	36-1	23-6	71-5	78-11

Symbol shows name of type of engine and tractive effort to nearest thousand pounds. Symbol initials stand for the following: C—Consolidation; TP—Ten-Wheel Passenger; TF-17—Ten-Wheel Freight; EF—Eight-Wheel Freight; S—Switcher; MT—Mountain; M—Mallet; MK—Mikado; GS—Golden State or General Service. Weights are shown to nearest thousand pounds; water and oil to nearest hundred gallons; and coal to nearest ton. Where there is a difference between the specifications shown here and those shown on the drawings it is because the drawings show the engines as they were when delivered to the WP and do not cover any modifications.

The two tractive effort figures shown for 251-260 and 322-336 engines are for with and without booster. Driving wheel base figures for articulated engines are for one set of wheels only. Overall length is measured from coupler face to coupler face.

*February 12, 1931 diameter of drivers changed to 55 inches and tractive effort raised to 19228.

ROSTER OF INDIVIDUAL LOCOMOTIVES

ENGINE NUMBER	BUILDER NUMBER	LAST DATE USED	DISPOSITION DATE	DISPOSITION NOTE	ORIGINAL COST	DISPOSITION PRICE
1	29160	Aug. 47	Oct. 47	A	$16598	$3976
2	29173	Dec. 47	Nov. 49	C	16598	2641
3	29174	Nov. 47	Nov. 49	C	16598	2523
4	29197	Aug. 49	Mar. 50	C	16598	2394
5	29240	Nov. 49	Dec. 49	C	16598	2586
6	29241	Sep. 49	Dec. 49	C	18996	2588
7	29273	Oct. 49	Mar. 50	C	16598	2474
8	29492	June 33	Nov. 37	A	16598	1813
9	29342	Aug. 47	Jan. 50	C	18996	2596
10	29343	Aug. 47	July 48	A	18996	3942
11	29348	Aug. 49	Mar. 50	C	18996	2434
12	29349	Nov. 46	Jan. 50	C	16598	2745
13	29442	Sep. 49	Feb. 50	C	16598	2387
14	29443	Dec. 48	Jan. 50	C	16598	2585
15	29444	Jan. 47	Sep. 47	A	16598	3976
16	29445	July 47	Oct. 47	A	16598	3976
17	29490	Mar. 47	Oct. 47	A	16598	3976
18	29491	Nov. 45	Sep. 47	A	16598	3976
19	29274	Mar. 50	Dec. 50	A	16598	3196
20	29509	May 47	Oct. 47	A	16598	3976
21	46451	Feb. 52	Dec. 53	J	15331	3000
22	46452	June 51	Oct. 51	H	15331	5671
23	46453	Nov. 48	Feb. 50	C	15331	2437
24	46454	Dec. 48	Nov. 49	C	15331	2547
25	46455	Dec. 49	Mar. 50	C	15331	2461
26	46456	Oct. 52	Mar. 54	M	15331	FREE
27	46457	Feb. 52	Feb. 53	G	15331	3605
28	46458	Dec. 48	Nov. 49	C	15331	2617
29	46459	Dec. 49	Mar. 50	C	15331	2412
30	46460	Mar. 53	Dec. 53	J	15331	3000
31	46461	July 48	April 50	C	15331	2330
32	46462	Dec. 48	Nov. 49	C	15331	2564
33	46463	Dec. 52			15331	
34	46464	Oct. 51	Oct. 51	G	15609	3517
35	46465	Feb. 52	Feb. 53	G	15609	3517
36	46466	Oct. 51	June 52	L	15609	3172
37	46467	Feb. 51	Jan. 52	G	15609	3172
38	46468	May 32	Nov. 39	A	15609	1698
39	46469	Aug. 47	Sep. 47	A	15609	3945
40	46470	Nov. 52			15609	
41	46471	Feb. 52	Jan. 53	L	15609	3598
42	46472	Aug. 48	April 50	C	15609	2174
43	46473	April 31	Dec. 34	A	15609	935
44	46474	July 47	Sep. 47	A	15609	3945
45	46475	Jan. 49	Nov. 49	C	15609	2623
46	46476	Dec. 49	Feb. 50	C	15609	4248
47	46477	April 49	Mar. 50	C	15609	2447
48	46478	Aug. 49	Nov. 49	C	15609	2600
49	46479	Nov. 49	Mar. 50	C	15609	2406
50	46480	Dec. 50	Oct. 51	K	15609	5649
51	46481	Aug. 47	Dec. 49	C	15609	2635
52	46482	Mar. 50	Mar. 50	C	15609	2415
53	46483	Dec. 49	Mar. 50	C	15609	2431
54	46484	Mar. 51	Oct. 51	G	15609	5642
55	46485	Nov. 51	Jan. 52	H	15609	5449
56	46486	Jan. 52	Jan. 52	D	15609	5649
57	46487	Dec. 46	April 47	A	15609	2976
58	46488	Oct. 30	Nov. 39	A	15609	1698
59	46489	Jan. 47	Oct. 47	A	15609	3945
60	46490	June 51	Oct. 51	D	15609	5652
61	46491	Aug. 47	Dec. 49	C	15609	2631
62	46492	Sep. 49	Feb. 50	C	15609	2464
63	46493	April 53			15609	
64	46494	Oct. 48	Dec. 49	C	15609	2605
65	46495	Nov. 52	Dec. 53	J	15609	3000

ROSTER OF INDIVIDUAL LOCOMOTIVES

71	45677	June 47	Jan. 50	C	13247	2339
72	45678	Oct. 36	Nov. 37	B	13247	1038
73	45679	Jan. 37	Nov. 37	B	13247	1087
74	45680	Nov. 37	Nov. 37	B	13247	1122
75	45681	May 36	Sep. 37	A	13247	2024
76	45682	Oct. 47	Jan. 50	C	13247	2344
77	45688	Nov. 48	Dec. 49	C	13247	2374
78	45689	May 48	Dec. 49	C	13247	2362
79	45690	Oct. 37	Nov. 37	B	14397	1107
80	45691	April 37	Nov. 37	B	14397	1080
81	45692	Aug. 47	Dec. 49	C	14397	2327
82	45693	July 37	Nov. 37	B	14397	1083
83	45694	July 47	Nov. 49	C	14397	2328
84	45695	May 47	Oct. 47	A	14397	2422
85	45696	Mar. 38	Dec. 39	A	14397	1483
86	46438	July 47	Dec. 49	C	14585	2353
87	46439	Nov. 37	Nov. 37	B	14585	1115
88	46440	Nov. 37	Nov. 37	B	14585	1104
89	46441	Dec. 46	Nov 49	C	14585	2380
90	46442	May 37	Nov. 37	B	14585	1077
91	46443	Jan. 29	Dec. 34	A	14585	834
92	46444	June 37	Nov. 37	B	14585	1093
93	46445	Dec. 36	Nov. 37	B	14585	1089
94	46446	April 53			14585	
95	46447	Nov. 37	Nov. 37	B	14585	1098
96	46448	Oct. 35	Nov. 37	B	14585	1070
97	46449	Feb. 37	Nov. 37	B	14585	1076
98	46450	July 36	Nov. 37	B	14585	1077
99	46430	Sep. 47	Dec. 49	C	14291	2363
100	46431	April 37	Nov. 37	B	14291	1107
101	46432	Nov. 35	Nov. 37	B	14291	1037
102	46433	Dec. 36	Nov. 37	B	14291	1112
103	46434	May 34	Nov. 37	B	14291	1090
104	46435	Aug. 36	Nov. 37	B	14291	1104
105	46436	July 36	Nov. 37	B	14291	1067
106	46437	Oct. 46	Jan. 50	C	14291	2363

121	2543	Dec. 34	Dec. 34	A	7500	528
122	2544	Dec. 47	April 50	C	7500	1400
123	3891	Nov. 24	June 30	A	3122	870
124	6085	Oct. 47	Nov. 49	C	3122	1402
125	978	Oct. 30	Dec. 34	A	3122	426
126	672	Nov. 46	Oct. 47	A	4000	7500
127	675	Dec. 23	June 30	A	4000	1340
151	46500	June 51	Oct. 51	D	11859	4046
152	46501	Feb. 52	Feb. 53	G	11859	2715
153	46502	Feb. 50	Feb. 50	C	11859	1781
154	46503	Nov. 46	Sep. 47	A	11859	2931
155	46504	Mar. 49	Nov. 49	C	11859	1848
156	46505	Mar. 51	May 51	E	11859	5000
157	46506	Oct. 46	Sep. 47	A	11859	2931
158	46507	Mar. 51	May 51	E	11859	5000
159	46496	July 48	Jan. 50	C	11616	1911
160	46497	April 47	Sep. 47	A	11616	2931
161	46498	May 51	June 51	C	11616	3783
162	46499	April 47	Sep. 47	A	11616	2931
163	55280	Feb. 52	Jan. 53	L	16118	2924
164	58786	Oct. 53			15951	
165	58787	Mar. 53			15959	
166	61548	Sep. 53			16080	
171	65750	Mar. 51	Oct. 51	L	12500	7738
172	65751	Mar. 50	July 51	L	12500	7904
173	65752	Feb. 50	June 52	L	12500	7267
174	65753	Oct. 48	April 50	C	12500	3058
175	65754	Oct. 49	April 50	C	12500	3073
176	65755	Nov. 50	June 52	L	12500	7390
177	65757	June 49	April 50	C	12500	3085
178	65759	Feb. 51	June 51	L	12500	7943
179	65761	May 51	May 52	L	12500	7470
180	65762	Feb. 50	July 51	L	12500	7871

ROSTER OF INDIVIDUAL LOCOMOTIVES

201	57444	May 51	May 52	L	52861	8993
202	57445	July 49	Dec. 49	C	52861	4179
203	57446	Oct. 52	Feb. 53	G	52801	6881
204	57447	Aug. 50	Aug. 51	A	52801	7937
205	57448	Oct. 50	June 51	C	52801	9590
206	65485	April 51	Oct. 51	L	83405	9551
207	65486	Mar. 50	June 51	C	83405	9551
208	65487	Feb. 52	Jan. 53	L	83405	6838
209	65488	Oct. 50	June 51	C	83405	9551
210	65489	Feb. 52	May 52	L	83405	8955
251	61636	June 51	May 52	L	122187	15286
252	61637	Oct. 50	May 52	L	122187	15286
253	61641	Jan. 51	May 52	L	122187	15286
254	61642	Dec. 50	May 52	L	122187	10405
255	61648	Oct. 50	May 52	L	122187	10405
256	61649	Dec. 50	May 52	L	122187	15286
257	62149	Mar. 51	May 52	L	186313	15101
258	62150	June 49	May 52	L	186313	15101
259	62151	June 51	May 52	L	186313	15101
260	62152	Jan. 51	May 52	L	186313	15101
301	59995	Mar. 52	Jan. 53	L	63754	5209
302	59996	June 50	June 51	L	63754	7811
303	59997	April 52	Jan. 53	L	63764	5209
304	59998	Nov. 47	Jan. 50	C	63764	3403
305	59999	Nov. 48	Jan. 50	C	63764	3171
306	61193	April 51	Jan. 52	G	55260	6282
307	61194	Oct. 50	Jan. 52	G	55260	6282
308	61195	Jan. 53	Dec. 53	J	55260	4000
309	61196	Jan. 53	Dec. 53	J	55260	4000
310	61197	Mar. 50	Jan. 52	G	55260	6282
311	63014	Mar. 49	Jan. 50	C	74280	3511
312	63015	Jan. 50	Mar. 50	C	74280	3271
313	63016	Mar. 49	Feb. 50	C	74280	3271
314	63017	Feb. 49	Jan. 50	C	74280	3511
315	63018	Dec. 48	Jan. 50	C	74280	3511
316	64259	Dec. 50	June 51	L	54929	7743
317	64260	June 51	Jan. 52	D	54929	6383
318	64261	Dec. 50	Jan. 52	D	54929	6383
319	64262	July 51	Jan. 52	D	54929	6383
320	64263	Feb. 51	Feb. 52	L	54929	6383
2nd 321	64264	May 50	Feb. 52	C	54929	6383
2nd 322	65480	Nov. 49	Feb. 50	C	67699	3365
2nd 323	65481	Mar. 52	Feb. 53	G	67699	5540
2nd 324	65482	Dec. 49	Mar. 50	C	67699	3365
2nd 325	65483	Nov. 37	Dec. 39	A	67699	2712
326	65484	Jan. 53	Dec. 53	J	67699	4500
327	66741	July 49	April 50	C	77640	3704
328	66742	May 51	Jan. 53	L	77640	6086
329	66743	Oct. 52	Dec. 53	J	77640	4500
330	66744	Sep. 50	Feb. 52	C	77640	6983
331	66745	Mar. 53	Dec. 53	J	77640	4500
332	67970	Oct. 49	April 50	C	79176	3758
333	67971	Feb. 49	April 50	C	79176	3758
334	67972	Oct. 52			79176	
335	67973	Oct. 49	Mar. 50	C	79176	3758
336	67974	Jan. 53	Feb. 53	G	79176	6188
1st 321	50804	Jan. 20	Feb. 20	N		
1st 322	50805	Jan. 20	Feb. 20	N		
1st 323	50806	Jan. 20	Feb. 20	N		
1st 324	50807	Jan. 20	Feb. 20	N		
1st 325	50808	Jan. 20	Feb. 20	N		
401	68902	June 49	June 52	C	181642	13762
402	68903	Nov. 50	June 52	J	181642	13762
403	68904	Feb. 50	June 52	C	181642	13762
404	68905	Nov. 50	June 52	C	181642	13762
405	68906	Oct. 50	June 52	J	181642	13762
406	68907	Nov. 50	May 52	L	181642	13762
407	68908	Nov. 50	May 52	L	181642	13762

481	8017	Dec. 51	Jan. 53	F	206655	6897
482	8018	Jan. 52	Feb. 53	G	206655	6291
483	8019	Jan. 53			206655	
484	8020	Mar. 52	Jan. 53	F	206655	6897
485	8021	Oct. 51	Jan. 53	F	206655	8079
486	8022	Jan. 53			206655	

EXPLANATION OF DISPOSITIONS

The disposition dates shown are the dates the engines were officially off the roster. In most cases engines were either scrapped or removed from WP property and scrapped within two or three weeks.

NOTE

A Scrapped by the Western Pacific at Sacramento.

B Scrapped by the United Commercial Company (Division of Hyman Michaels) on Western Pacific property at Stockton.

C Sold for scrap to Luria Brothers, San Francisco. Delivered to California Metals Company, Pittsburg, California, for actual scrapping.

D Sold for scrap to Purdy Company, San Francisco.

E Sold to U. S. Gypsum Company, Gerlach, Nevada. Delivered in May of 1951. Engines still in service under WP numbers, but USG herald has been applied to the tenders. In addition to the sale price, the engines were to have been fixed up at a cost not exceeding $3100.00.

F Sold to the Southern Pacific Company for parts. Tenders retained by WP for use on MW equipment. Engines shipped on own wheels to Sacramento, stripped of parts that could be used on SP GS-6's (4460-4469) and balance of engines scrapped by Southern Pacific.

G Sold for scrap to Hyman Michaels Company, San Francisco.

H Sold for scrap to W. W. Johnson Company, P. O. Box 725, Stockton, California.

J Sold for scrap to Luria Brothers, San Francisco; scrapped by Hyman Michaels Company, San Francisco.

K Sold for scrap to Purdy Company, San Francisco; scrapped by Hyman Michaels Company, San Francisco.

L Sold for scrap to Luria Brothers, San Francisco; scrapped by Purdy Company, San Francisco.

M See No. 26, below.

N See 1st-321 to 1st-325, Page 27.

Total initial cost for all steam engines excluding the five 2-8-2's that went to the Wabash was $9,357,040. Total disposition value was $882,357, about enough to buy one four unit diesel and two 1000 HP switchers.

ADDITIONAL HISTORY AND INFORMATION ON CERTAIN LOCOMOTIVES

Not all Western Pacific locomotives had any interesting history beyond what has already been shown in the general and individual rosters, but for those that did, the information is shown below on this and the following pages.

ENGINE NUMBER

8 The only engine of the Baldwin-built "mud-hens" (1-20) that was not converted from slide to piston valves. First of the Baldwin 2-8-0's to be scrapped.

26 One of only four Western Pacific Steam engines that has not been (or will not soon be) scrapped. In December of 1953 the railroad authorized donation of this engine to "TRAVEL TOWN" in Griffith Park, Los Angeles. It was cleaned up and put in first class appearance at Jeffery Shops, sent to Los Angeles and formally presented at 2:00 P.M. March 21, 1954, by Gilbert Kneiss, Assistant to the President of the Western Pacific. It is now on permanent display along with several other steam engines from western railroads, among them being Santa Fe 664, Southern Pacific 3025 and Stockton Terminal & Eastern 1, an ancient 4-4-0.

33 One of the three remaining 2-8-0's. Now in stationary boiler service at Portola.

38 One of four American consolidations that was not converted from slide to piston valves. Other three were 39, 44 and 58. Laid dead at Oakland from 1932 until November 1939.

39 Though never converted from slide valves, was in more or less active service (at Sacramento and Stockton during her last years) until just a month before being scrapped in September of 1947.

43 First 2-8-0 to be scrapped.

44 Like the 39, was in active service until shortly before being scrapped in September of 1947 though it was never converted from slide valves.

48 Along with the 61, was the last 2-8-0 to have headlight moved from top to center of smokebox.

58 Not converted from slide valves. Laid derelict at Oakland from October 1930 until November 1939 when it was hauled to Sacramento for scrapping.

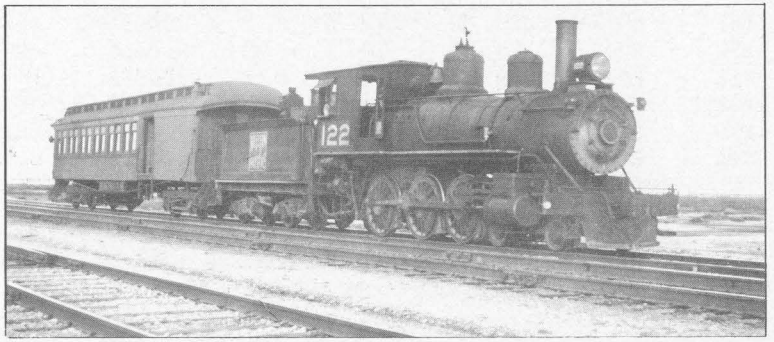
86 Hauled the "Comstock Express" from Portola to Reno and return on the first railfan excursion over the Virginia & Truckee (via WP from Oakland to Reno) on June 6, 1938.

91 First of the Alco (American Locomotive Company) 4-6-0's to be scrapped.

94 To be sole remaining steam power on the railroad. Shopped in February of 1953 and equipped with wooden pilot and painted to appear nearly as she looked when built (see Page 94) in 1909. Hauled first passenger train from Gerlach to Oroville and in recent years has handled several railfan excursions. Now stored at Oakland.

106 Highest numbered of the Alco 4-6-0's. Along with 71 and 76, was the last of the 4-6-0's to be scrapped.

121 Formerly Alameda & San Joaquin Railroad Numbers 1 and A-1,
122 and 2 and A-2, these were the first of seven older and smaller engines acquired by the Western Pacific, which took over the A&SJ in July 1903. They were renumbered to 121 and 122 presumably in 1905 but continued to be used principally in other than main line service. The 121 worked on the Quincy Western (Now Quincy RR) in July of 1916 and on the Tidewater Southern on various occasions, was set aside in February of 1934 and scrapped in December of the same year. The 122 worked on the Deep Creek Railroad after the road's engines were scrapped and concluded her active career in December 1947 on the Tide-



water Southern and was broken up in April of 1950. A more complete record of these two engines apparently is not available, so if any reader can furnish further information or pictures of them as A-1 and A-2, it would be appreciated.

123 Formerly B&L No. 4. Oldest engine and only 2-6-0 on the Western Pacific. Built in 1876 for the Virginia & Truckee as their No. 24, the "Merrimac," it was sold in 1901 to the Verdi Lumber Company (see map) becoming their No. 2. It was acquired by the B&L in 1902 and went to the WP on November 30, 1916 when the WP purchased the B&L. The engine was on Western Pacific property and probably used by the WP prior to actual purchase for the records show that it was shopped at Jeffery Shops on November 25, 1916 and though there is no record to substantiate it, it was probably renumbered from B&L to WP at that time. Aside from other Boca & Loyalton engines that were acquired with the railroad and scrapped without being renumbered, the 123 along with 127, was the first engine to be scrapped by the WP. This engine was quite similar to Virginia & Truckee 13 (later 15), the "Empire," and Virginia & Trukee 20, the "Tahoe," as well as several other V&T 2-6-0's. The Empire went to the Pacific Portland Cement Company at Gerlach, Nevada as 501 in 1924 and was presented to the Railway & Locomotive Historical Society in 1938 and is now stored at the Western Pacific round-

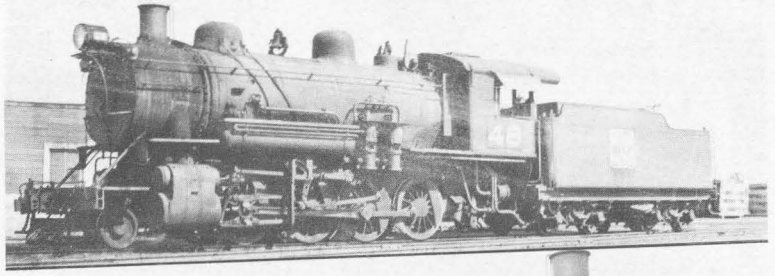
house at Oakland. The Tahoe was sold in 1942 to the Bong Construction Company at El Monte, California and is now in the process of being restored by the owner, Mr. Clifford Bong, along with other members of the Southern California Chapter of the Railway & Locomotive Historical Society. The 123 was last in service in November of 1924 and scrapped at Sacramento in June of 1930.

124 Formerly B & L No. 5. Obtained second-hand in November 1916 with the Boca & Loyalton Railroad purchase. It was built for the Cincinnati, New Orleans and Texas Pacific, a part of the Southern Railway System, as No. 55 and subsequently 555 and 589 of that road. It went to the B&L about 1905. In later years, as WP 124, it was used principally on the Terminous Branch and the Tidewater Southern. It was set aside in October of 1947 and broken up in November of 1949, being at that time the oldest locomotive on the road.

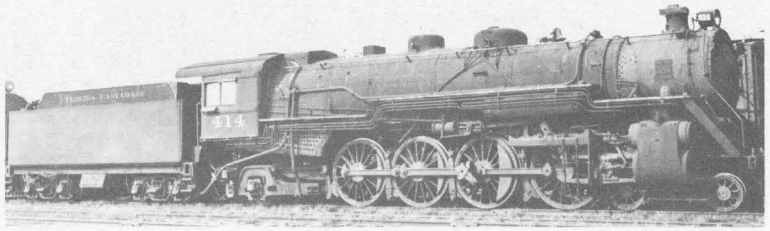
125 Formerly B&L No. 7. This was the last of the B&L engines to come into the Western Pacific numbering system. It was built in 1888 for the Pittsburgh & Lake Erie Railroad, coming to the B&L in 1905 and to the WP in November 1916. Had Class 2 repairs at Jeffery Shops August 23, 1928 and was used from then until October 1930 on the Tidewater Southern when it was set aside. Serious consideration was given to shopping her, but on April 10, 1931, ample power being available to the Tidewater Southern and because the estimated cost of repairs was too high—in excess of $3000.00, she was permanently retired, but wasn't scrapped until December of 1934.

126 Former D&RG 546 and RGW 39. Purchased August 9, 1917 from the D&RG for $4000.00. Left Salt Lake August 10th for Elko where it was shopped at an expense of $2526.00, renumbered to WP 126 and sent to Burmester, Utah on August 27 for use on the Tooele Branch. Sold January 23, 1918 for $7500.00 to the Tidewater Southern Railroad but didn't move west until after it had been converted to oil at Elko in February of 1918. Last used on the Tidewater Southern (No. 1) in November of 1946 and scrapped at Sacramento by the WP in October of 1947 after the tender had been removed and put on the 124. This engine was under WP ownership for only five months which probably explains why there are no known photographs of it as a WP engine.

127 Former D&RG 549 and RGW 42. Purchased August 9, 1917 from the D&RG for $4000.00. Left Salt Lake City with the 126 (546) August 10, and sent to Jeffery Shops for repairs which were accomplished at a cost of $667.00. Ready for service September 15, 1917 and sent back to Burmester for duty. Returned to Sacramento and converted to oil in May of 1918. It was last used in December of 1923 and finally scrapped at Sacramento in June of 1930. Driving wheels were salvaged and applied to the 126 (TS 1).



156 158	See Note E, Page 23. Both engines were set up at Salt Lake in October of 1909, but the 158 was used on the D&RG for about five years before seeing service on the WP.	
163 164 165 166	Ex United Verdi Copper Co. No. 3 Ex United Verdi Copper Co. No. 86 Ex United Verdi Copper Co. No. 87 Ex United Verdi Copper Co. No. 88	These engines were purchased on September 17, 1927 from the United Commercial Company, Steuart Street, San Francisco for an approximate cost of $16,000 each. The 163 has been scrapped; the others are stored at Oroville, Stockton and Oakland.
171 172 173 174 175 176 177 178 179 180	Ex Florida East Coast RR No. 403 Ex Florida East Coast RR No. 404 Ex Florida East Coast RR No. 405 Ex Florida East Coast RR No. 406 Ex Florida East Coast RR No. 407 Ex Florida East Coast RR No. 408 Ex Florida East Coast RR No. 410 Ex Florida East Coast RR No. 412 Ex Florida East Coast RR No. 414 Ex Florida East Coast RR No. 415	Purchased in June of 1936 for an average cost of $12,500 each and rebuilt at Sacramento at an average cost of $33,364 each. These engines took over (from the 71 and 86 class) the Oakland to Salt Lake passenger runs, until replaced by 4-8-4's and then



diesels, and in later years were often used on the Feather River Express which ran only between Oakland and Portola. When 174, 175 and 177 were set aside their tenders were used with diesel cab units 801-A, 802-A and 803-A during the last months the Royal Gorge was on the timetable. See Page 77.

201 to 210	Used almost exclusively between Oroville, Keddie and Portola and between Keddie and Bieber, though during the war years were occasionally used in helper service between Stockton and Niles. 203 and 208 were also used between Stockton and Oakland during the week or two following the earthquake in July of 1952 which tied up the SP and Santa Fe between Bakersfield and Mojave. 202 was the first one to be scrapped, the 208 the last. The tender from 204 was put on the 303 when that engine was converted to oil. See Page 78.
251 to 260	Used almost exclusively in the Feather River Canyon—Oroville to Portola, and in later years a few of them were in service between Keddie and Bieber. All off the roster in May of 1952 and scrapped shortly thereafter.

306 307 308 309 310	Ex Elgin, Joliet & Eastern No. 802 Ex Elgin, Joliet & Eastern No. 803 Ex Elgin, Joliet & Eastern No. 804 Ex Elgin, Joliet & Eastern No. 805 Ex Elgin, Joliet & Eastern No. 806	Purchased in March 1920 as replacements for 1st 321-325. They were known as USRRA Heavy Mikados. Were coal burners on the EJ&E and converted to oil by the Western Pacific in 1938. Renumbered from EJ&E to WP at Elko in March and April 1920.
311 315	Built in April of 1921 but not delivered to the Western Pacific until June of 1922.	

1st 321 Became Wabash RR No. 2213
1st 322 Became Wabash RR No. 2214
1st 323 Became Wabash RR No. 2215
1st 324 Became Wabash RR No. 2218
1st 325 Became Wabash RR No. 2219

The engines were built for the United States Railroad Administration in 1918 and assigned to the Western Pacific in February of 1919. They were unsatisfactory from almost every respect and were run only about 30,000 miles each in their year's time on the WP and sold to the Wabash in February 1920. Record does not show where the engines were assigned from the time they were built until they went to the WP. All were scrapped by the Wabash in 1951 and 1952.

317
2nd 322
2nd 323 — Only 2-8-2's, aside from the Wabash engines above, not to be equipped with Elesco Feedwater Heaters.

2nd 325 First 2-8-2 to be scrapped.

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401 to 407 Used in fast freight service between Elko and Salt Lake. All were coal burners and were last used on the Western Pacific in August and September of 1950 though the 402, 404, 405, 406 and 407 each put in several thousand miles service on the Union Pacific in October of 1950. They were returned to the WP and set aside in November of 1950. The 402 had gone to the Chicago Railroad Fair in 1949 to participate in the pageant "Wheels a-rolling," but was returned to the Western Pacific in August. All seven of these engines were officially removed from the roster in May and June of 1952 and were scrapped shortly thereafter.

481 to 486 Constructed from the same plans as SP 4460-4469. Only 483 and 486 remain in existence, being stored at Stockton in standby service and haven't been used since January of 1953. 481, 484 and 485 were sold without tenders to the Southern Pacific at Sacramento for parts, tenders being converted by the Western Pacific for use with snow-fighting and MW equipment. 482 was sold in its entirety for scrap.

CHRONOLOGICAL LIST OF DISPOSITIONS

Feb. 1920	June 1930	Dec. 1934	Sep. 1937	Nov. 1937		Nov. 1939	Dec. 1939	Dec. 1946	Sep. 1947	Oct. 1947
1st	123	43	75	8	93	38	85	57	15	1
321	127	91		72	95	58			18	16
322		121		73	96	325			39	17
323		125		74	97				44	20
324				79	98				154	59
325				80	100				157	84
				82	101				160	126
				87	102				162	
				88	103					
				90	104					
				92	105					
Total 5	2	4	1	22		3	1	1	8	7

July 1948	Nov. 1949	Dec. 1949	Jan. 1950	Feb. 1950	Mar. 1950	Apr. 1950	Dec. 1950	Mar. 1951	June 1951
10	2	5	9	13	4	31	19	156	161
	3	6	12	**23**	7	42		158	172
	24	51	14	46	11	122			178
	28	61	71	62	25	174			180
	32	64	76	153	29	175			205
	45	77	106	313	47	177			207
	48	78	159	322	49	327			209
	83	81	304		52	332			302
	89	86	305		53	333			316
	124	99	311		312				
	155	202	314		324				
1	11	11	315		335				
Total 1	11	11	12	7	12	9	1	2	9

Aug. 1951	Oct. 1951	Jan. 1952	Feb. 1952	May 1952	June 1952	Jan. 1953	Feb. 1953	Dec. 1953
204	22	36	320	179	173	41	27	21
	34	37	321	201	176	163	35	26
	50	55	330	210	401	208	152	30
	54	56		251	402	301	203	65
	60	306		252	403	303	323	308
	151	307		253	404	328	336	309
	171	310		254	405	481	482	326
	206	317		255		484		329
		318		256		485		331
		319		257				
				258				
				259				
				260				
				406				
				407				
Total 1	8	10	3	15	7	9	7	9

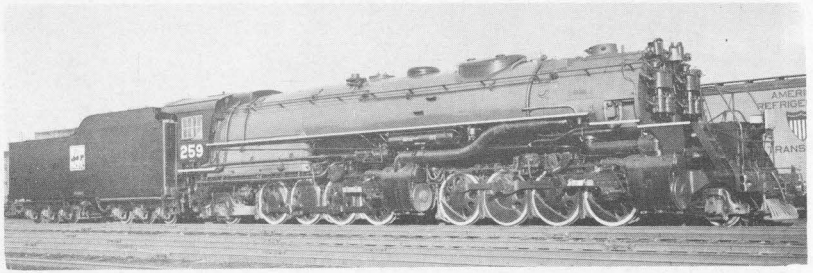
RECAPITULATION OF TYPES OF STEAM ENGINES—WP PROPER

Type	Name of Type	Engine Numbers	Total
0-6-0	Switcher	151-166	16
2-6-0	Mogul	123	1
4-6-0	Ten-Wheel	71-106; 121, 122; 125-127	41
2-8-0	Consolidation	1-65; 124	66
2-8-2	Mikado	301-336; 1st 321-325	41
4-8-2	Mountain	171-180	10
4-8-4	*Northern	481-486	6
2-6-6-2	Mallet	201-210	10
2-8-8-2	**Articulated-Consol.	251-260	10
4-6-6-4	**Challenger	401-407	7
			208

*Also known as "General Service" on some other roads.
**Both types popularly known as Mallets, or "Malleys" on the WP.

CHRONOLOGICAL ACQUISITION LIST OF WESTERN PACIFIC LOCOMOTIVES

Engine Numbers	Date Acquired	From
121-122	1905	Alameda & San Joaquin RR
1- 20	1906	Baldwin Locomotive Works
71- 85	1908	American Locomotive Co.
86-106	1909	American Locomotive Co.
21- 65	1909	American Locomotive Co.
151-162	1909	American Locomotive Co.
123-125	1916	Boca & Loyalton RR
126-127	1917	Denver & Rio Grande RR
201-205	1917	American Locomotive Co.
301-305	1918	American Locomotive Co.
1st 321-325	1919	USRR Adminstration
306-310	1920	Elgin, Joliet & Eastern RR
311-315	1922	American Locomotive Co.
316-320	1923	American Locomotive Co.
2-321	1923	American Locomotive Co.
2-322-325	1924	American Locomotive Co.
326	1924	American Locomotive Co.
206-210	1924	American Locomotive Co.
327-331	1926	American Locomotive Co.
163-166	1927	United Verdi Copper Co.
332-336	1929	American Locomotive Co.
251-255	1931	Baldwin Locomotive Works
171-180	1936	Florida East Coast RR
256-260	1938	Baldwin Locomotive Works
401-407	1938	American Locomotive Co.
481-486	1943	Lima Locomotive Works



CHRONOLOGICAL AGE LIST OF WESTERN PACIFIC STEAM LOCOMOTIVES

Engine Numbers	Year Built	Year Acquired by Western Pacific
123	1876	1916
124	1882	1916
125	1888	1916
126-127	1891	1917
121-122	1896	1905
1- 20	1906	1906
71- 85	1908	1908
86-106	1909	1909
21- 65	1909	1909
159-162	1909	1909
151-158	1909	1909
163	1915	1927
201-205	1917	1917
301-305	1918	1918
1st 321-325	1918	1919
164-166	1919	1927
306-310	1919	1920
311-315	1921	1922
316-320	1923	1923
2nd 321	1923	1923
2nd 322-325	1924	1924
326	1924	1924
206-210	1924	1924
171-180	1924	1936
327-331	1926	1926
332-336	1929	1929
251-255	1931	1931
256-260	1938	1938
401-407	1938	1938
481-486	1943	1943

ROSTER OF DIESEL LOCOMOTIVES

Engine Numbers	Tot. Engines	Symbol	Builder	Date	Weight	Horse Power	Tractive Effort	Cost Each	Note
501-503	3	S-50	EMD	1939	200,000	600	50,000	$ 64,524	1
504-511	8	S-50	ALCO	1942	202,000	660	50,000	60,818	1
551-558	8	S-57	ALCO	1943	230,000	1000	57,500	79,666	2
559-562	4	S-57	ALCO	1950	230,000	1000	57,500	102,328	2
563-564	2	S-57	ALCO	1951	231,000	1000	57,500	102,648	2
581-585	5	S-60	BLW	1945	245,000	1000	60,000	78,500	2
601-606	6	S-62	EMD	1952	248,000	1200	62,000	110,676	2
701-709	9	RS-62	EMD	1952	248,000	1500	62,000	170,991	3
710-713	3	RS-62	EMD	1953	247,000	1500	62,000	170,833	3
801-803	3	D-176	EMD	1947	734,000	4500	176,000	480,545	4
804-805	2	D-176	EMD	1950	753,000	4500	176,000	544,190	4
901-903	3	D-225	EMD	1941	908,000	5400	225,000	497,654	5
904-906	3	D-225	EMD	1943	916,000	5400	225,000	507,292	5
907-912	6	D-225	EMD	1944	927,000	5400	225,000	505,713	5
913-921	9	D-239	EMD	1950	953,200	6000	239,000	653,407	5
922-924	3	D-238	EMD	1951	952,000	6000	238,000	687,170	5
TOTALS	77				37,299,000	210,580	9,216,000	$21,561,333	

NOTES: 1. Switcher. 2. Switcher. Also used in road service. 3. Road-Switcher. 4. 3-Unit Passenger. 5. Four-Unit Freight. Engines 901-912 have been or are being converted to 6000 HP.

ROSTER OF LOCOMOTIVES OF THE DEEP CREEK, INDIAN VALLEY AND *TIDEWATER SOUTHERN RAILROADS

Engine Number	Type	Builder	Number	Date	Drivers	Cylinders	Engine Weight	Steam	Tract. Effort	Former
DC 1	4-6-0	Rome	539	1889	60	18x24	114,000	160	18,000	DRG 543
DC 2	2-8-0	Baldwin	11251	1890	47	20x24	115,000	151	24,000	DRG 597
IV 1	2-8-0	Baldwin	11771	1891	50	20x24	120,000	160	26,000	DRG 661
IV 2	2-8-0	Baldwin	12417	1892	46	20x24	113,000	160	28,000	DRG 668
TS 1	4-6-0	Rome	672	1891	60	18x24	114,000	160	18,000	DRG 546
TS 32	2-6-2	Baldwin	57018	1923	46	16x24	106,000	180	20,000	SRR 32

*Steam Only

HISTORY

DC 1 Purchased from the D&RG in 1917. Was Rio Grande Western No. 36 and became DRG 543 in 1908. Same class engine as WP 126 (TS-1). Scrapped September 1930.

DC 2 Purchased from the D&RG in 1917. Was Rio Grande Western 597. Scrapped in January 1939. Was last used in March of 1938.

IV 1 Purchased from the D&RG in December 1916. Scrapped December 1939. Was Rio Grande Western No. 142 and became DRG 661 in 1908. Records of the WP show that this engine was stored at Jeffery Shops March 1, 1915 and that it was in Boca & Loyalton Service from April 1915 to June 1916 and then again stored.

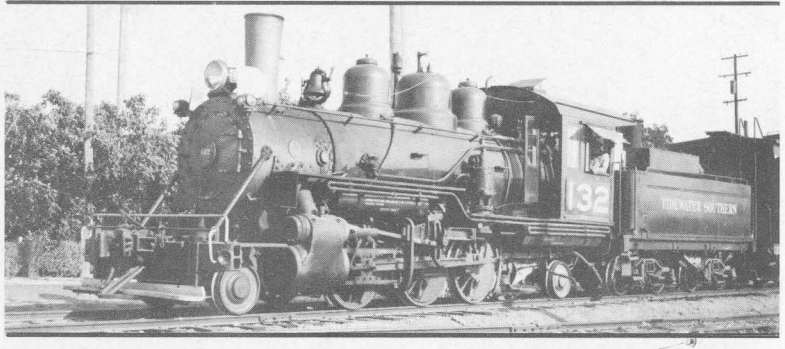
IV 2 Purchased from the D&RG in December 1916. Scrapped December 1939. Was Rio Grande Western No. 149 and became DRG 668 in 1908.

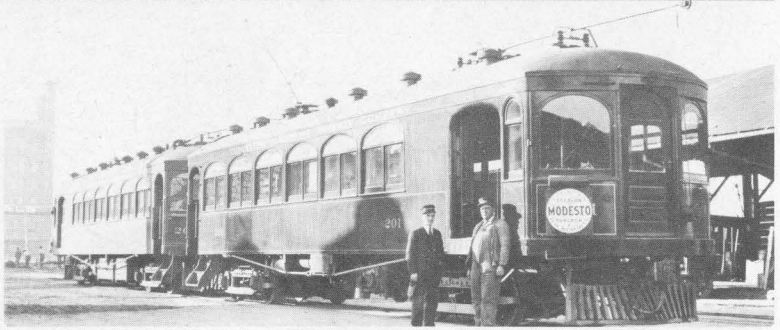
NOTE: These two engines were apparently borrowed or leased by the WP from the D&RG as early as 1914 as records show that the 661 (IV 1) and 668 (IV 2) were assigned respectively to the Western and Eastern Division of the WP on July 1, 1914. It is probable that the engines remained on the WP until the Indian Valley commenced operation in June of 1917.

TS 1 See WP 126 Went into service on the Tidewater Southern February 1, 1918.

TS 32 Purchased from the Sierra Railroad in April of 1940. Renumbered to 132 on June 16, 1941 to avoid confusion with WP 32 which often used the same roundhouse (Stockton). Tender damaged at Stockton December 22, 1952 and replaced with tender from Sierra Railroad No. 18 which had been set aside for scrapping. The 132 is used on the Tidewater Southern only during the late summer and fall fruit rush, but has been assigned to work on the Sacramento Northern, Stockton Terminal & Eastern and the WP proper on various occasions. In previous years it has come all the way to Modesto on the Tidewater Southern but in 1953 it worked only as far as Manteca. Present information is that it will be retained indefinitely.

NOTE: Although the Tidewater Southern was an electrically operated railroad until 1948, various steam engines are known to have worked on the line. Apparently used in construction work was SP No. 1905, a 2-6-2 Saddle Tank built by the Central Pacific at Sacramento in 1882 and sold to the TS in 1912. No record is available of its disposition. DRG 714 was used from July to September 1914 and returned to the D&RG in February 1917. Western Pacific engines 94, 99, 122, 124 and 125 are also known to have worked on the Tidewater Southern at various times. All business except as mentioned above is now handled by diesels.





ROSTER OF LOCOMOTIVES OF THE BOCA AND LOYALTON RAILROAD

There apparently being no complete files on the engines of this road, little of the information shown is substantiated by official records therefore, as was the case with the Alameda & San Joaquin, if any reader can supply corrections or further information it would be appreciated.

Number	*Type*	*Builder*	*Number*	*Date*	*Drivers*	*Cylinders*	*Weight*
1	0-4-4-T	Baldwin					
2	4-4-0	Baldwin					
3	2-6-0	Baldwin	3889	1876	48	17x24	75,000
4	2-6-0	Baldwin	3891	1876	50½	16x24	76,000
5	2-8-0	Baldwin	6085	1882	50	19½x24	108,000
6	4-6-0	Rh. Island					
7	4-6-0	Pittsburgh	978	1888	51	18x24	101,000

——— HISTORY ———

1. Baldwin Vauclain Compound. Purchased in 1898 from Chicago South Side Elevated Company. Sold to Natomas Gravel Company at Oroville at an unknown date—probably about 1913, becoming No. 2 of that company. Scrapped in 1937. Worked on the Western Pacific during construction of that road.
2. Purchased in 1898 from the Pennsylvania Railroad. Worked on the WP during construction.
3. Ex-Virginia & Truckee 23, built new for that road. Purchased by the B&L in 1901 and scrapped by the WP at Jeffery Shops November 15, 1916 without ever getting a WP number. Was named "Santiago" on the V&T.
4. Became Western Pacific No. 123.
5. Became Western Pacific No. 124.
6. No information.
7. Became Western Pacific No. 125.

Miscellaneous notes picked up from old correspondence files of the WP show B&L 3, 4, 5, 6 and 7 as having been assigned to the Western Division on July 1, 1914; that the 3 was in Jeffery Shops August 1, 1914 along with the 5 and that No. 6 was awaiting shopping at Loyalton this same date. Further, that the 4 (123) was not a coal burner on the WP; that the 3 was still at Sacramento on January 1, 1915 and the 6 still at Loyalton January 1, 1915.

FOREIGN LINE LOCOMOTIVES USED ON THE WESTERN PACIFIC WHICH DID NOT REMAIN ON THE ROAD AND BECOME A PART OF THE WESTERN PACIFIC ROSTER

These lists are not necessarily complete. It is just incidental data found while examining the files for other information.

	Road	*Number*	*Type*	**Dates Used*	*Remarks*
	RGW	34	4-6-0	1905-1910	Became DRG 541. Scrapped February 1924.
	RGW	121	2-8-0	1905-1910	Became DRG 640. Scrapped September 1926.
	RGW	122	2-8-0	1905-1910	Became DRG 641. Scrapped September 1929.
	RGW	124	2-8-0	1905-1910	Became DRG 643. Scrapped March 1917.
	RGW	128	2-8-0	1905-1910	Became DRG 644. Sold January 1928.
	RGW	149	2-8-0	1905-1910	Became DRG 668 and later Indian Valley 2.
(1)	DRG	507	4-6-0	1910-1911	Was named "Salida" on DRG. Scrapped 1924.
	DRG	532	4-6-0	1905-1910	Sold Nov. 1915 to Crystal River & San Juan RR.
	DRG	661	2-8-0	1914-1916	Became Indian Valley No. 1.
	DRG	668	2-8-0	1914-1916	Became Indian Valley No. 2.
(2)	DRG	714	4-6-0	1914-1916	Formerly RGW 65. Scrapped February 1924.

NOTE 1. Was used on WP Trains 7 and 8 between Oroville and Oakland.
NOTE 2. Used also on the Tidewater Southern Railroad. Returned to D&RG February 1917.

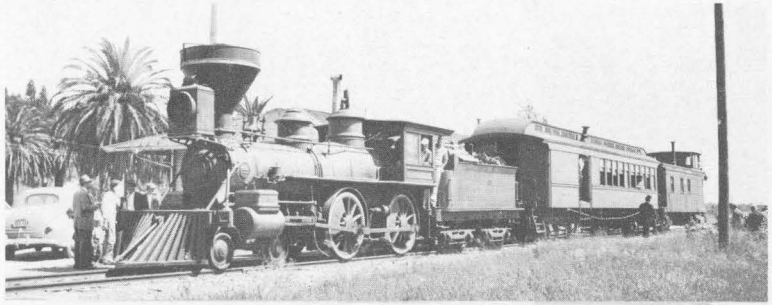
*Approximate dates only.

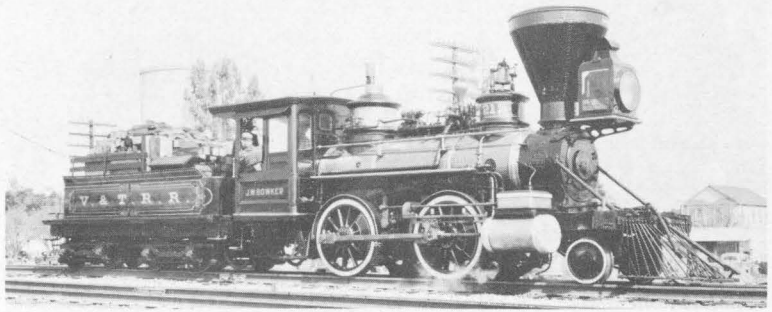
The following engines were used at various times during World War II and were returned to their parent road when no longer needed on the Western Pacific.

DRGW	776	4-6-0	DRGW	1403	2-10-2
DRGW	783	4-6-0	DRGW	1503	4-8-2
DRGW	785	4-6-0	DRGW	3402	2-8-8-2
DRGW	1170	2-8-0	DMIR	501	2-10-2
DRGW	1174	2-8-0	DMIR	506	2-10-2
DRGW	1194	2-8-0	DMIR	510	2-10-2
DRGW	1200	2-8-2	DMIR	512	2-10-2
DRGW	1202	2-8-2	DMIR	514	2-10-2
DRGW	1205	2-8-2	DMIR	1300	2-8-2
DRGW	1206	2-8-2	DMIR	1301	2-8-2
DRGW	1207	2-8-2	DMIR	1307	2-8-2
DRGW	1208	2-8-2	C&NW	2449	2-8-2
DRGW	1211	2-8-2	C&NW	2473	2-8-2
DRGW	1213	2-8-2	MILW	58	2-6-6-2

Like all railroads during the war, particularly western ones, the Western Pacific was short of power and on July 16, 1943 inquired of the Southern Pacific about possibility of buying—not leasing—several heavy Pacifics (4-6-2's) but the SP was having same sort of trouble too about that time and informed the WP that they had none for sale. The same month the WP considered buying some D&RGW Pacifics, but decided against it due to age and performance of engines.

Since the war two other foreign line steam engines have operated on the WP. Virginia & Truckee 12 operated between San Jose and Oakland on an excursion train on May 1, 1949, ran in connection with Keddie Jubilee on November 1, 1949 and operated out of Reno on an excursion train in June of 1953. Virginia & Truckee 21 steamed from the Oakland roundhouse to the freight slip on three occasions, twice being ferried to San Francisco, once for the Maritime Exhibit and once for a run over the old Market Street car tracks for a fund raising drive, and once to be ferried to the Alameda Belt RR slip to operate in the celebration of the anniversary of the first transcontinental train.





This book, the culmination of more than a year's actual preparation and twenty years' interest in and photographing of Western Pacific steam power, is comprised of four major sections. The first thirty-four pages, or first section, provide a brief historical background of the Railroad and its affiliated lines, a system map, a rough sketch map showing the early eastern California and Western Nevada operations and a table showing the present division and subdivision set-up. There are notes on engine terminals and miscellaneous equipment, complete specification data and history of every steam engine ever owned with additional history on certain engines, a roster of diesel locomotives, a roster of steam engines of subsidiary lines and such material that was available on other steam engines that entered into the Western Pacific story.

Typical views, in full-page-size, of twenty-five of the total of twenty-six different classes of steam engines are presented in the second section, pages 36 to 61. Pages 62 thru 67 show engines of special interest — the 94, the 86 with snowplow, on a cold grey day at Portola in the winter of 1937, the 121 as it looked about 1910, and a steam engine from two of the Western Pacific's wholly-owned subsidiary lines — No. 2 of the Deep Creek and No. 1 of the Tidewater Southern, for a short time (August 1917 to January 1918) WP's own No. 126. Pictures of the 26th class, the engines that went to the Wabash, are on Page 93, but since there are no known pictures of them as WP engines, they are not shown in Section 2.

Page 68 starts the forty-six page miscellaneous section — train and general views, additional engines of special interest, some old-time shots and special pictures.

The final section, Pages 114 thru 138, was published for interest of model builders and for those individuals who might want more specification data than appears in the rosters. Here are shown official Mechanical Department side view drawings of engines and tenders of each of the twenty-five classes with an accompanying picture which, in most cases, is of the opposite side of the engine to that shown in the second section. Having no left side view of No. 123, the only engine of its class, we are showing in its place on Page 119, a near mate, the old Virginia & Truckee "Empire," taken at the Western Pacific roundhouse in Oakland in January of 1953.

Despite our original hope that a concerted effort would turn up pictures of engines 123, 126 and 127, the only ones of the entire steam roster (aside from the Wabash engines) we do not have, none were to be found. To the best of our knowledge they have never been photographed as such, so in order to have the roster photographically as well as historically complete we have had an artist friend from Cranleigh, Surrey, England, Mr. Richard Ward, make a composite of each from information we were able to furnish. We think you will agree that he has done a technically and artistically excellent job and we believe the engines are accurately portrayed, the 123 purporting to show the engine as it might have looked on the Loyalton Branch in 1918 or 1919, the 126 at Elko in the Fall of 1917, and the 127 somewhere in the desert, possibly Delle or Tooele, in 1923. Lacking a good photo of No. 125, we have had Mr. Ward also make a painting of this engine as it looked in 1928 or 1929.

In our work on this publication a sincere effort has been made to achieve completeness and accuracy (though in a few instances information was just not available) and the wholehearted cooperation of the Western Pacific has been of inestimable value. We therefore extend grateful thanks to Mr. Gilbert Kneiss, Assistant to the President, Public Relations, who made possible our access to the records; to Mr. E. E. Gleason, Chief Mechanical Officer, and Mr. M. W. Brown, Chief Draftsman, Jeffery Shops, for their courtesy and efforts. Notwithstanding the pressure of their own work these men spent an entire, uninterrupted day with us on our initial trip to Sacramento in quest of information, and were unfailingly courteous and helpful on each of our several subsequent trips for the same purpose. Our thanks also to Mr. Erich Thomsen of the Engineering Department and Mr. Arthur Lloyd of the Public Relations Department in San Francisco and to Mr. Peter Del Moro of Jeffery Shops, for extensive data painstakingly gathered and furnished, and to Mr. Adolfo Rodriguez, Files and Records Clerk at Jeffery Shops, for his patience in digging out old records from the vaults. We wish also to thank Mr. William Pennington, Western Pacific engineer of Portola, and Mr. Wilbur Whittaker of Mill Valley, California, for the many pictures they made available to us, Mr. Charles Felstead of Chicago for the use of the Wabash pictures, the Wabash Railroad for furnishing information requested, and Mr. Ralph Demoro of Alameda, California and Don Roberts of Portland, Oregon, for complying with a hurried request for a look at their Western Pacific photographs; Mr. David Myrick for his help on the N-C-O history, Douglas Richter and Roy Graves for their assistance, plus many others who lent a hand with the book. And lastly, on a sad note, we wish to make a public acknowledgement of the many old-time pictures furnished by our good friend Bob McFarland of San Francisco, who passed away June 27, 1954.

Layout and printing was done by the Acme Printing Company of Modesto. Cover arrangement by Alfred Rose of Modesto. Except as indicated below, all photos were taken by and prepared for offset reproduction by Guy L. Dunscomb. Cover photo was taken at Portola on July 6, 1940. The 326 had just brought No. 40, the Exposition Flyer, up the Feather River Canyon from Oroville, and No. 173, one of the ten long-legged ex FEC 4-8-2's, will highball it on eastward across the desert.

PHOTO CREDITS

PAGE	SUBJECT	ORIGINAL BY
62	Engine 94-Small	R. H. McFarland
62	Engine 94-Large	Fred Stindt
64	Engine 86	W. A. Pennington
65	Engine 121	R. H. McFarland
66	DC 2	Tom Aldridge
67	TS 1	Doug Richter
73	B&L 2 & Train	3—Unknown
73	Station Scene	4—Unknown
79	Engine 39	Allan Youell
82	All	R. H. McFarland
83	Engine 83	T. T. Tabor
83	Engine 331	G. M. Best
83	Engine 1	Western Pacific
85	180 & Train	Tom Aldridge
91	Engine 484	Robert Hanft
91	Engines 319, 321	Don Roberts
106	Engine 302	Lew Harris
120	Engine 124	W. A. Pennington
121	Engine 125	5—Unknown
122	Engine 127	Richard Ward
124	Engine 163	Allan Youell
127	Engine 210	Fred Stindt
130	Engine 302	Doug Richter
132	Engine 313	Fred Stindt
136	Engine 334	Fred Stindt
140	Train	Tom Aldridge

PAGE	SUBJECT	ORIGINAL BY
1	Deep Creek Train	Tom Aldridge
7	CCT Car 204	1—Unknown
8	MET 9	Al Rose
12	NCO Depot	1—Unknown
13	Engine 88	R. H. McFarland
14	Trial Diesel	Tom Aldridge
16	Car 198	Doug Richter
16	Car 375	W. W. Whittaker
17	Car 402	Doug Richter
17	Steamer	Western Pacific
18	Ferry Slip	Ralph Demoro
24	122 & Car	Tom Aldridge
26	FEC 414	R. J. Foster
27	Engine 306	Don Roberts
29	Engine 259	R. J. Foster
30	IV 2	Al Rose
31	Tidewater cars	1—Unknown
32	V&T Train	Al Rose
32	V&T 21	Doug Richter
38	Engine 73	W. A. Pennington
40	Engine 121	Larry Harrison
42	Engine 123	Richard Ward
44	Engine 125	2—Richard Ward
45	Engine 126	Richard Ward
46	Engine 157	James Boynton
47	Engine 166	Robert Gray
55	Engine 315	Fred Stindt

1—From collection of R. Brandt; 2—Sketch from photo from collection of W. A. Pennington. Original photographer unknown; 3—From collection of Roy Graves; 4—From collection of W. A. Pennington; 5—From collection of Larry Harrison.

INFORMATION RECEIVED JUST PRIOR TO GOING TO PRESS.

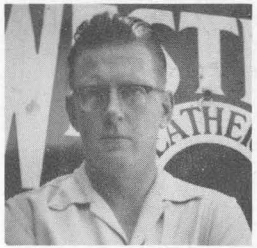
Engines 33 and 40 were vacated from roster August 31st. Engine 164 operated under its own power from Oroville to Gerlach to relieve ex WP 158 which was being shopped. It returned leaving Gerlach August 17th. This undoubtedly will be the last steam operation on the Western Pacific east of Oroville except for possible future excursions behind Engine No. 94.

Yes, the steam engine is gone from the Western Pacific and the rumble of the diesel has replaced forever the wonderfully incomparable note of the ten-wheeler's whistle and the mellow steamboat chime of the 4-8-4 on the Route of the Feather River. Never again will be heard the exhaust of the "Little Mallet" on the High Line, the "Big Mike" in the desert nor the graceful 4-8-2 as it races along the Sacramento Valley. But one thing is certain: These beloved steam engines played a vital role in bringing this railroad up the ladder of prominence from a position of relatively small importance to one of vast strength and worth, not only by virtue of the transportation it offers, but as the stimulus for building industries and communities in every area it serves. Today, behind the big EMD's passengers on the California Zephyr ride on a train second to none through territory of unequalled beauty and enchantment; freight, much of it in roller-bearing cars, is speeded to its destination faster than ever before. Now the steam locomotive's glory is passed — its work is done, and the mass-produced diesel will carry on. But for a few minutes, through the pages of this book, the exciting past can be re-lived. So take a trip with us now back to the era when Steam ruled the rails. We hope you have a pleasant journey.

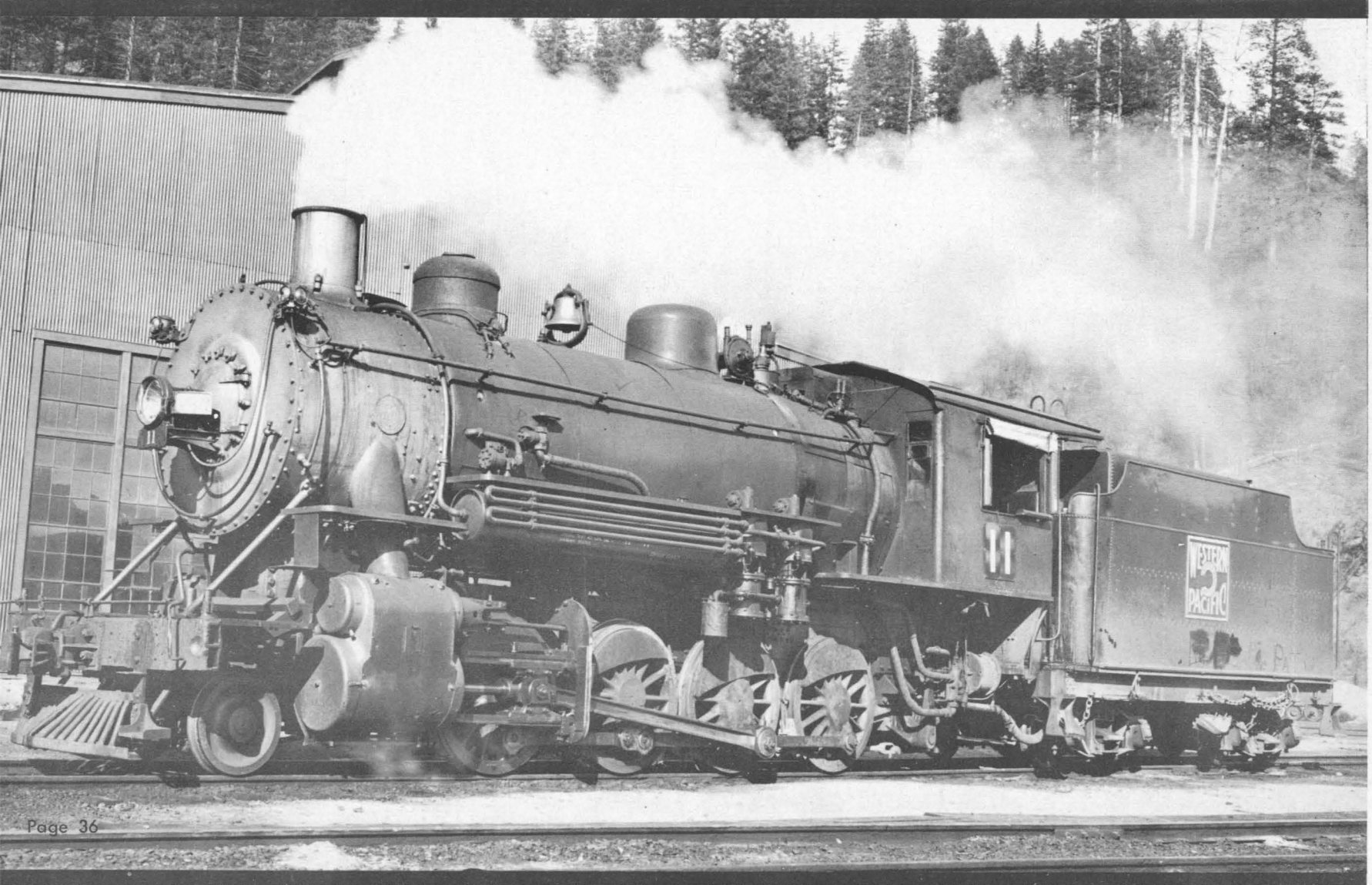
Fred A. Stindt
1414 Aberdeen Drive
San Mateo, California

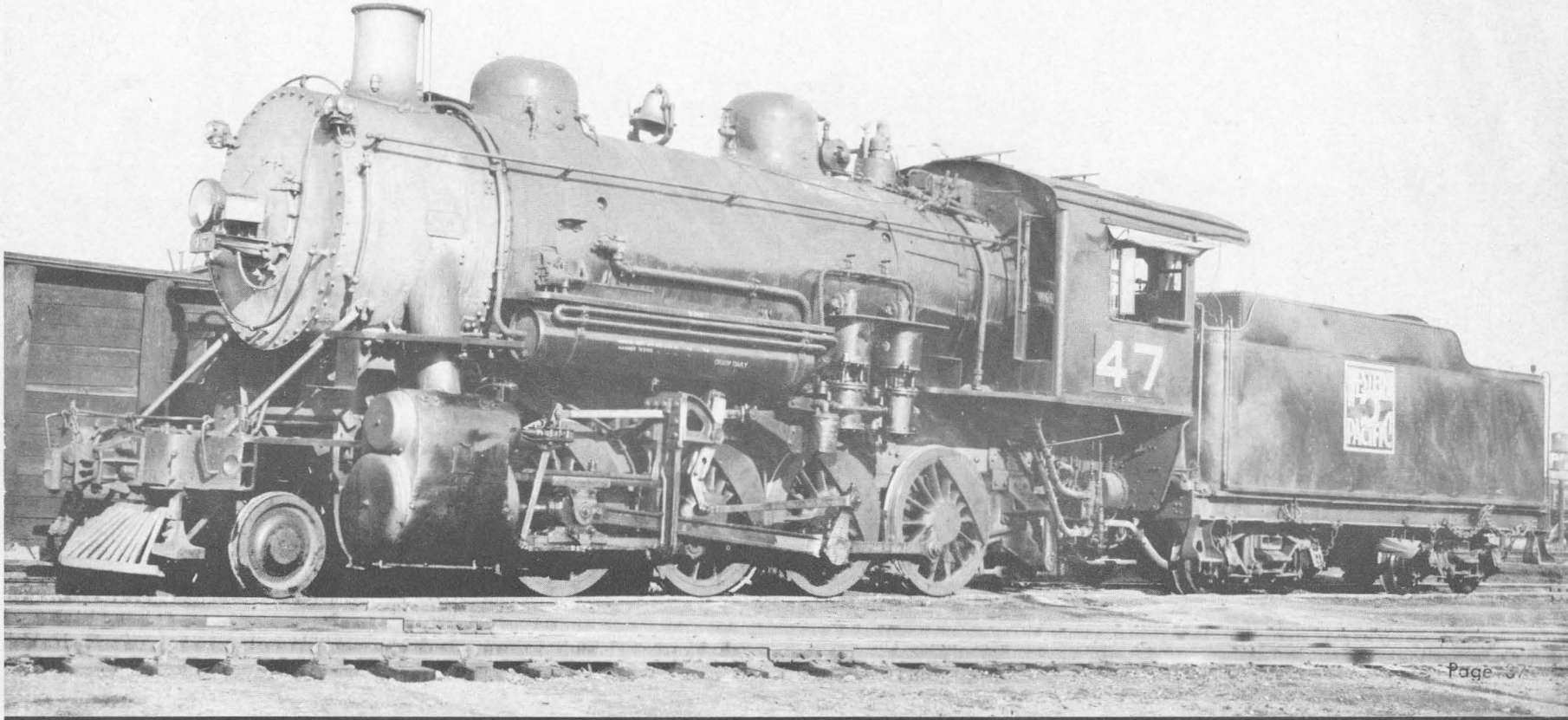
October 1, 1954

Guy L. Dunscomb
1027 Yale Avenue
Modesto, California

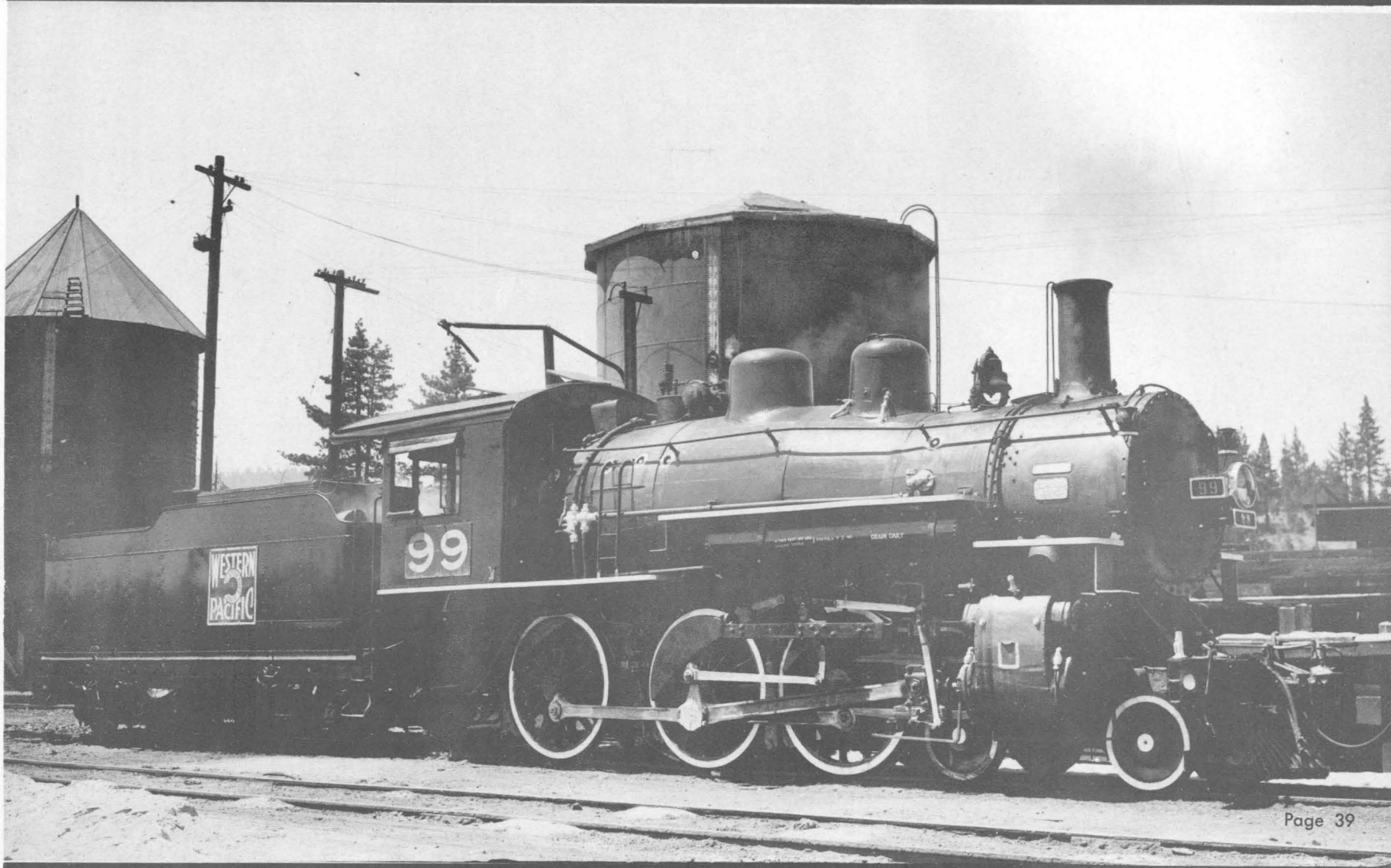


AN UNUSUAL SIGHT — A DOUBLEHEADER PASSENGER SPECIAL. LEAVING SOUTHERN PACIFIC'S OAKLAND PIER JANUARY 30, 1946. WHITTAKER PHOTO.


WESTERN
PACIFIC


47
PACIFIC


73
WESTERN PACIFIC
73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PACIFIC
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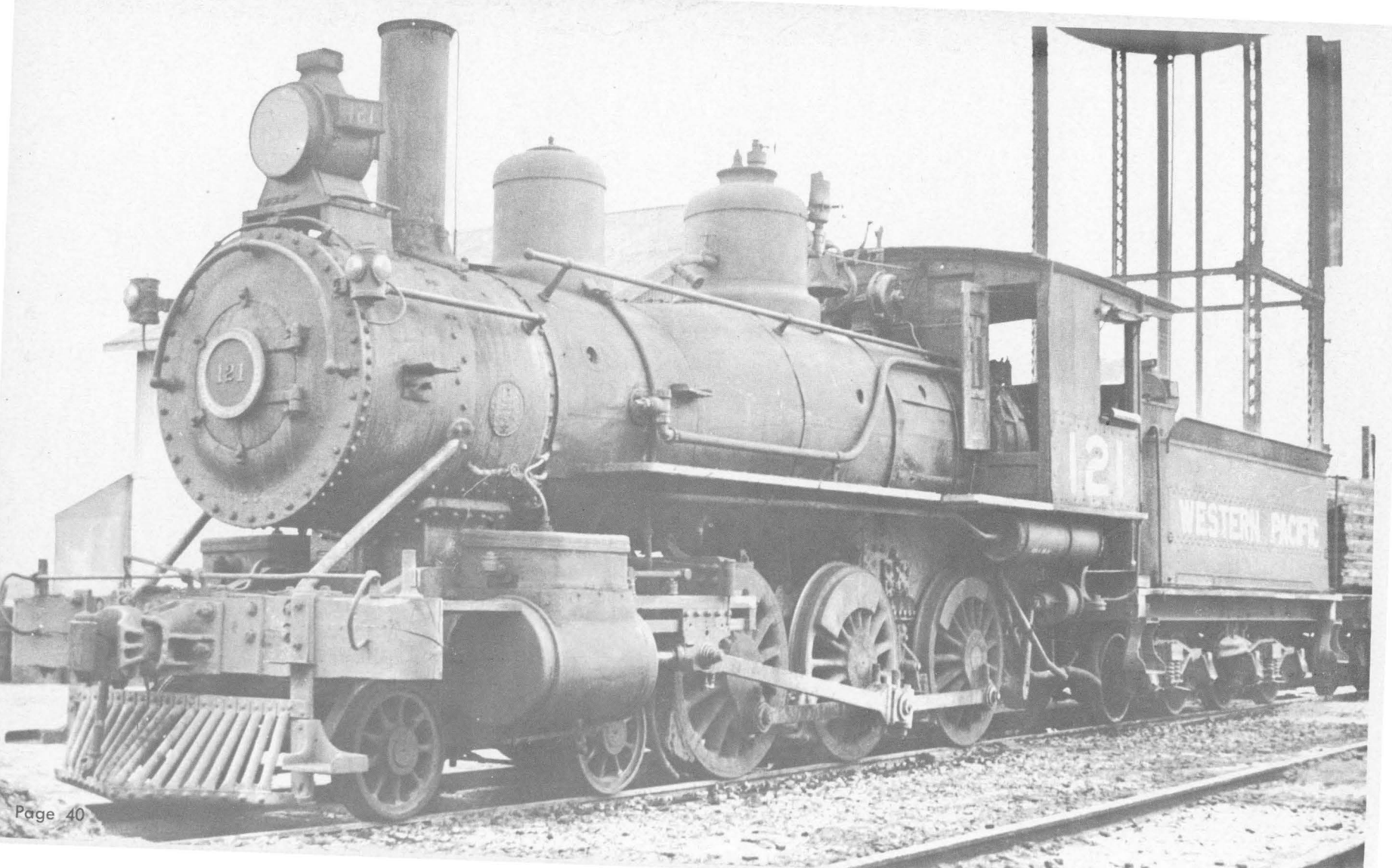
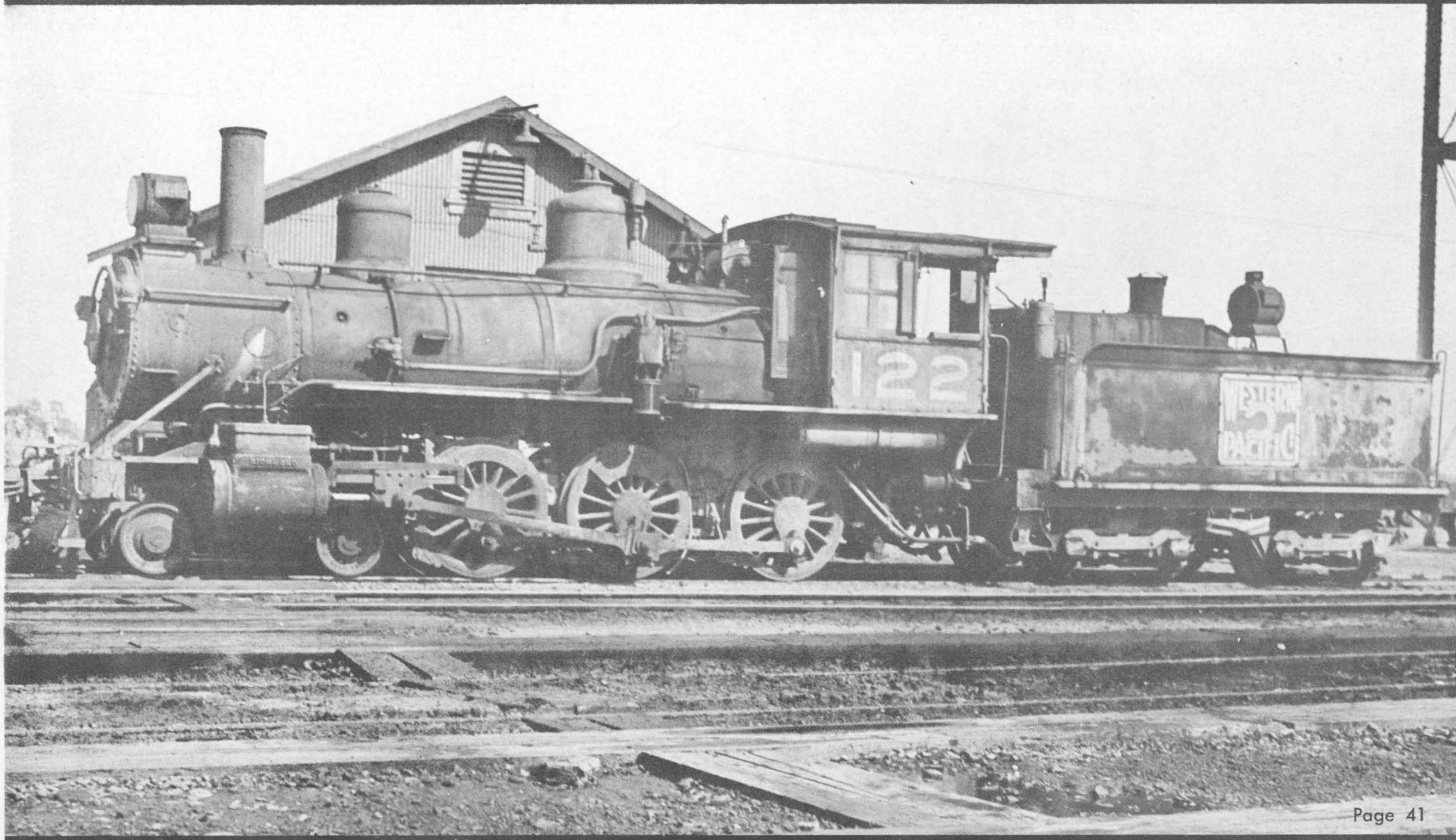
99


121
121
WESTERN PACIFIC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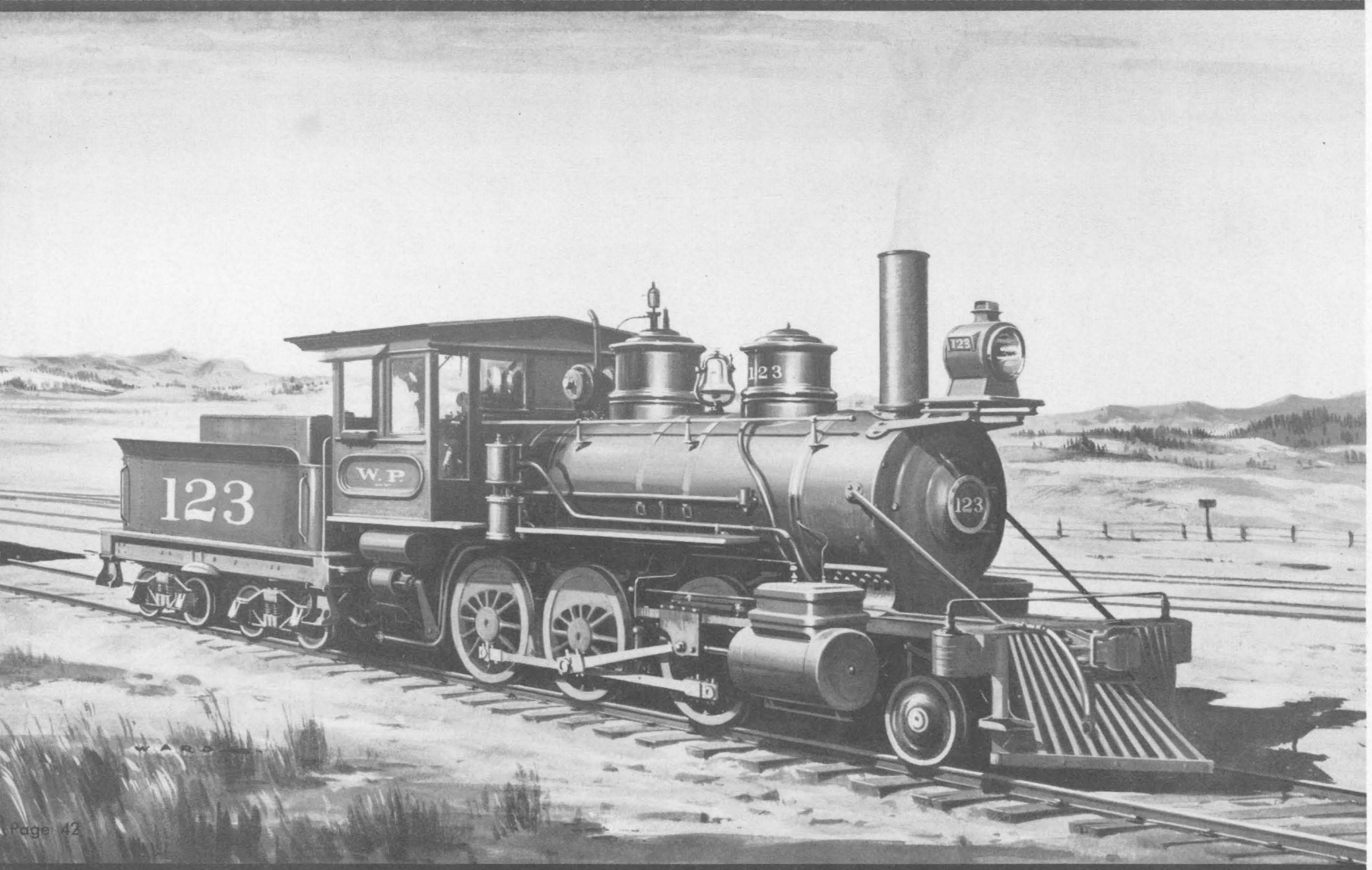
PACIFIC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W.P.
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124
WESTERN
PACIFIC


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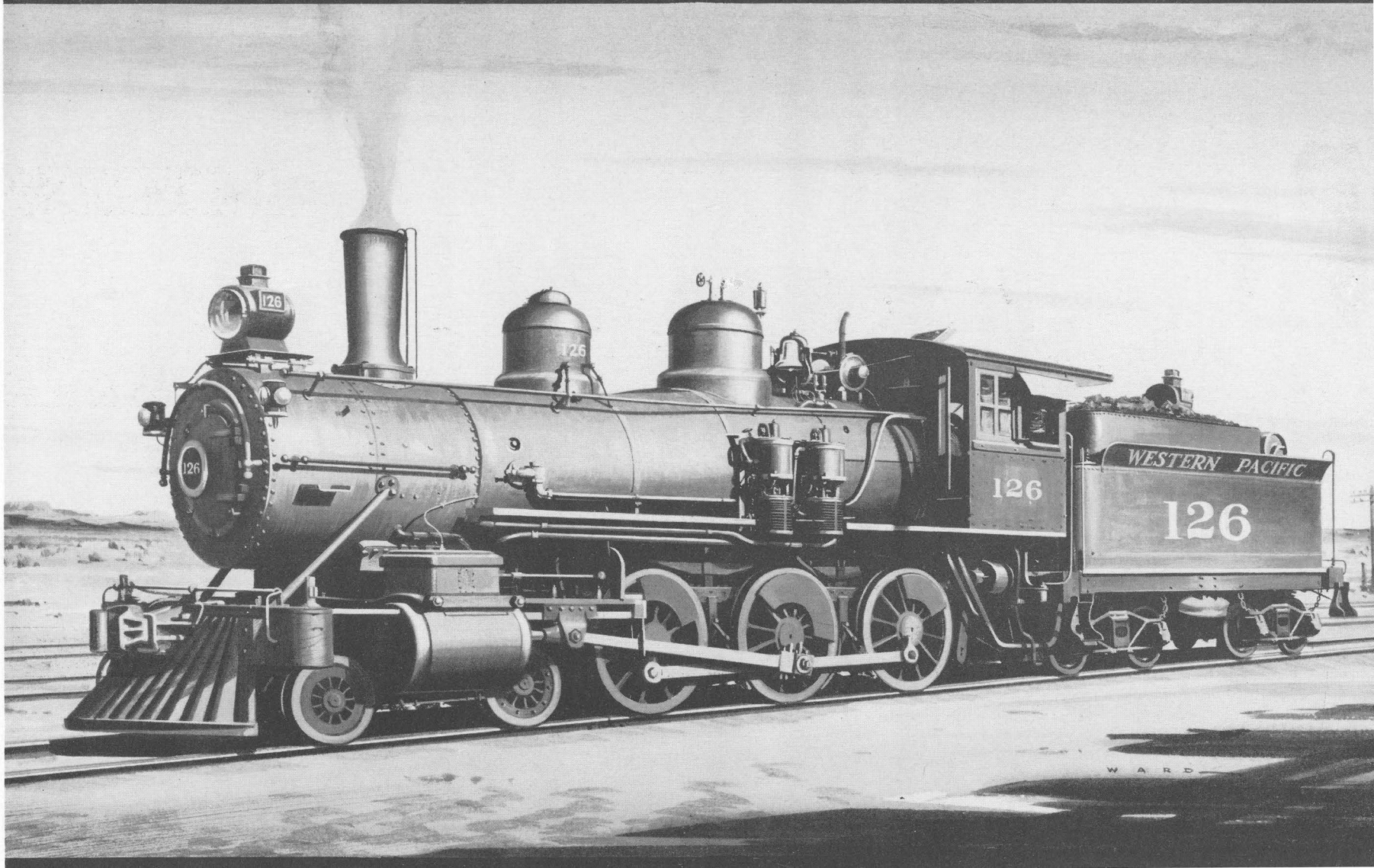
125
WESTERN PACIFIC
WARD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126
WESTERN PACIFIC
126
WARD


WESTERN
PACIFIC
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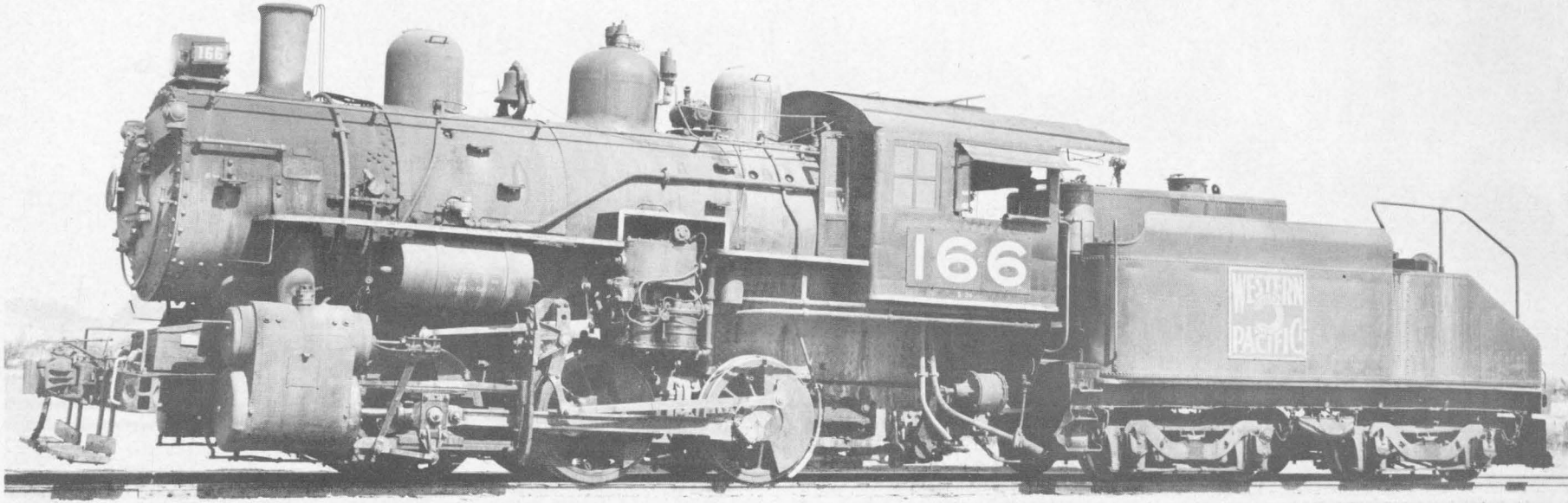
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WESTERN
PACIFIC


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176


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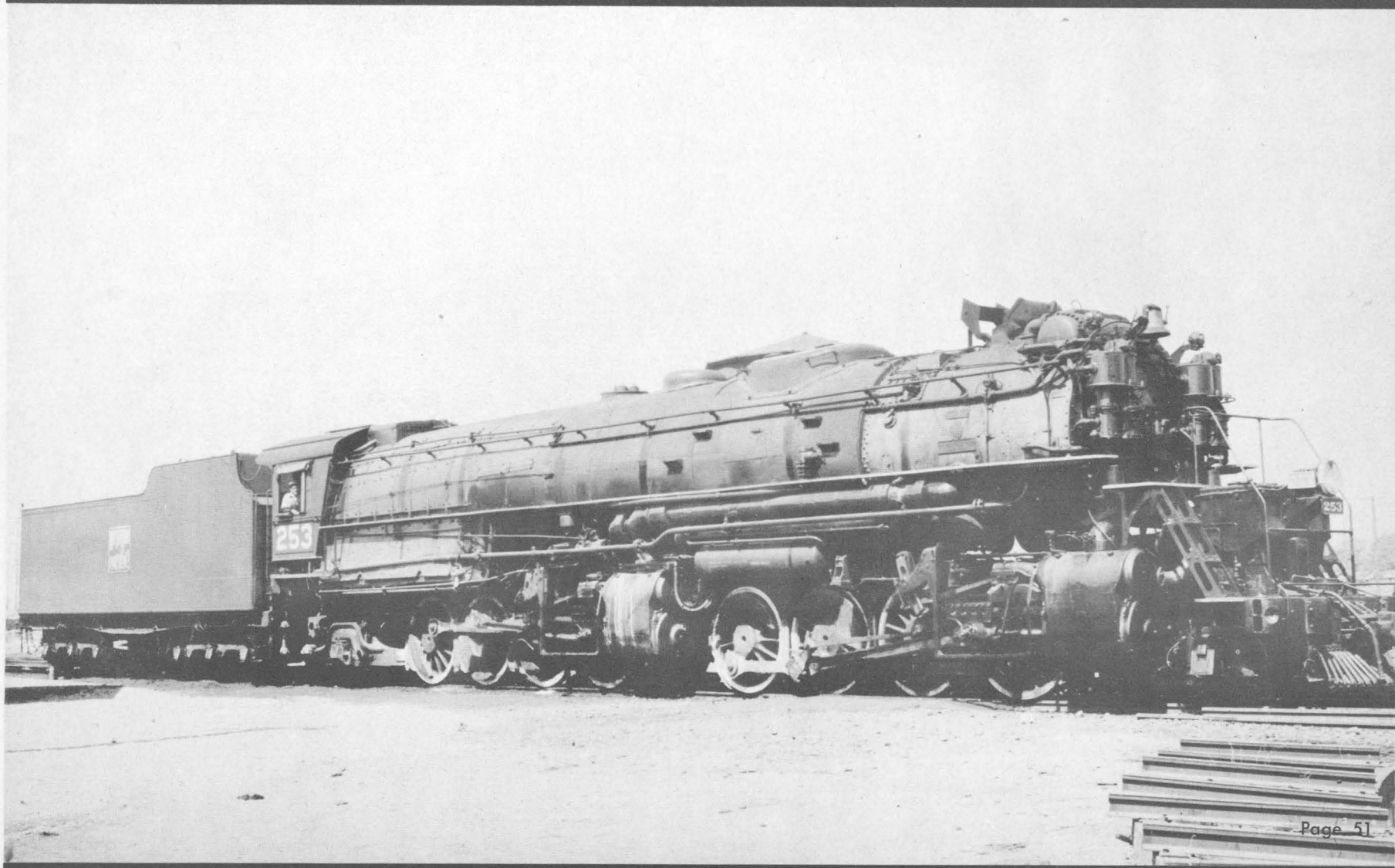
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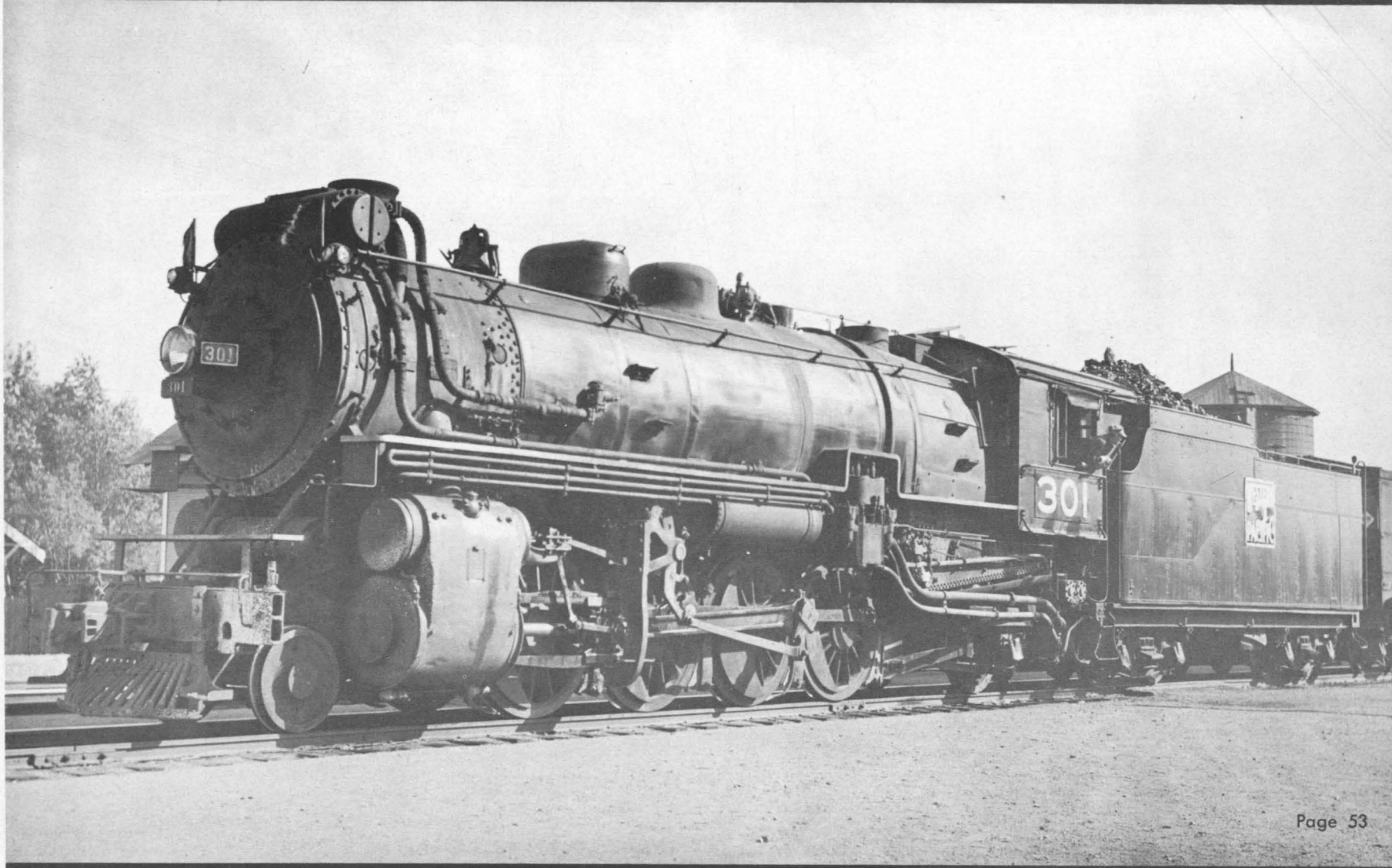
257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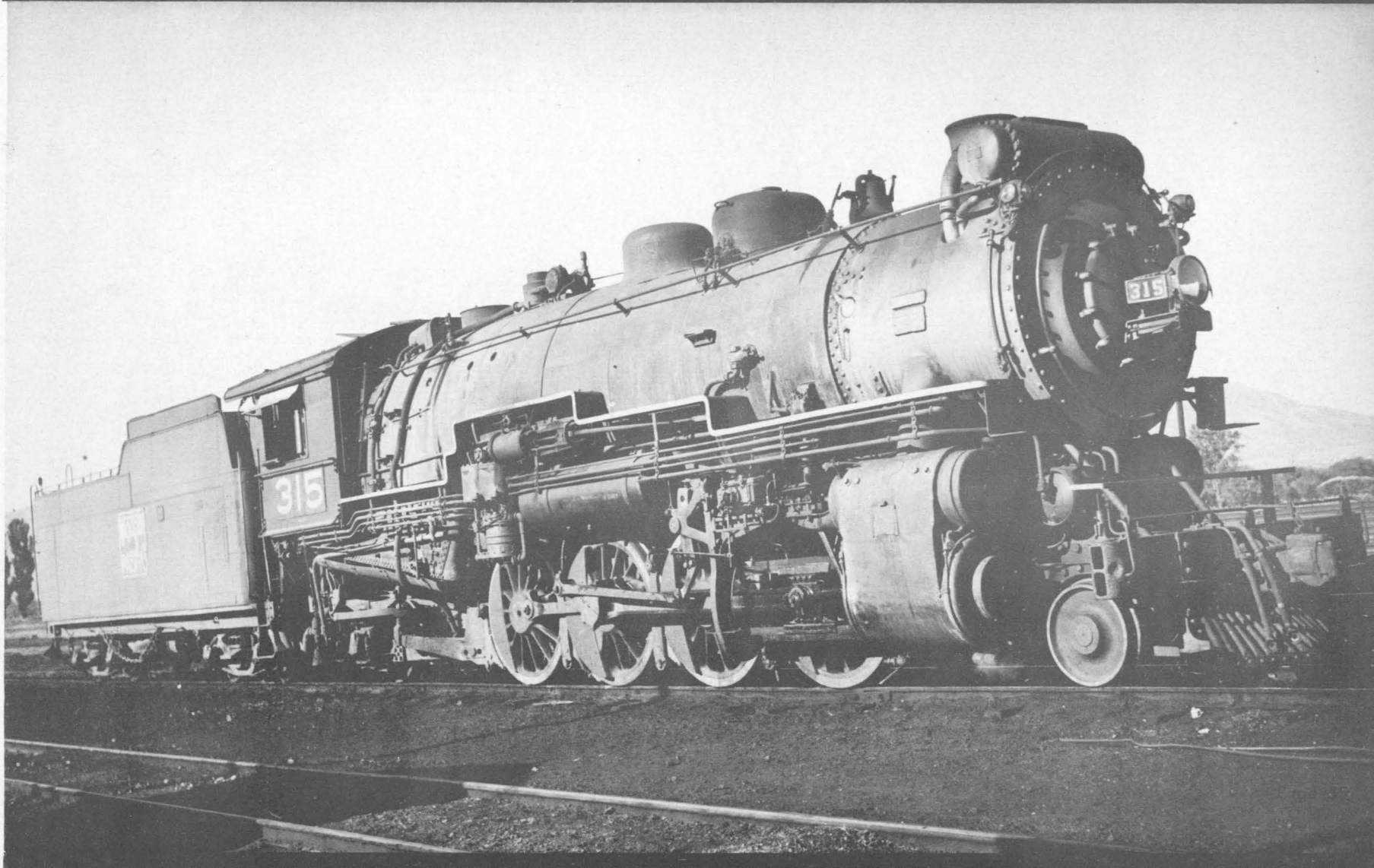
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319
WESTERN PACIFIC


326
326


329


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406


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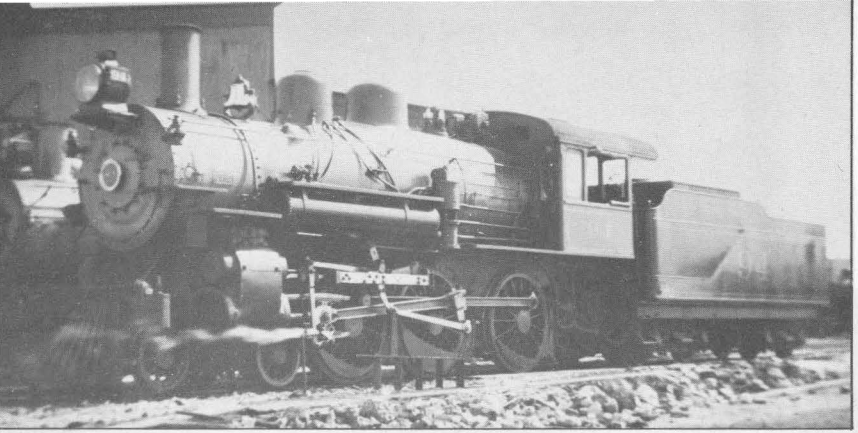
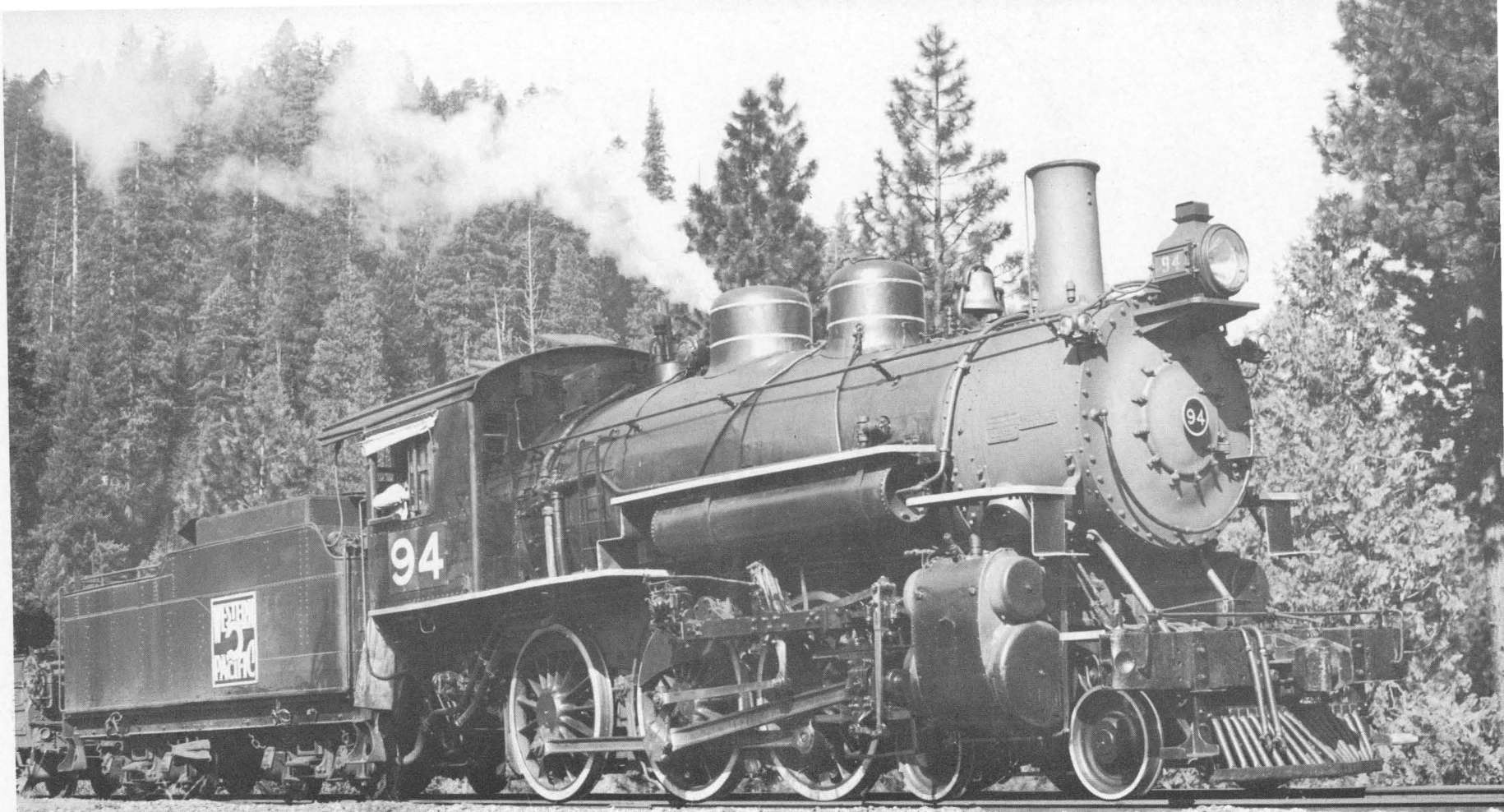


BELOW, NO. 94 AS SHE LOOKS TODAY; LEFT A 1910 PHOTO. SEE OPPOSITE PAGE FOR HOW SHE LOOKED FROM THE FALL OF 1949 TO THE SPRING OF 1953.


94
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94
NORTHERN PACIFIC


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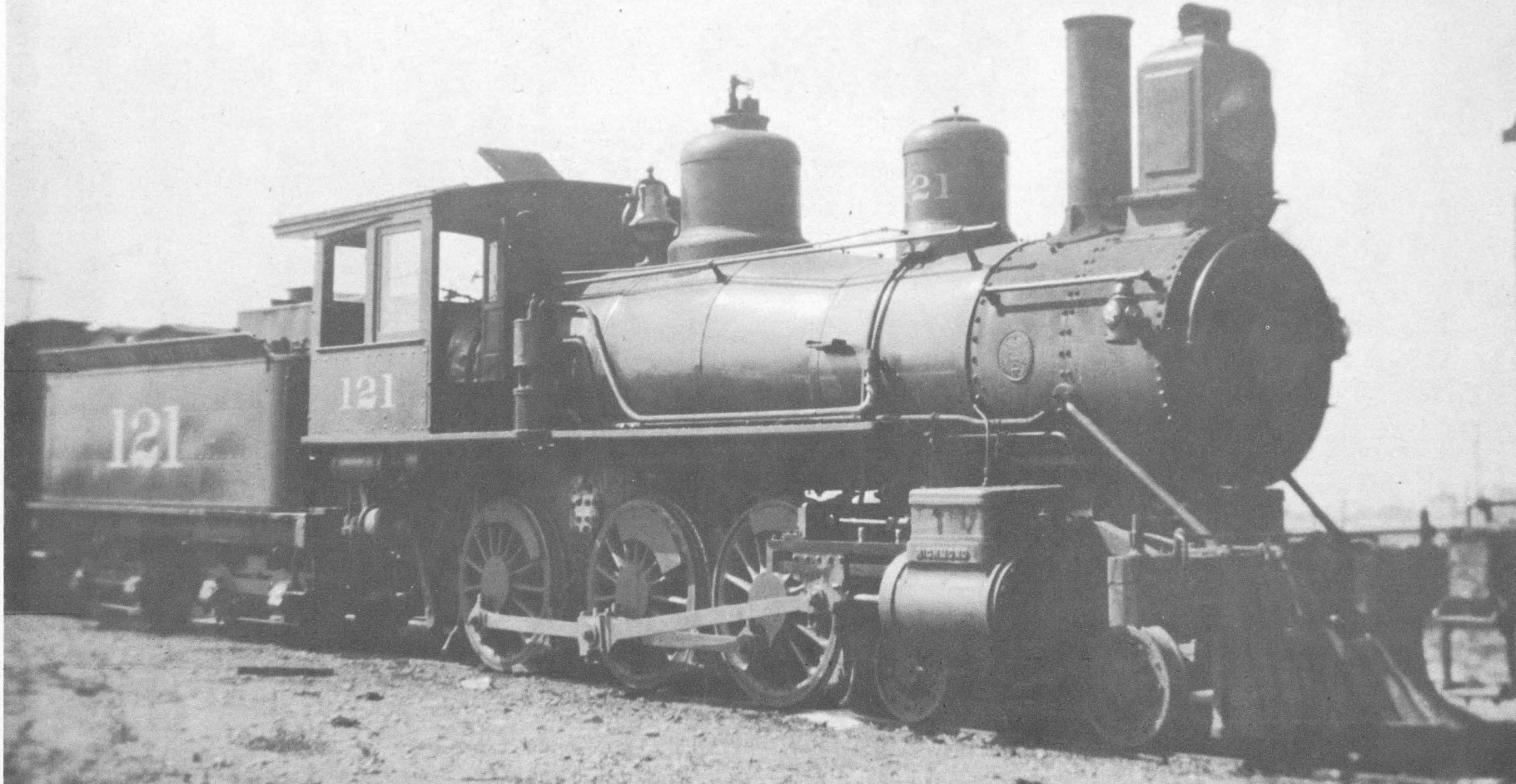
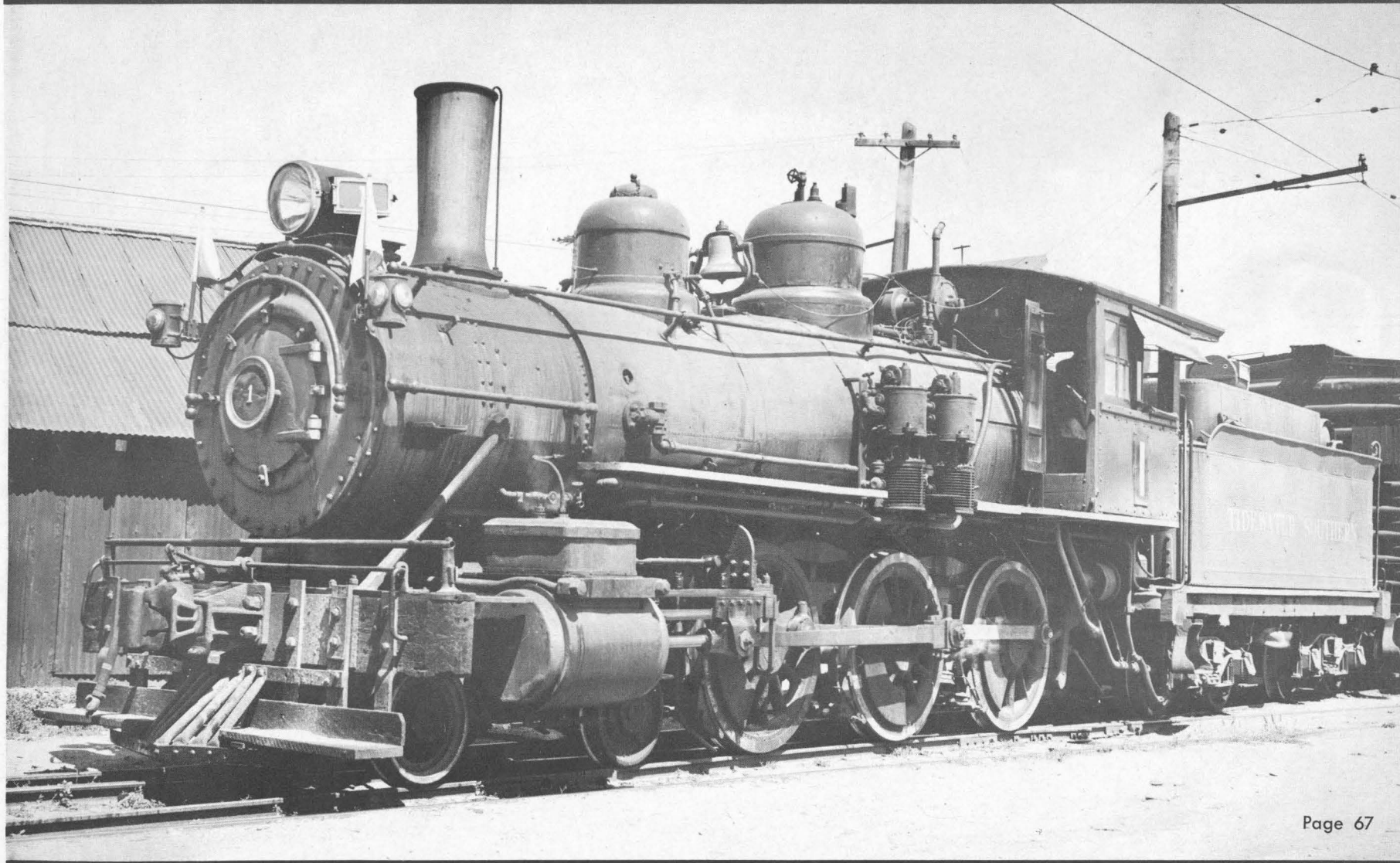
86
WESTERN PACIFIC

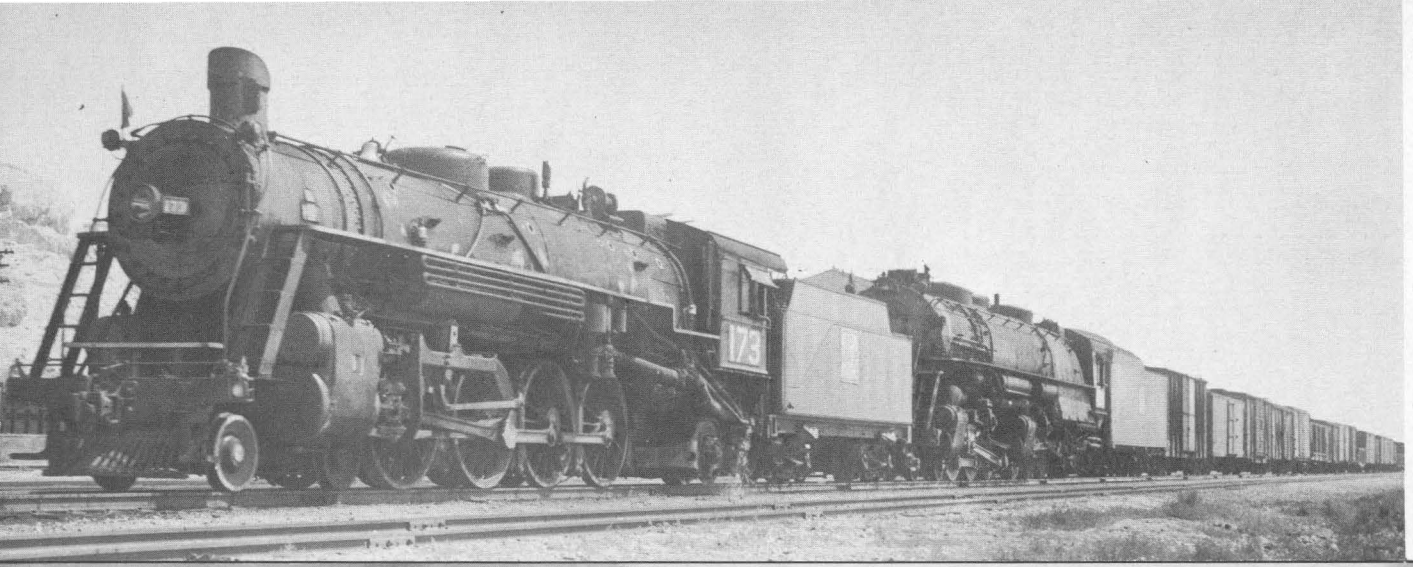

121
121
21


2
DEEP CREEK R.R.
D.C.R.R.
2



NO. 2 LEAVING STOCKTON. THESE SMOKE DEFLECTORS DIDN'T LAST LONG. PENNINGTON PHOTO.

SHRINE SPECIAL LEAVING STOCKTON JUNE 23, 1950.



THE 401 GETS A LITTLE HELP FROM THE 173 AT WENDOVER IN AUGUST OF 1940. TOM ALDRIDGE PHOTO. BELOW: NO. 39 LEAVING PORTOLA JUNE 25, 1939.

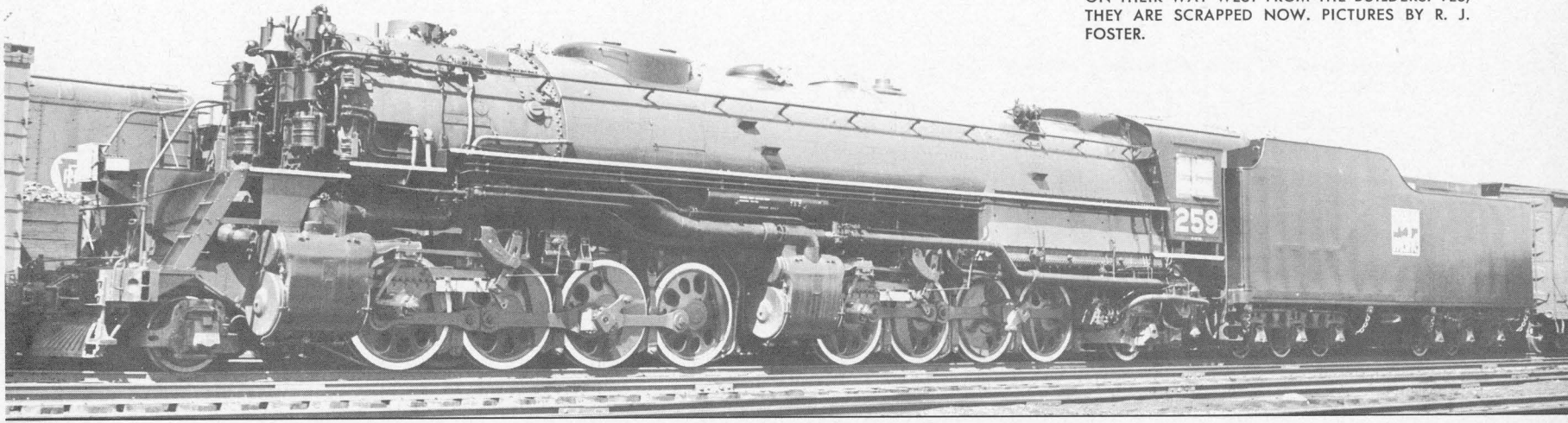
No. 2, THE FEATHER RIVER EXPRESS,
WEST OF PORTOLA SEPTEMBER 2nd, 1940.
WHITTAKER PHOTO.

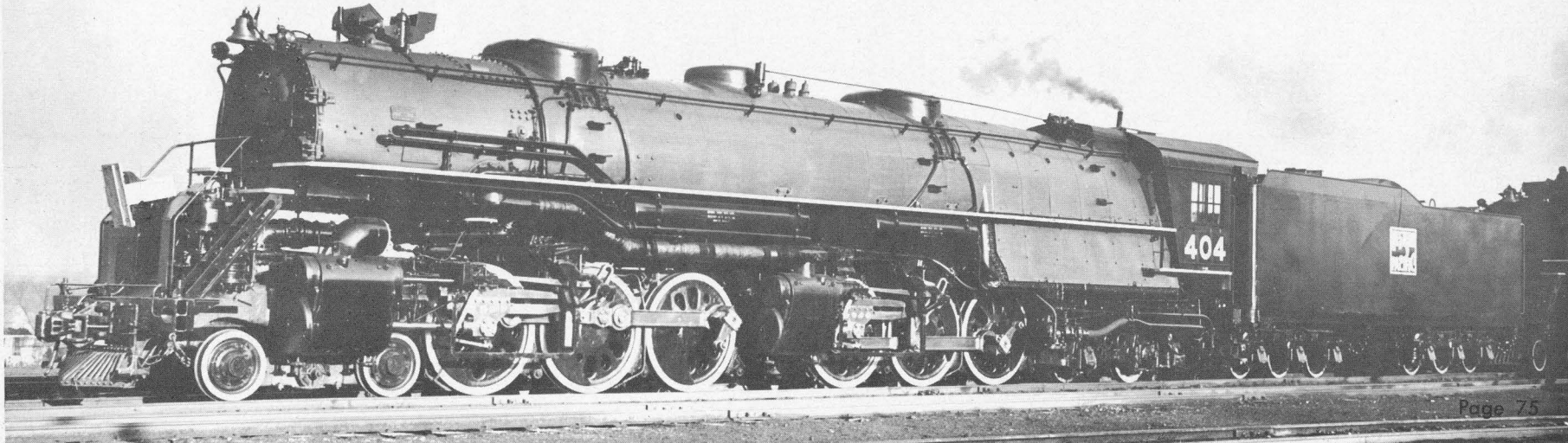
NO. 12, THE FEATHER RIVER EXPRESS, WITH ENGINE 62. SEPTEMBER 1, 1940.

CONSTRUCTION AT OROVILLE. WE BELIEVE THE ENGINE IS BOCA & LOYALTON NO. 2. COLLECTION OF BILL PENNINGTON.

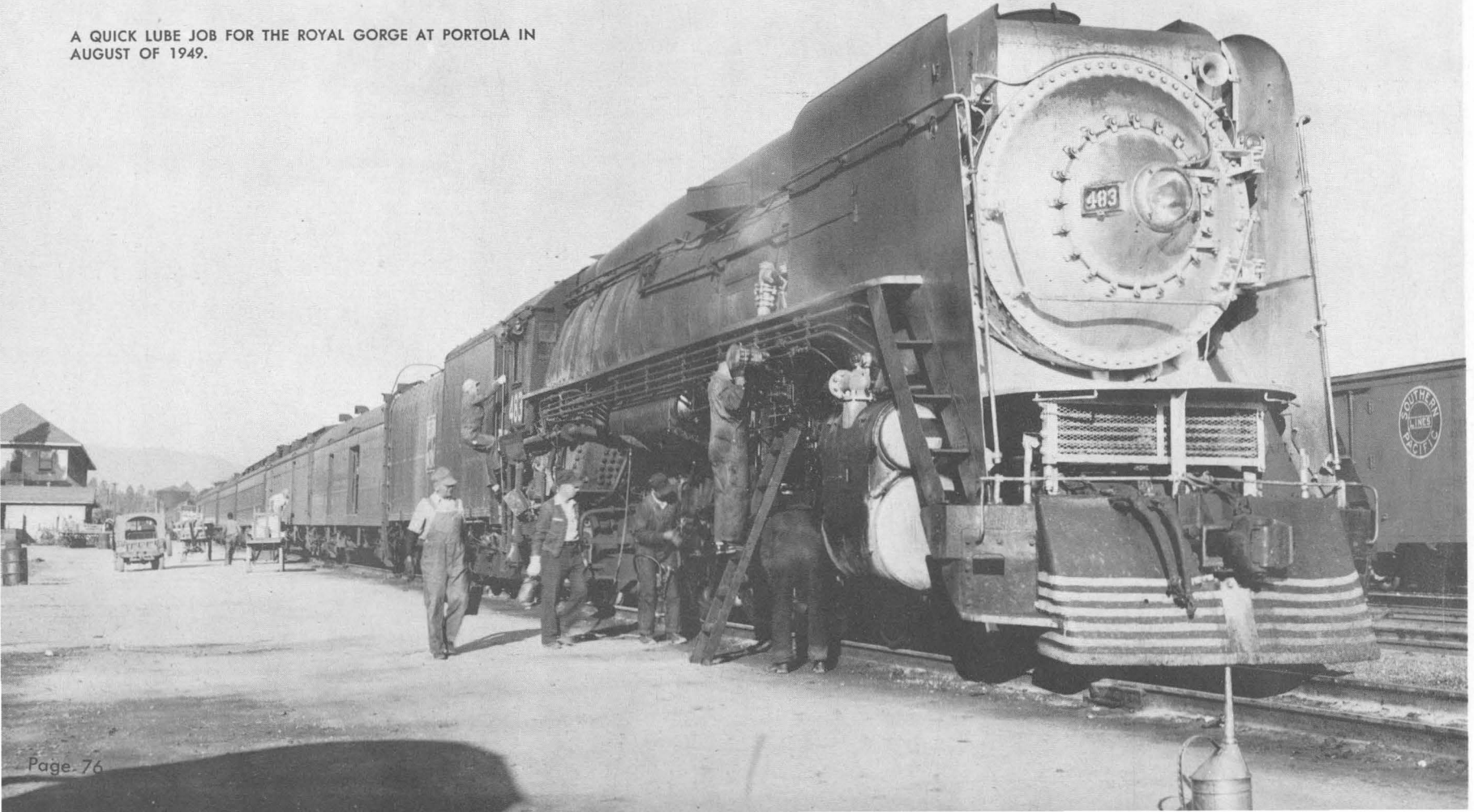
EXTRA 259 EAST ARRIVING KEDDIE AUGUST 20, 1949.

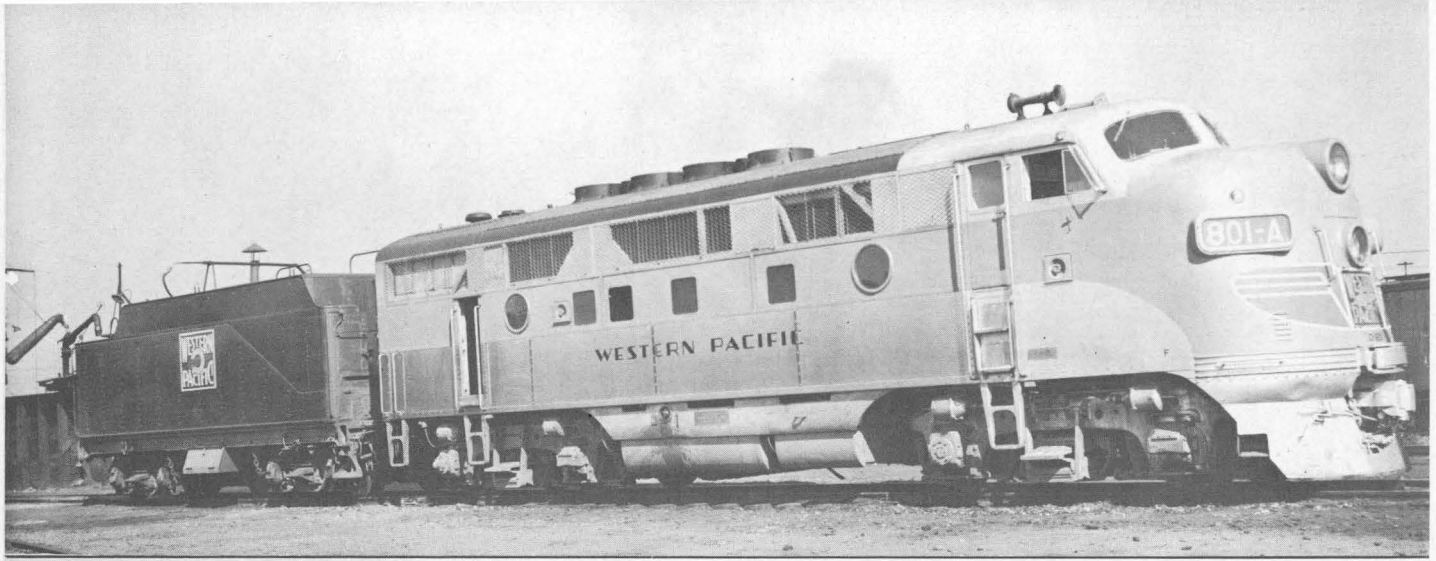
ON THEIR WAY WEST FROM THE BUILDERS. YES, THEY ARE SCRAPPED NOW. PICTURES BY R. J. FOSTER.



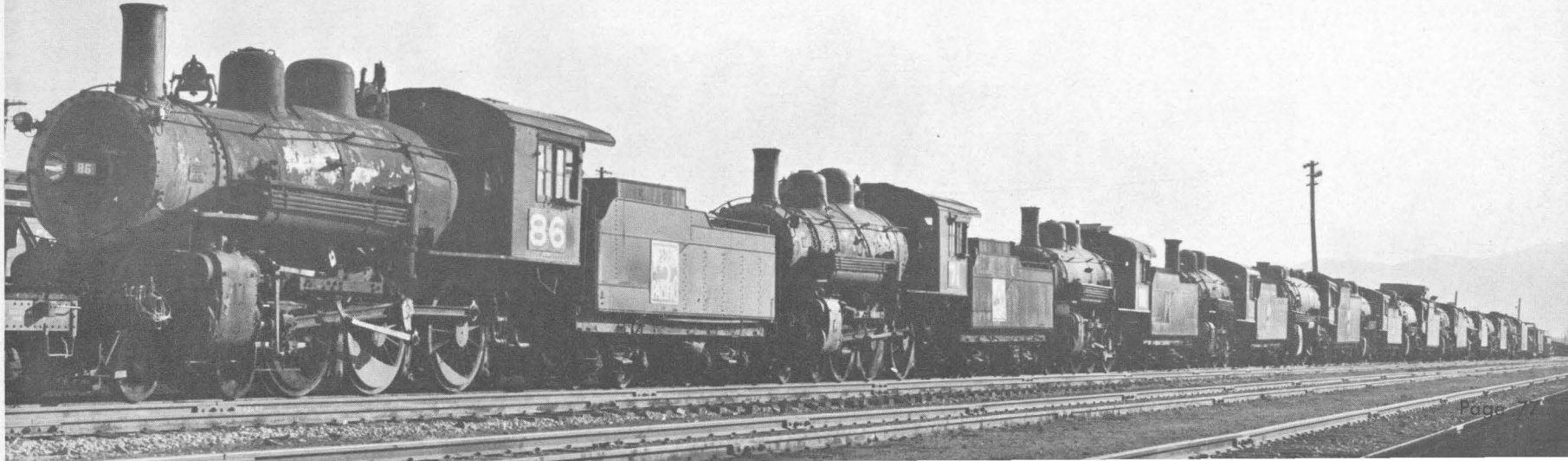


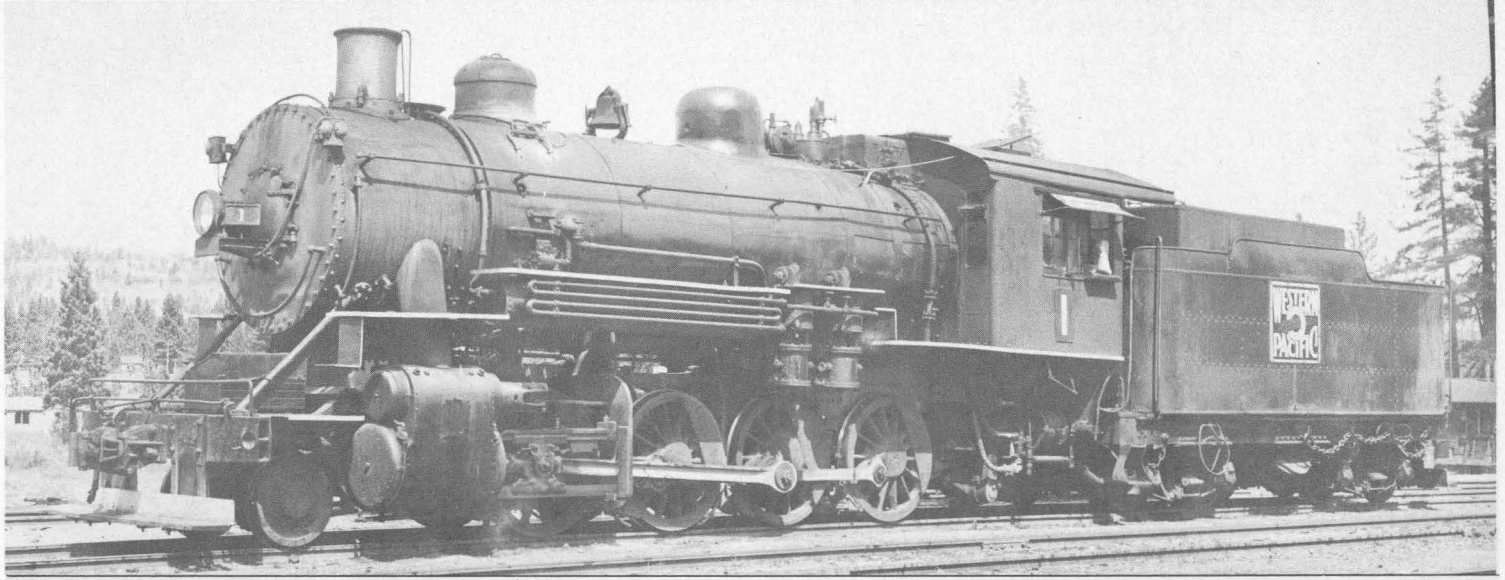
A QUICK LUBE JOB FOR THE ROYAL GORGE AT PORTOLA IN AUGUST OF 1949.

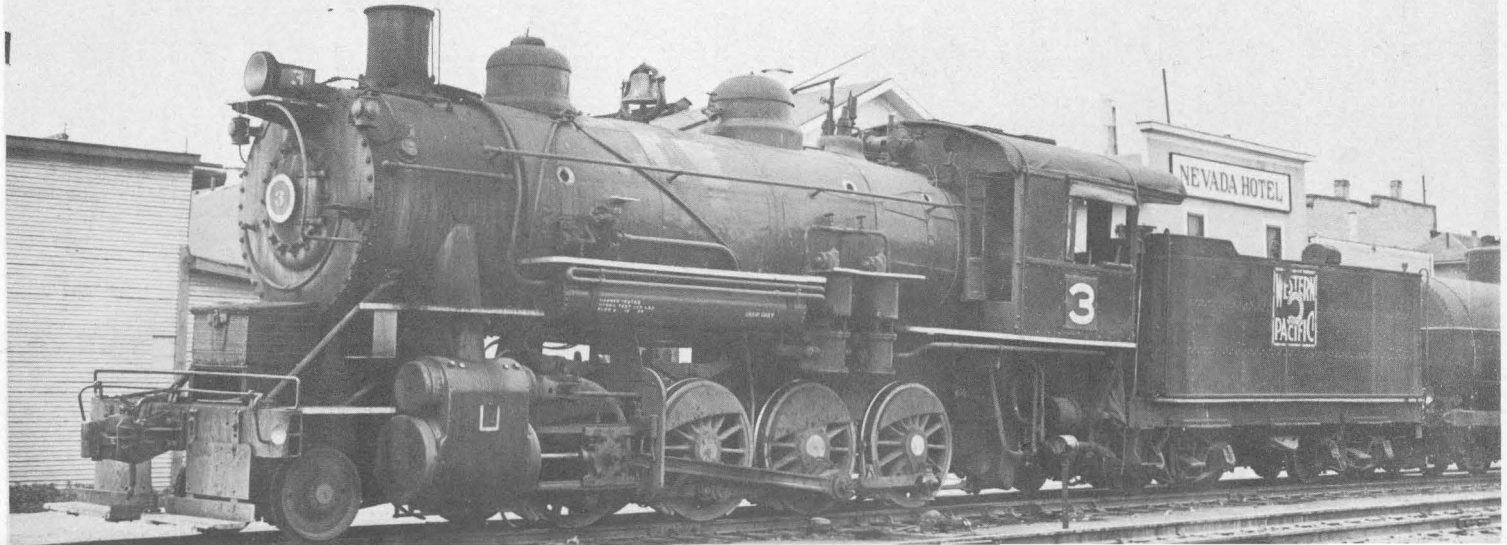




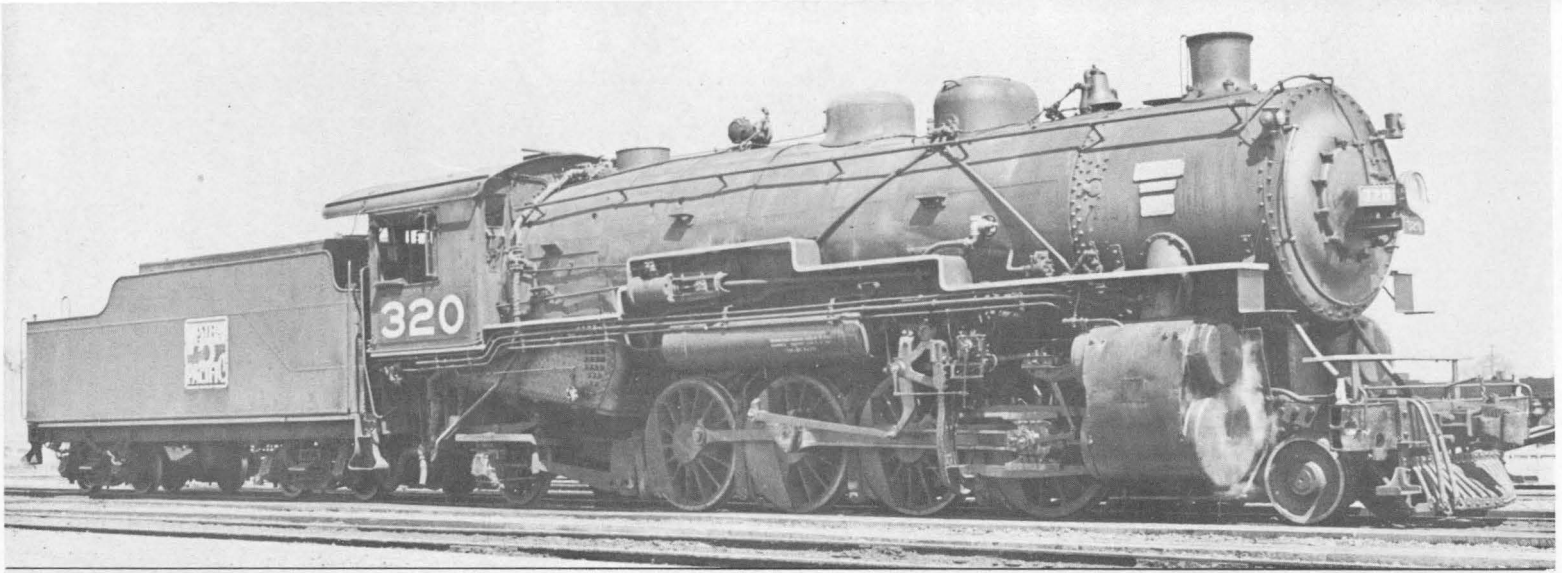
THIS WAS THE POWER OF THE "ROYAL GORGE" THE LAST FEW MONTHS IT WAS ON THE TIMETABLE. FRED STINDT PHOTO. LOWER: THE COLD, SILENT LINE. ELKO AUGUST 1949.

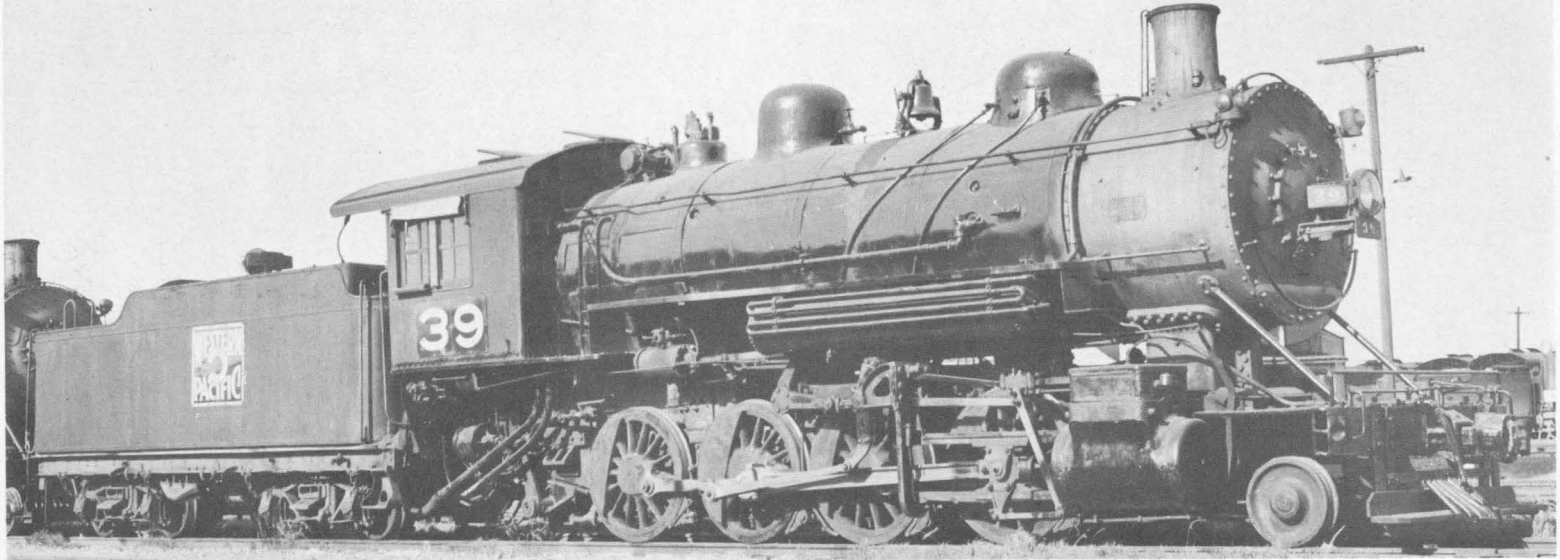






ENGINES WITH IDENTICAL SPECIFICATIONS BUT SOMEWHAT DIFFERENT IN APPEARANCE. THE L AT PORTOLA IN 1946, THE 3 AT ELKO IN 1939, BY D. S. RICHTER.

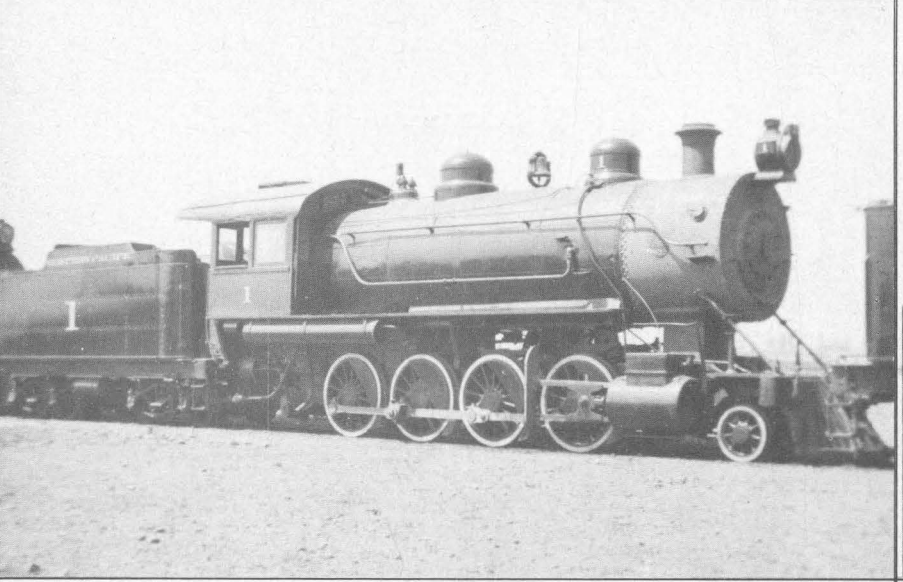




UPPER: HOW THE MIKES LOOKED BEFORE HAVING ELESCO FEEDWATER HEATER APPLIED. LOWER: AS THE ALCO CONSOLIDATIONS LOOKED AS SLIDE-VALVE ENGINES.

ENGINE 104 READY TO LEAVE SALT LAKE CITY WITH FIRST PASSENGER TRAIN, AUGUST 20, 1910. WP PHOTO.

JUST WEST OF QUINCY JUNCTION MAY 7, 1951. THE LAST RUN OF A 4-8-2 ON THE WP.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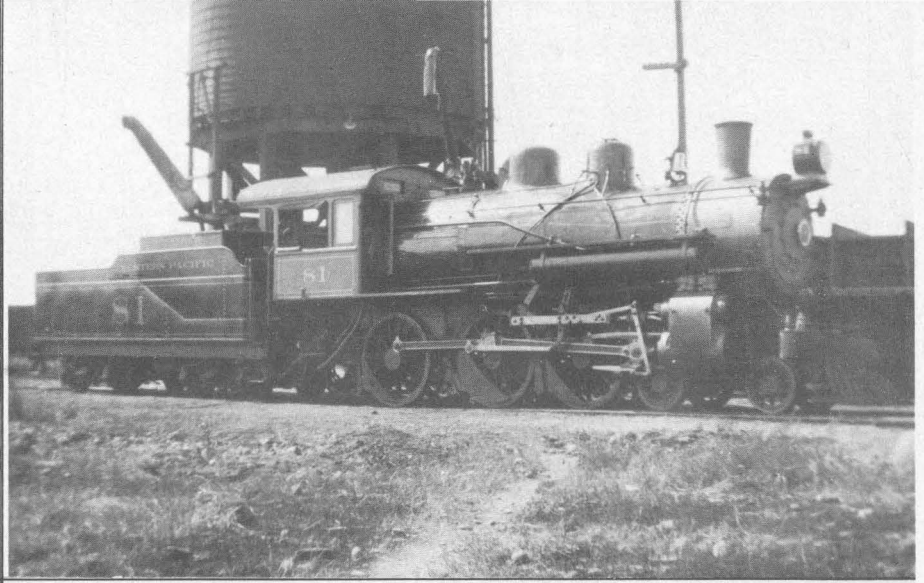
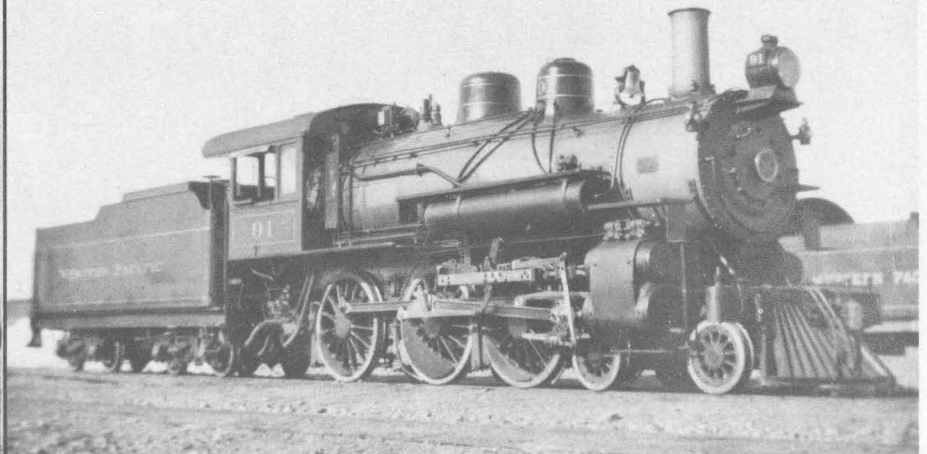

81
81


151
W. P.
151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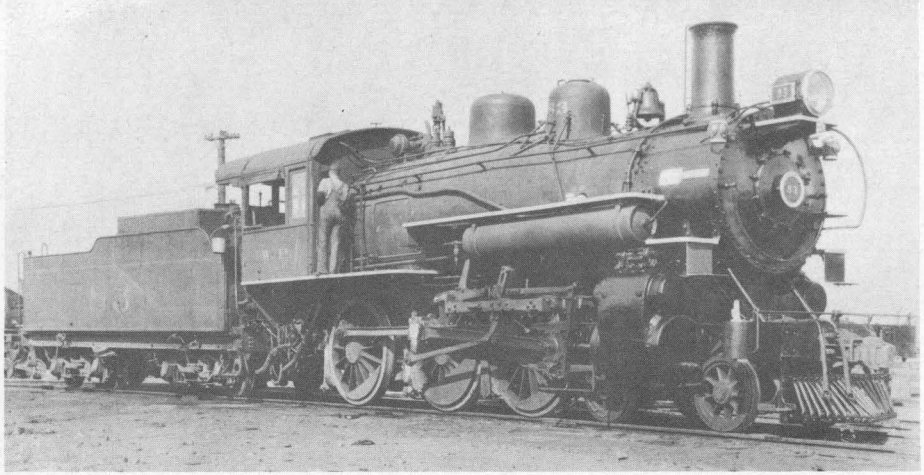
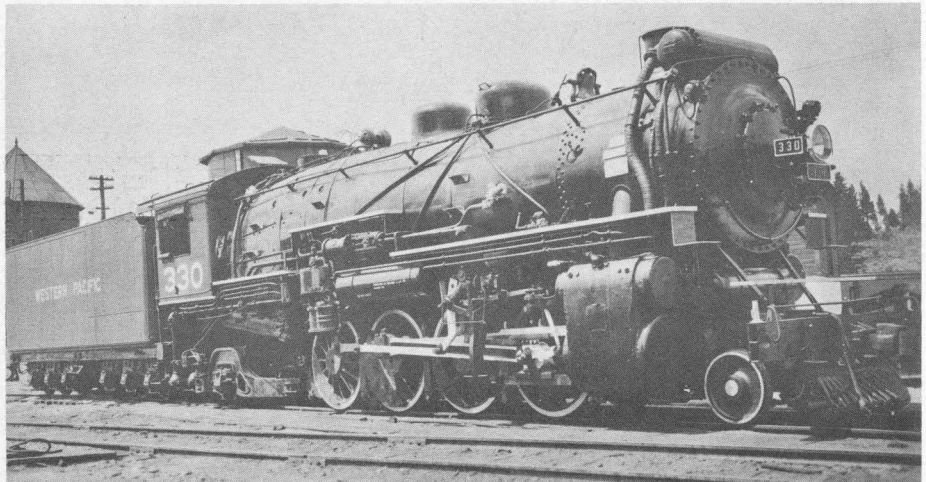


SEVERAL DIFFERENT STYLES OF STENCILING HAVE BEEN USED THROUGHOUT THE AGE OF STEAM ON THE WESTERN PACIFIC WHICH ARE ILLUSTRATED HERE. DATES ARE APPROXIMATE.



1906 TO 1908 ENGINE NO. 1 PICTURED BELOW SHOWS ENGINES AS THEY APPEARED WHEN DELIVERED AT SALT LAKE CITY IN 1906. STRIPING ON WHEELS, CAB, STEAM AND SAND DOMES AND TENDER WITH NAME IN HEAVY SERIF LETTERS ALONG CENTER OF TENDER.

1908 TO 1918 NUMBER ON DOME, SIDE OF CAB, CENTER OF SIDE OF TENDER WITH NAME IN MEDIUM SERIF LETTERS ON TOP OF SIDE OF TENDER. GENERAL STYLE FOR FREIGHT ENGINES. SEE ENGINE NO. 1 OPPOSITE PAGE.

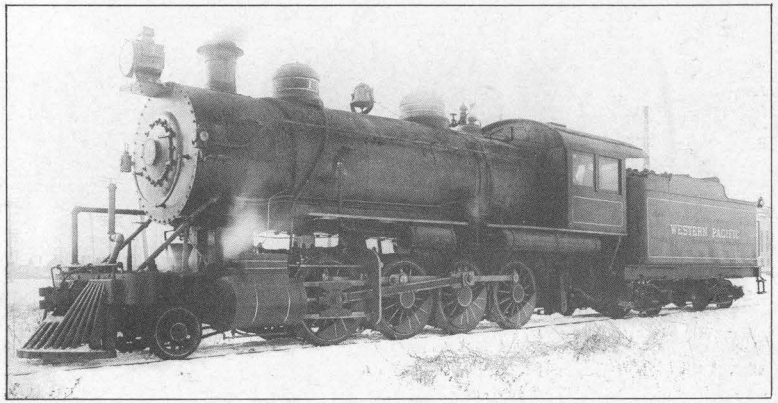
TWO GENERAL STYLES FOR PASSENGER ENGINES. ENGINE 81 SHOWS SAME STYLE AS ENGINE 1 EXCEPT THAT THERE IS STRIPING ON CAB, DOMES AND TENDER. ENGINE 91 HAS SAME STRIPING BUT THE NAME IS IN CENTER INSTEAD OF TOP OF TENDER AND NO NUMBER SHOWS ON TENDER.

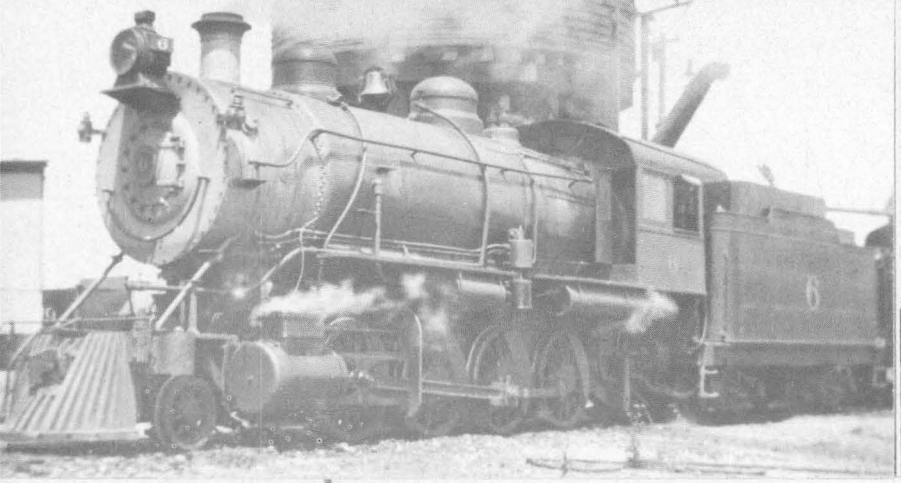
SWITCH ENGINES SAME GENERAL STYLE AS ENGINE NO. 1 EXCEPT THAT SOME OF THIS CLASS HAD INITIALS ON TOP SIDE OF TENDER INSTEAD OF NAME. SEE NO. 151 ON OPPOSITE PAGE AND COMPARE WITH NO. 155 ON PAGE 84.

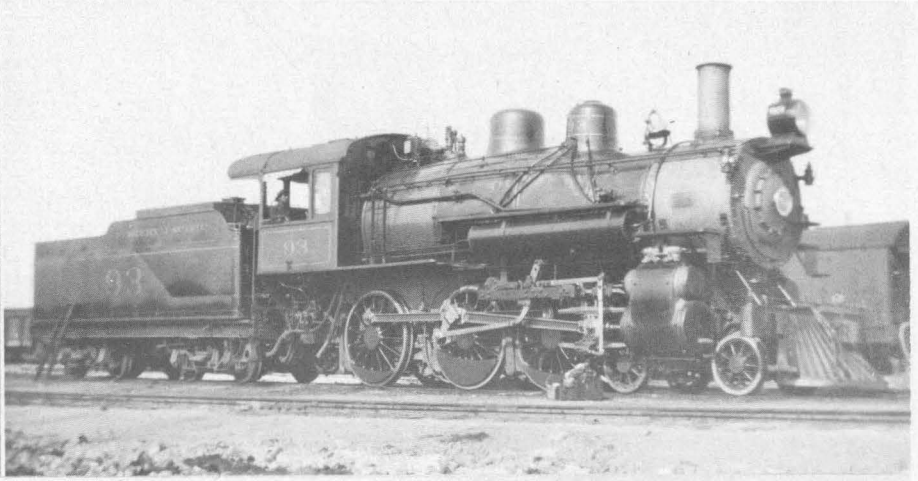
1918 TO 1927 NUMBER BUT NO STRIPING ON DOME; INITIALS ON CAB AND LARGE NUMBER PAINTED ON CENTER SIDE OF TENDER AND ALSO LARGE NUMBER ON BACK CENTER OF TENDER. SEE ENGINE 83.

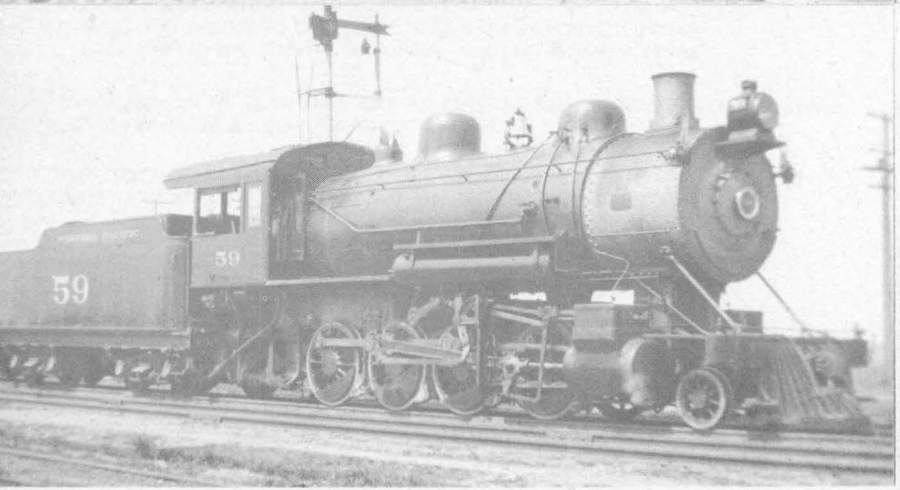
1925 TO 1929 LARGE NUMBER PAINTED ON CAB AND NAME IN MEDIUM-HEAVY SANS-SERIF LETTERS ON CENTER SIDE OF TENDER. SEE ENGINE 330.

1928 TO 1953 ENAMEL NUMBER PLATES ON CAB AND ENAMEL MEDALLION ON TENDER WITH SMALL PAINTED NUMBERS ON BOTH SIDES ON REAR OF TENDER FRAME.

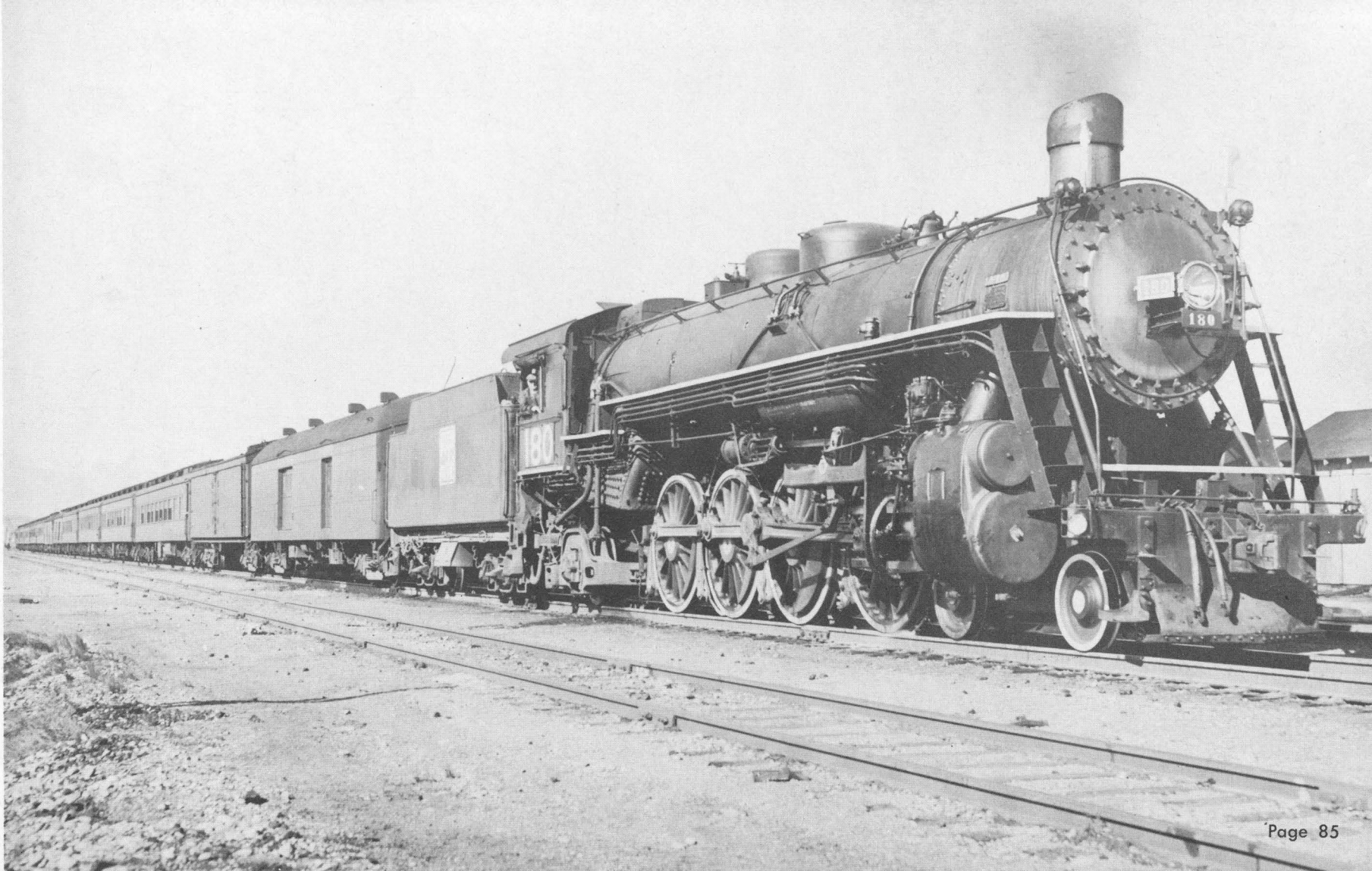


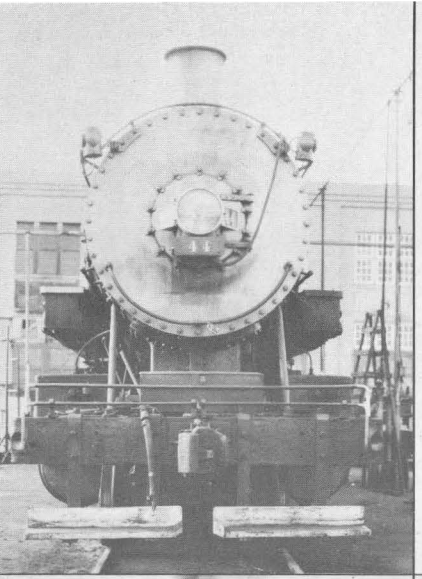






IN 1909 WHEN THE RAILS WERE JOINED AT KEDDIE, THE WESTERN PACIFIC WAS A NEW RAILROAD FROM THE GROUND UP, INCLUDING 115 NEW LOCOMOTIVES. HERE ARE SHOWN EARLY PHOTOS, (ALL BY R. H. McFARLAND) OF TYPICAL EXAMPLES OF EACH OF THE FOUR GROUPS, TWENTY BALDWIN AND FORTY-FIVE AMERICAN CONSOLIDATIONS, THIRTY-SIX AMERICAN PASSENGER AND TWELVE SWITCH ENGINES.


180
180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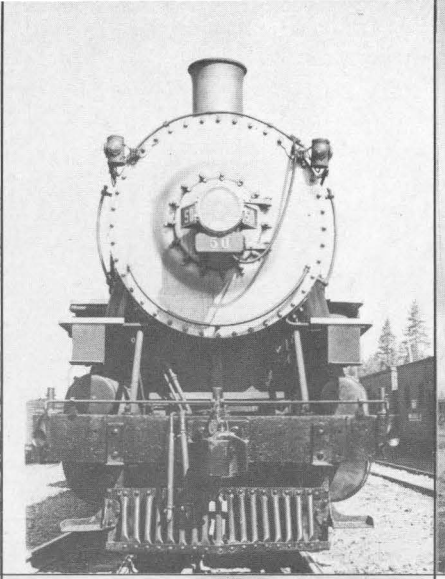
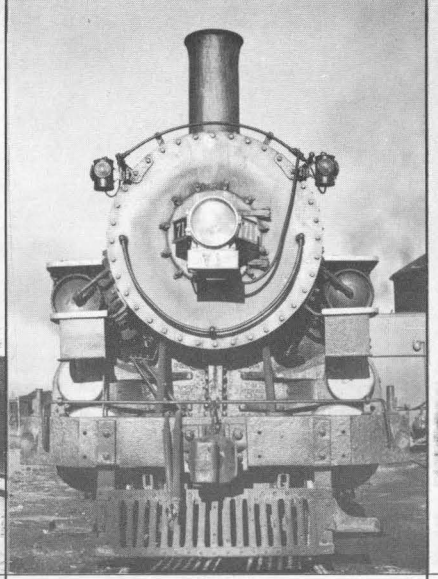
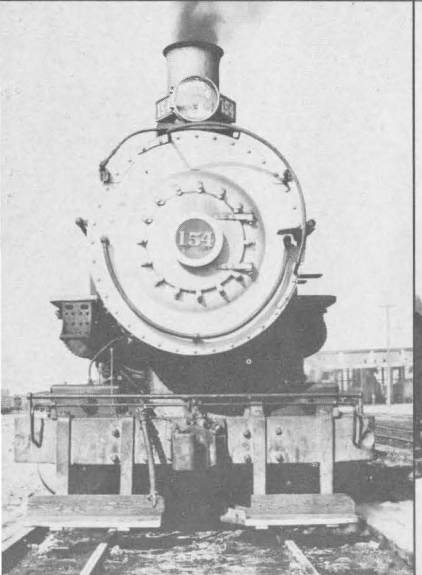
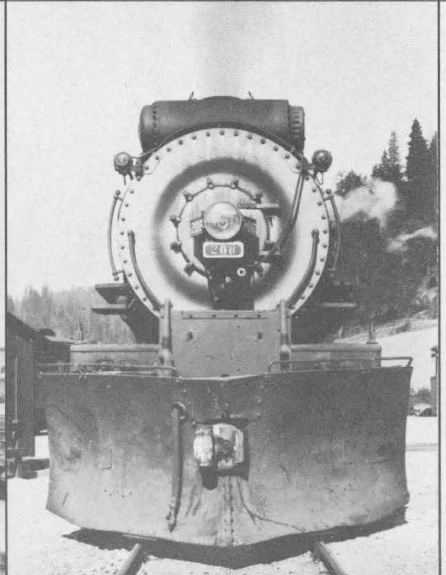

50




176


154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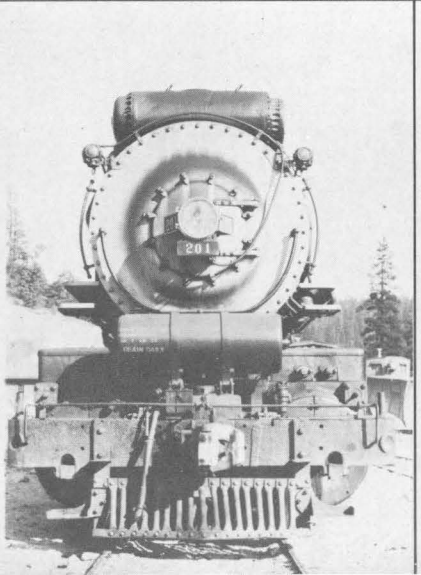
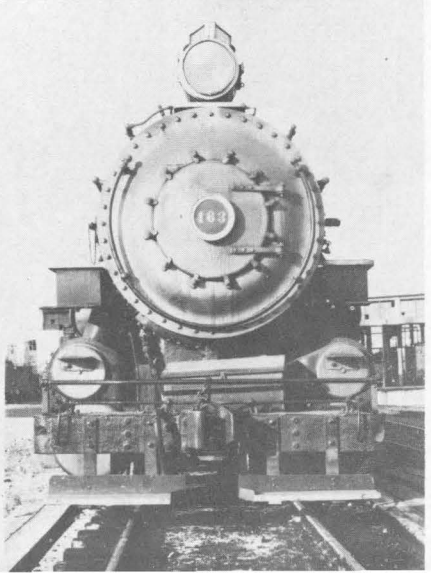
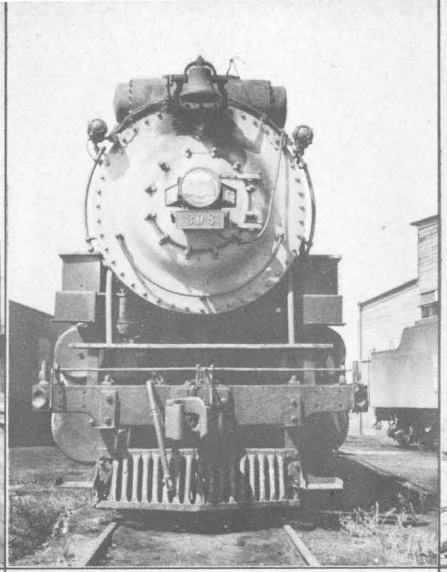

201


182


301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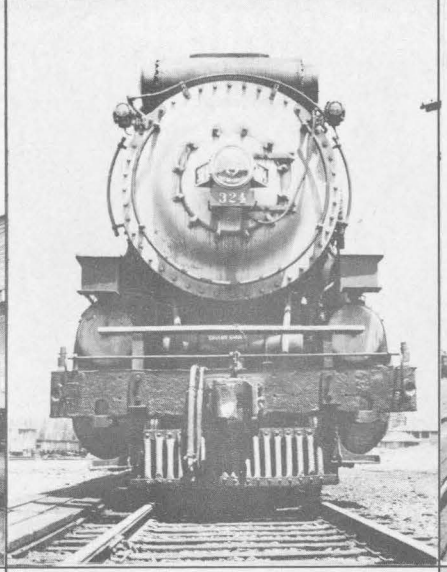
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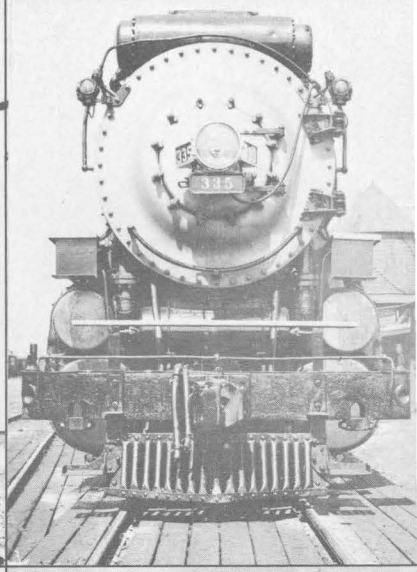
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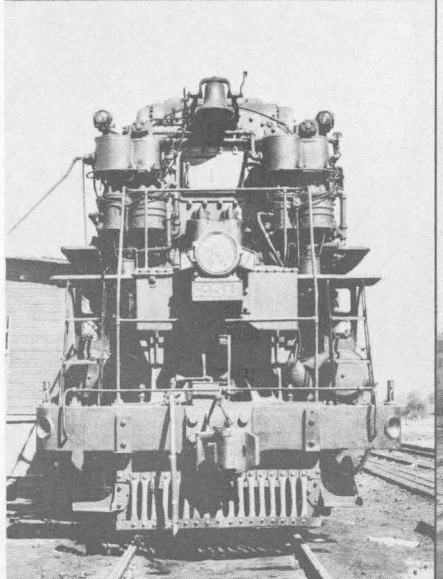
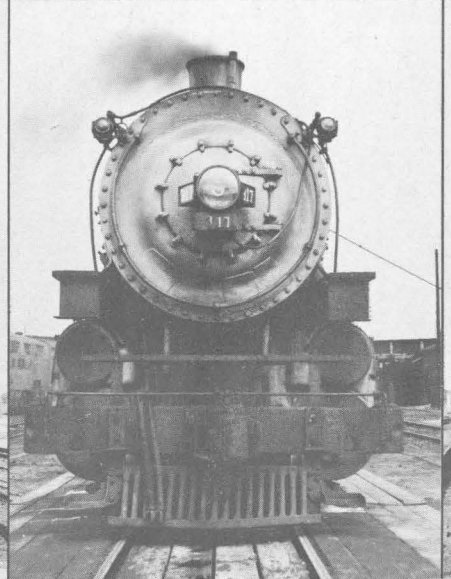
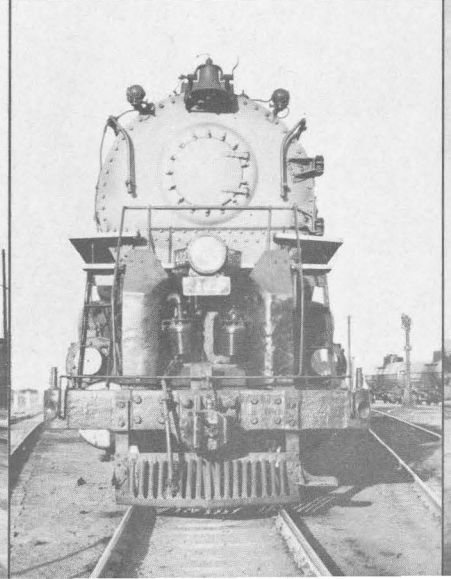
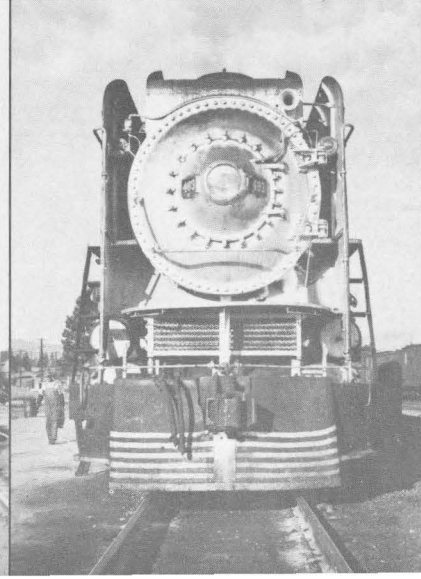



317

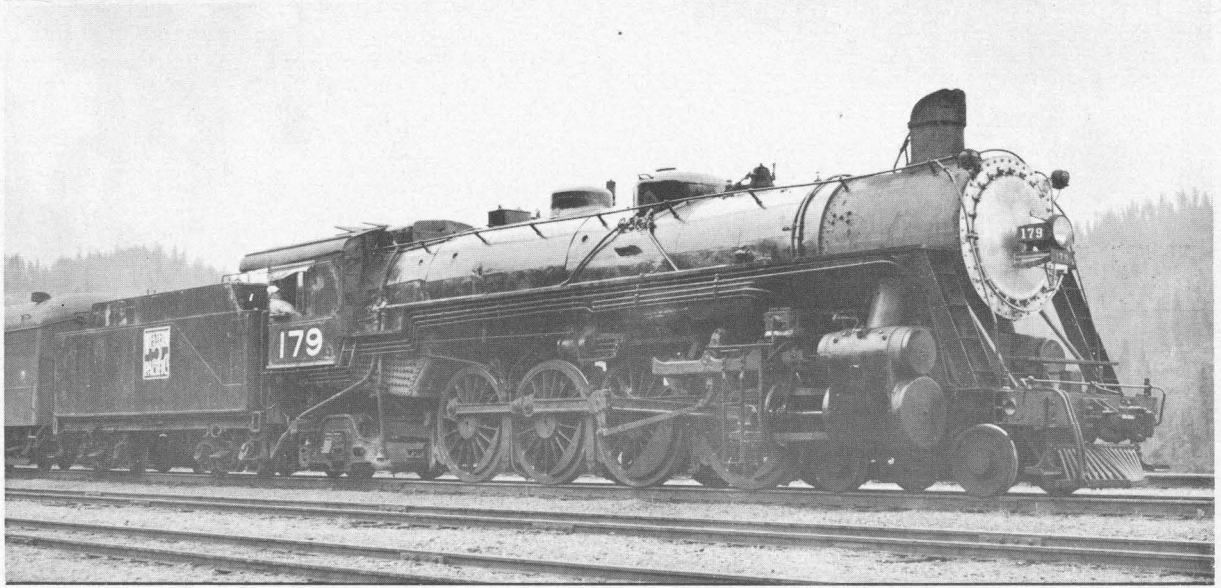


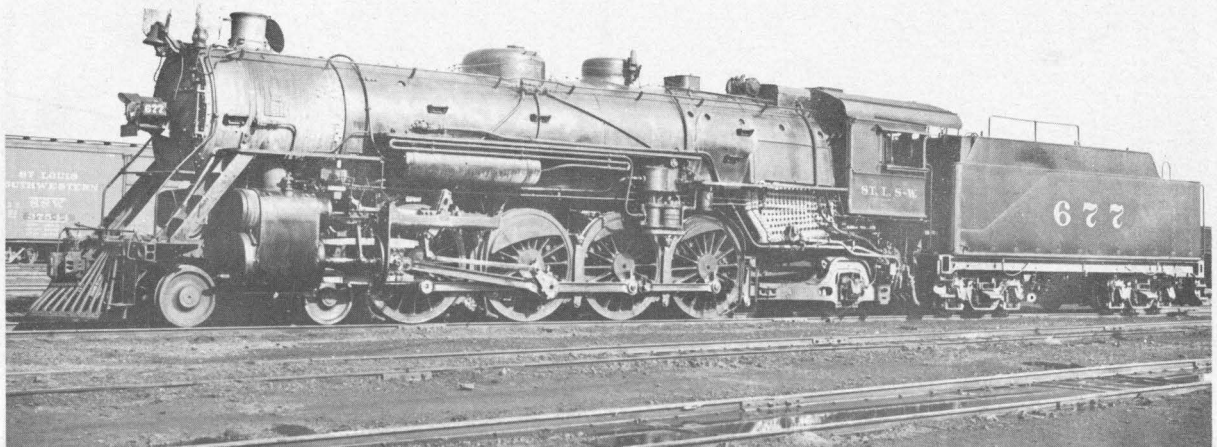


AN EXTRA A FEW MILES WEST OF PORTOLA SEPTEMBER 1940.
WHITTAKER PHOTO.

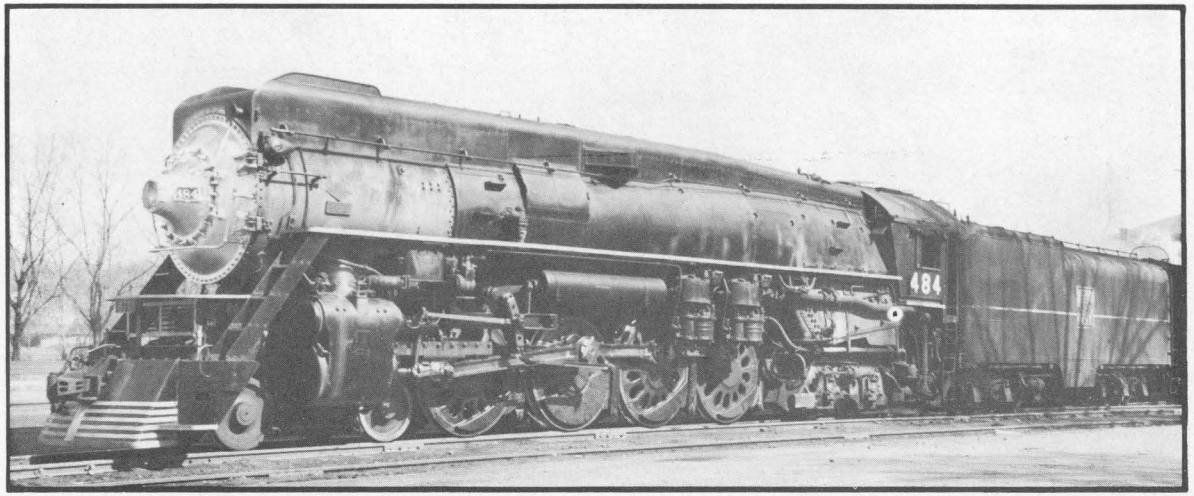
EASTBOUND BELOW PULGA JULY 3, 1939.

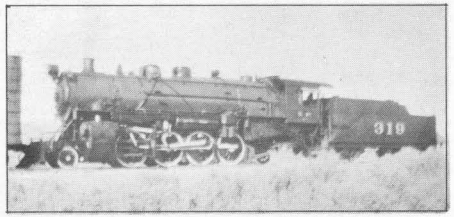
THE COTTON BELT ALSO GOT SOME 4-8-2'S FROM THE FLORIDA EAST COAST. HERE'S HOW THEY COMPARE WITH THE WP'S JOBS. 677 AT EAST ST. LOUIS IN MARCH 1937 BY R. J. FOSTER. MANY OF YOU WILL RECOGNIZE THE TIME AND PLACE OF THE 179—KEDDIE, MAY 7, 1951.

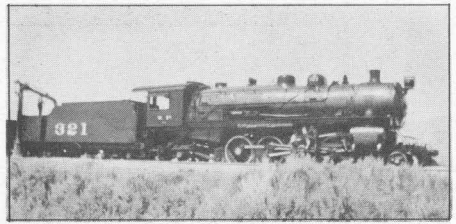


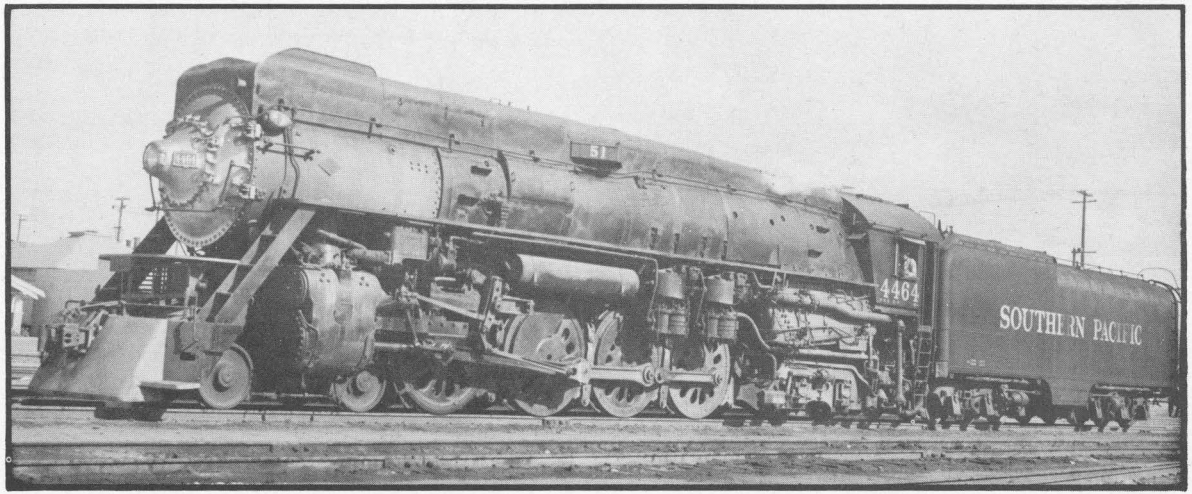


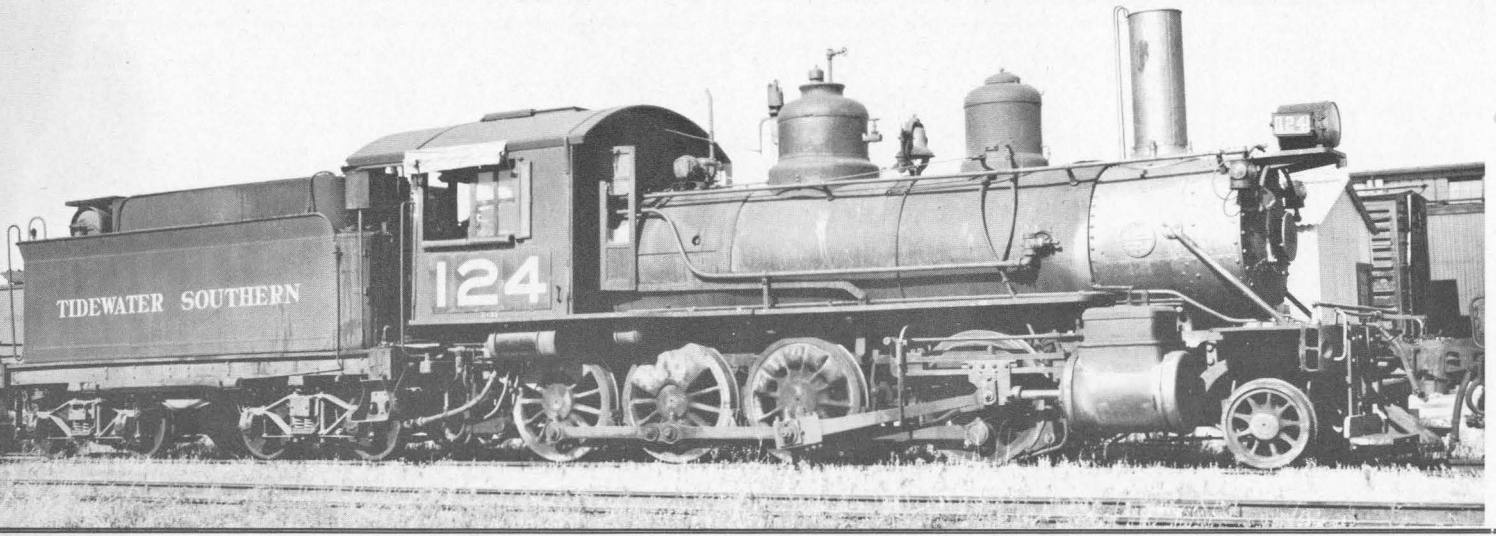
A COMPARISON OF THE SP GS 6'S WITH THE WP 4-8-4'S.



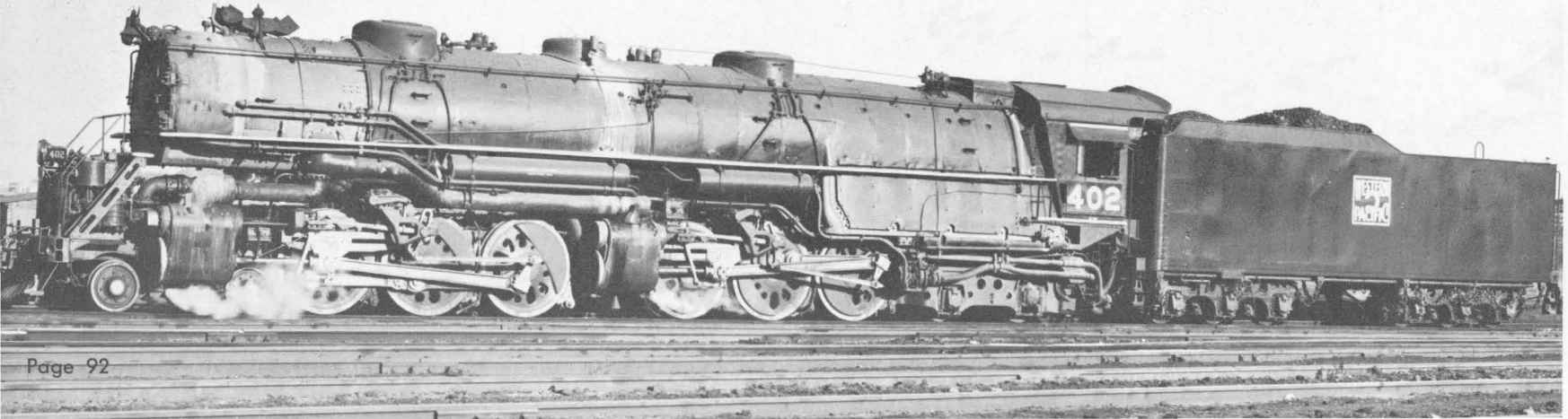


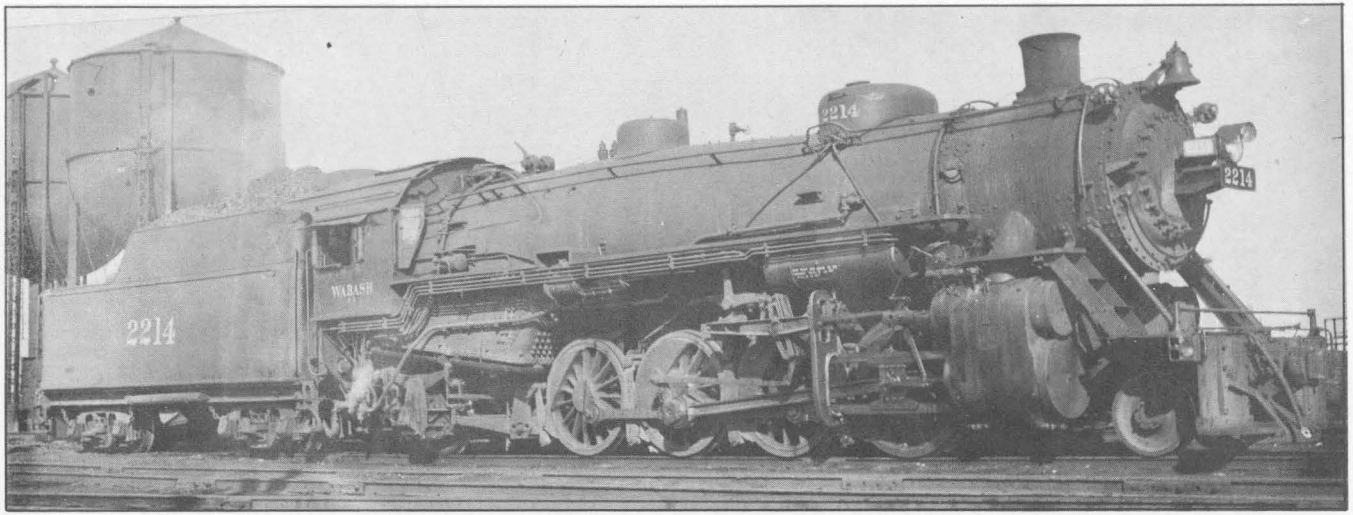




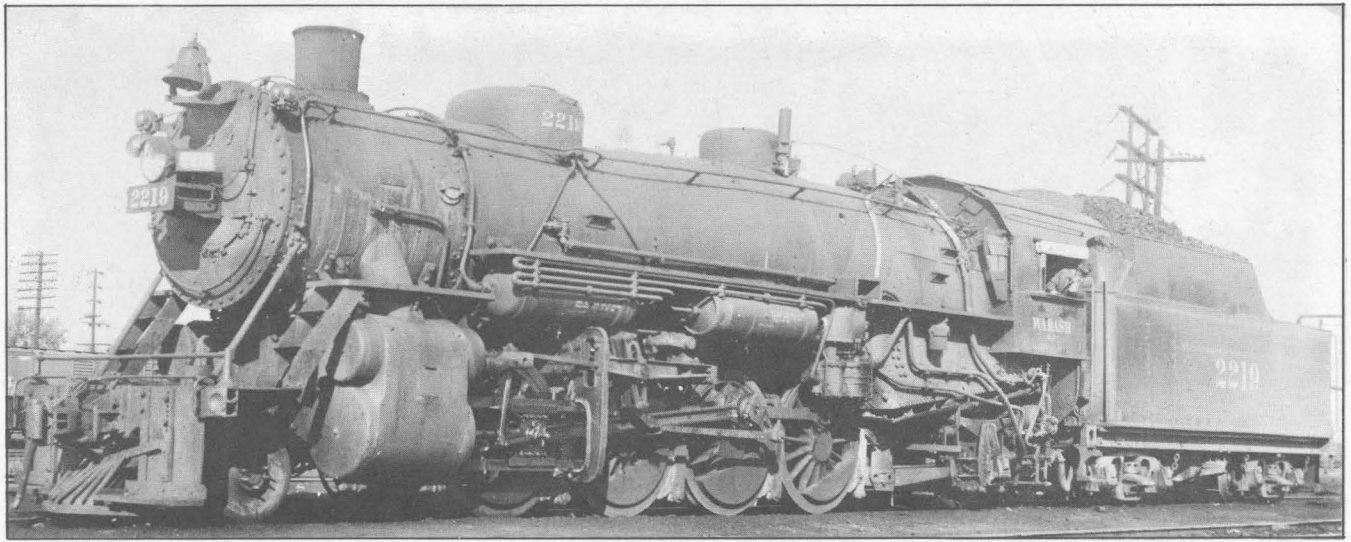


THE OLD AND THE NEW, YET SCRAPPED ONLY THREE YEARS APART. THE 124 AT STOCKTON IN JUNE OF 1947 WITH TENDER FROM TIDEWATER SOUTHERN NO. 1, AND THE 402 AT SALT LAKE IN AUGUST OF 1949.

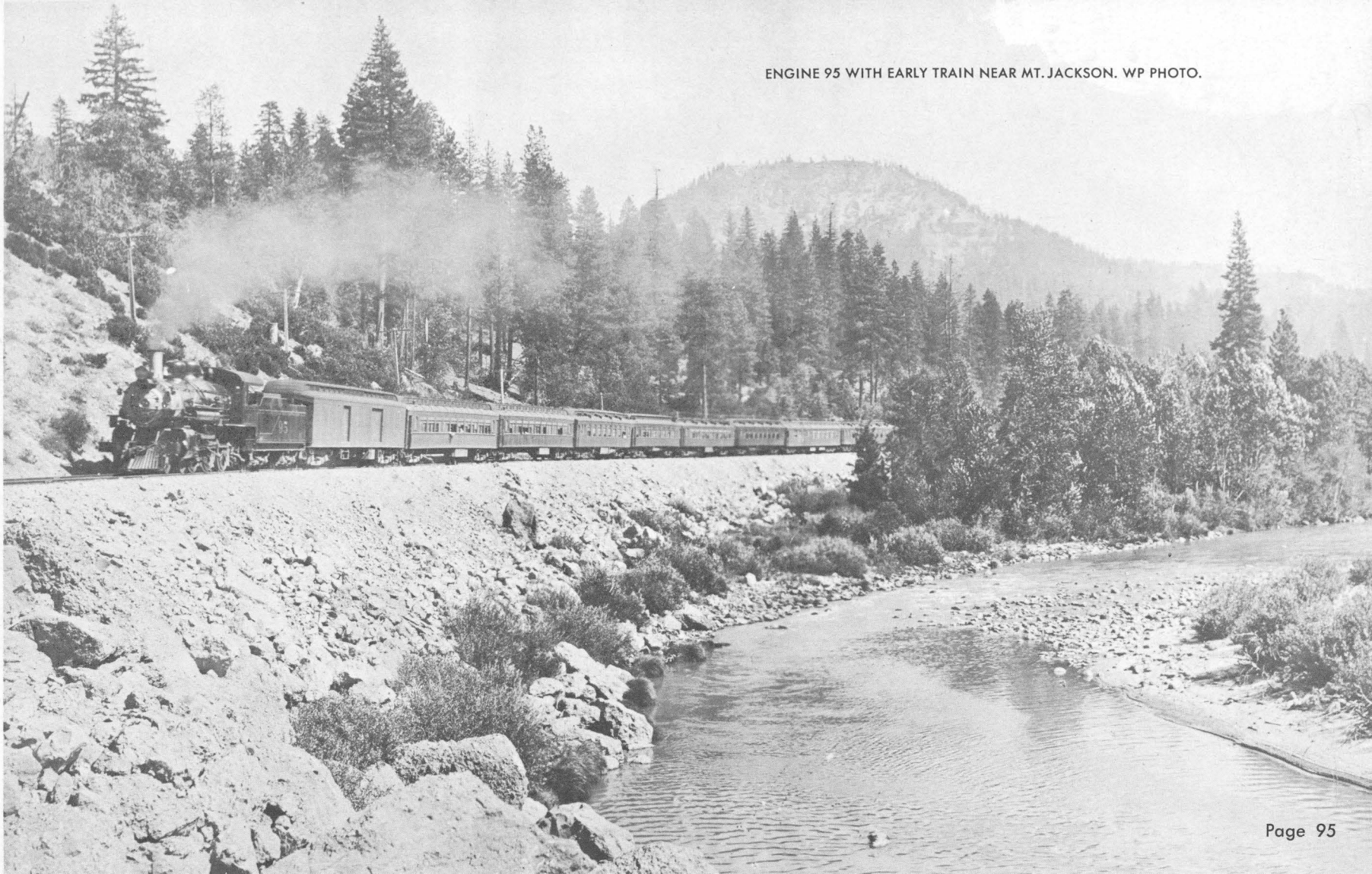




FIRST 322 AND FIRST 325 AS THEY LOOKED ON THE WABASH. ANYONE GOT PICTURES OF THESE ENGINES ON THE WP?



ENGINE 94 AND FIRST PASSENGER TRAIN, SPANISH CREEK TRESTLE NEAR KEDDIE, AUGUST 21, 1910. WP PHOTO.



ENGINE 95 WITH EARLY TRAIN NEAR MT. JACKSON. WP PHOTO.

UPPER: AT HAWLEY MAY 13, 1950. BELOW, FEATHER RIVER EXPRESS AT NILES, JUNE 29, 1947. WHITTAKER PHOTOS.

EXTRA 256 EAST AT QUARTZ JUNE 1947. PENNINGTON PHOTO.

A RAIL FAN EXCURSION BETWEEN TUNNELS 31 AND 32, JUST WEST OF KEDDIE. WHITTAKER PHOTO.

NICE FOR THE RAIL FAN BUT ROUGH ON THE OPERATING DEPARTMENT. IT TOOK THREE OF THESE "LITTLE MALLEYS" TO HOIST A TONNAGE TRAIN OUT OF KEDDIE AND CRESCENT MILLS AND UP TO BIEBER.

DATE, LOCATION AND PHOTOGRAPHER UNKNOWN. COLLECTION BILL PENNINGTON.

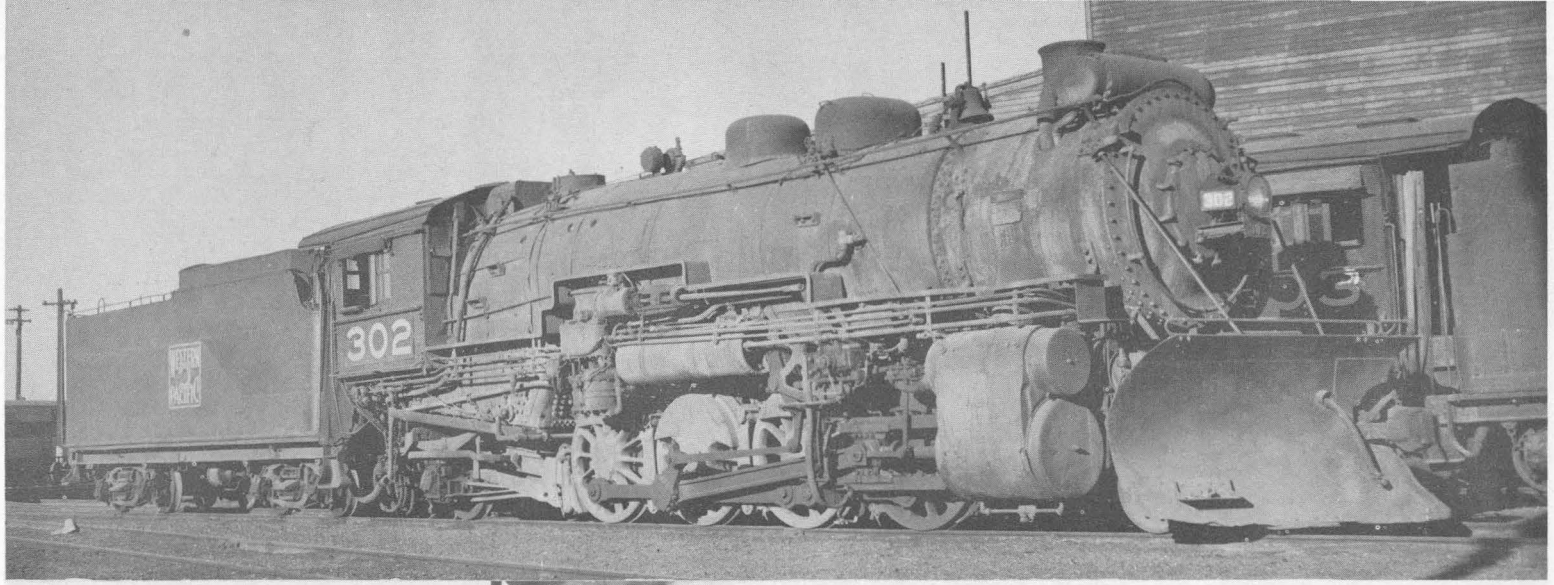
PHOTOGRAPHER AND LOCATION OF PICTURE UNKNOWN, BUT THIS IS PROBABLY ON THE CALPINE BRANCH IN 1923.

ENGINE 172 ON NO. 1, THE SCENIC LIMITED, AT ALTAMONT, MAY 30, 1939.

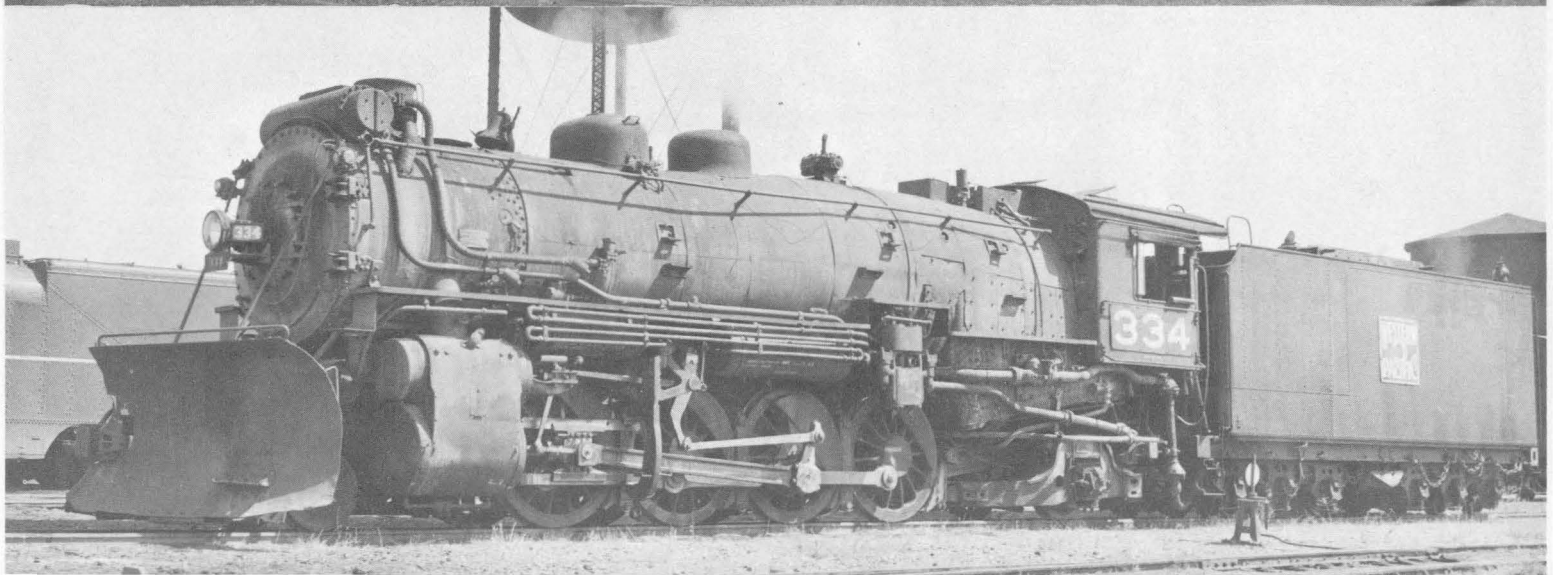
UPPER: NO. 39, EXPOSITION FLYER, AT HAWLEY SEPTEMBER 1, 1940. LOWER: TAX ASSESSORS SPECIAL AT STOCKTON OCTOBER 15, 1939.

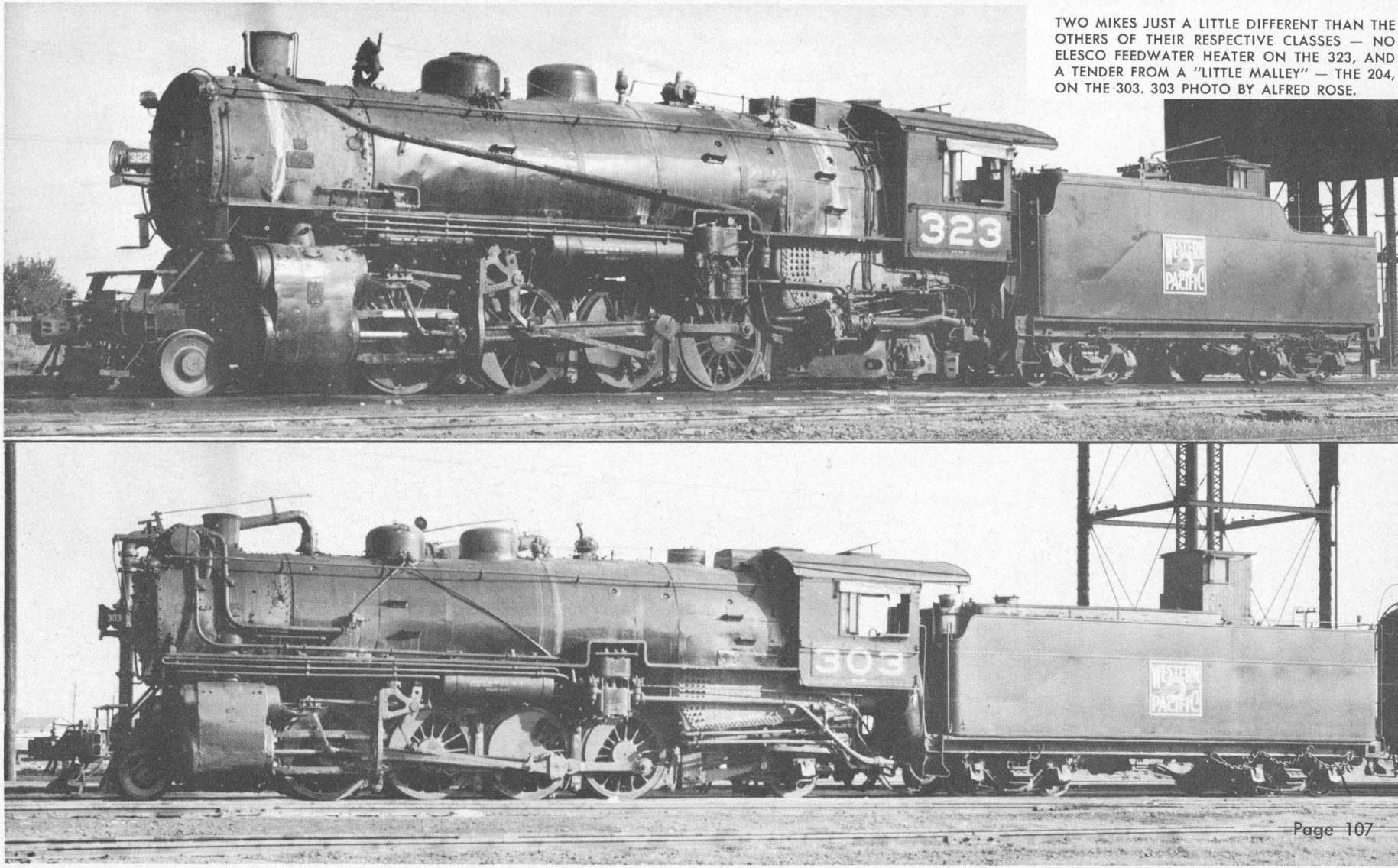
UPPER: TURNING THE FEATHER RIVER EXPRESS ON THE WYE AT PORTOLA. WHITTAKER PHOTO. LOWER: THE "PAUL BUNYAN SPECIAL." COLLECTION OF FRED STINDT.

ABOVE, NO. 4, THE FEATHER RIVER EXPRESS, AT DELLAKER SEPTEMBER 3, 1939, ENGINE 60. BELOW, NO. 12, FEATHER RIVER EXPRESS AT KEDDIE, JULY 4, 1940.



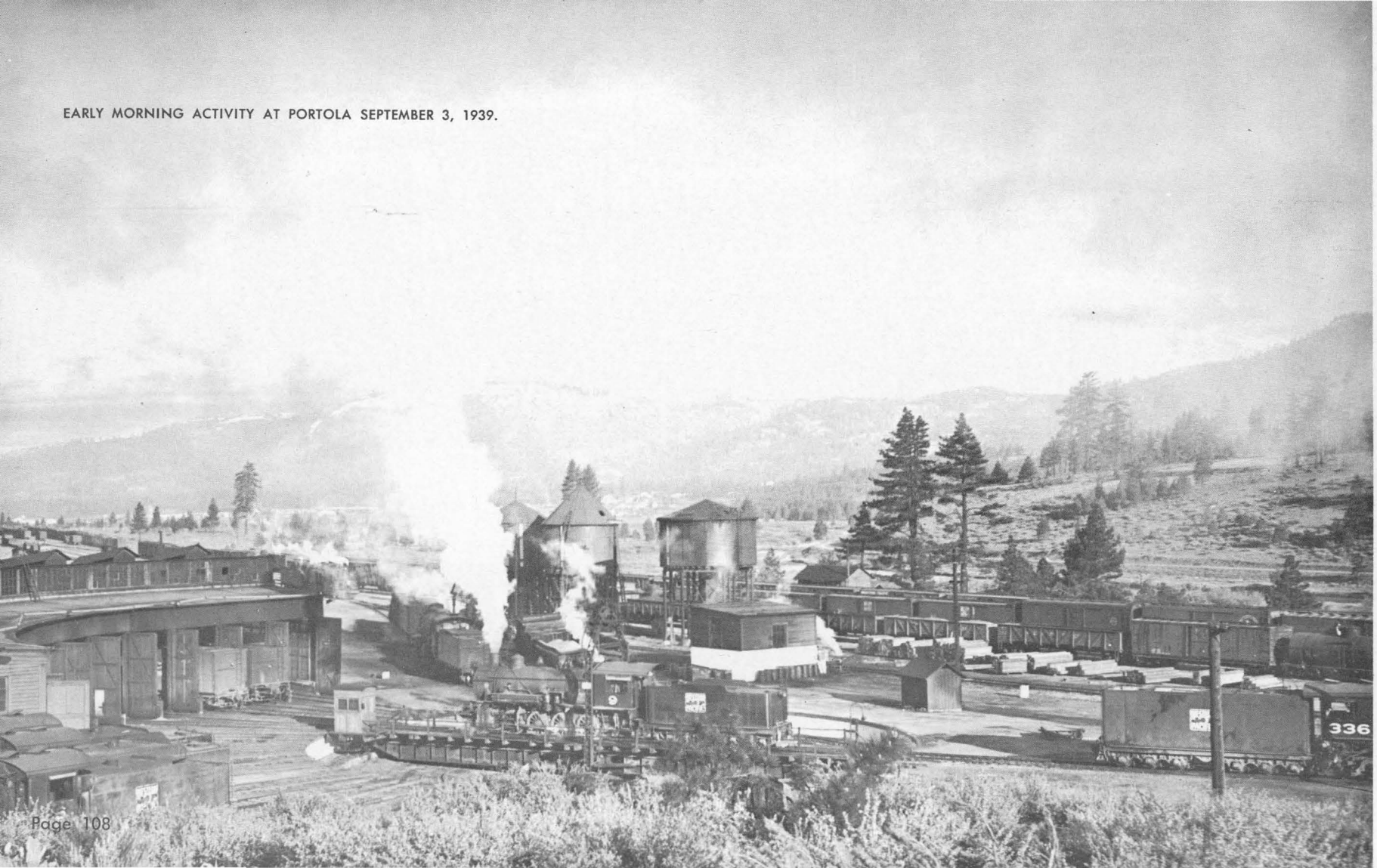
IT WASN'T TOO OFTEN
THAT YOU SAW
A WP ENGINE WITH
A SNOWPLOW.

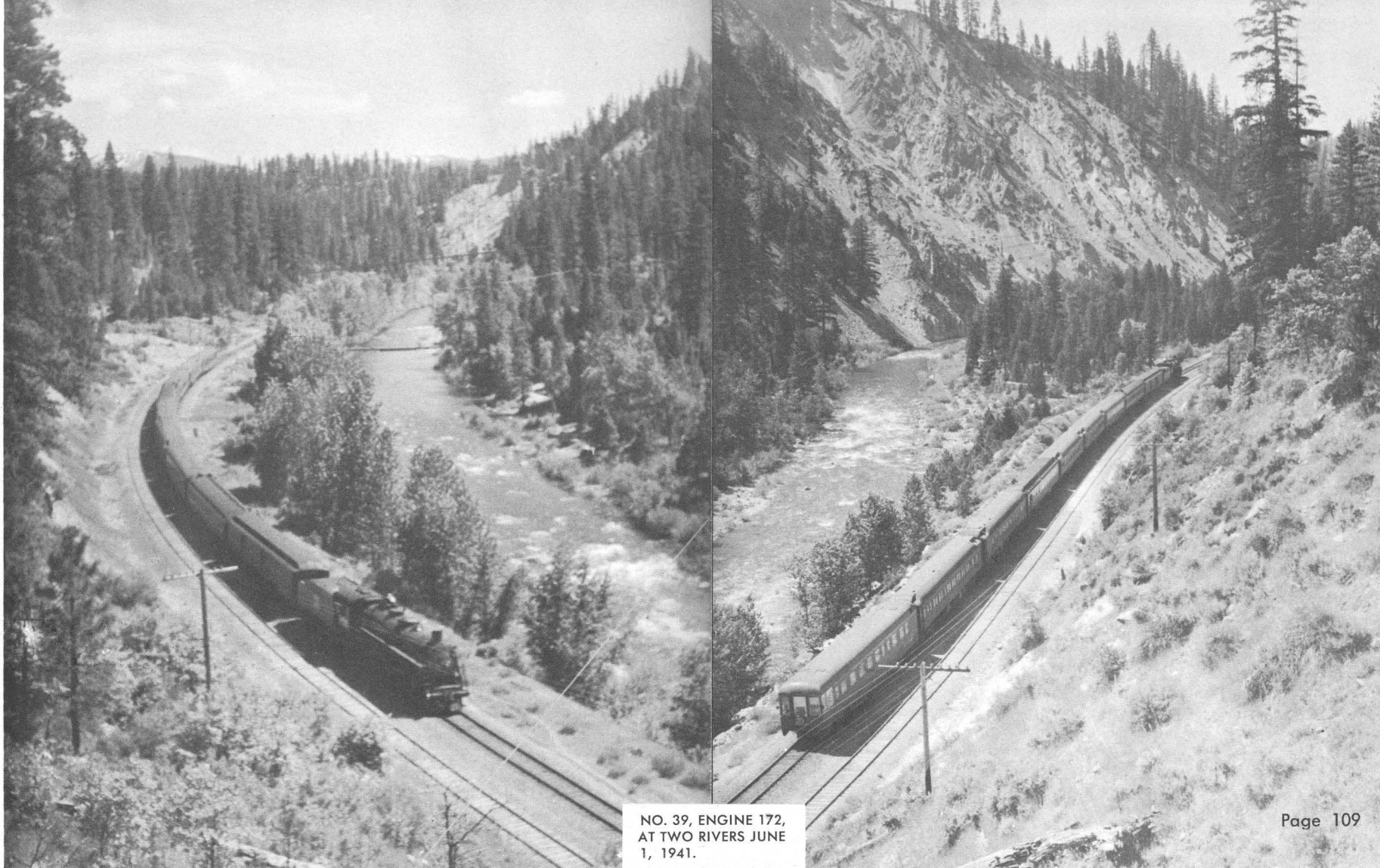




TWO MIKES JUST A LITTLE DIFFERENT THAN THE OTHERS OF THEIR RESPECTIVE CLASSES — NO ELESCO FEEDWATER HEATER ON THE 323, AND A TENDER FROM A "LITTLE MALLEY" — THE 204, ON THE 303. 303 PHOTO BY ALFRED ROSE.

EARLY MORNING ACTIVITY AT PORTOLA SEPTEMBER 3, 1939.





NO. 39, ENGINE 172, AT TWO RIVERS JUNE 1, 1941.

EXCURSION TRAIN AT QUINCY JUNCTION MAY 15, 1950. LOWER, ENGINE 324 WITH NO. 39 AT WILLIAMS LOOP, SEPTEMBER 2, 1939.

NO. 39 WITH ENGINE 326 LEAVING KEDDIE MAY 1940. WHITTAKER PHOTO.

STOCKTON BOUND FROM OROVILLE, SEPTEMBER 2, 1939.

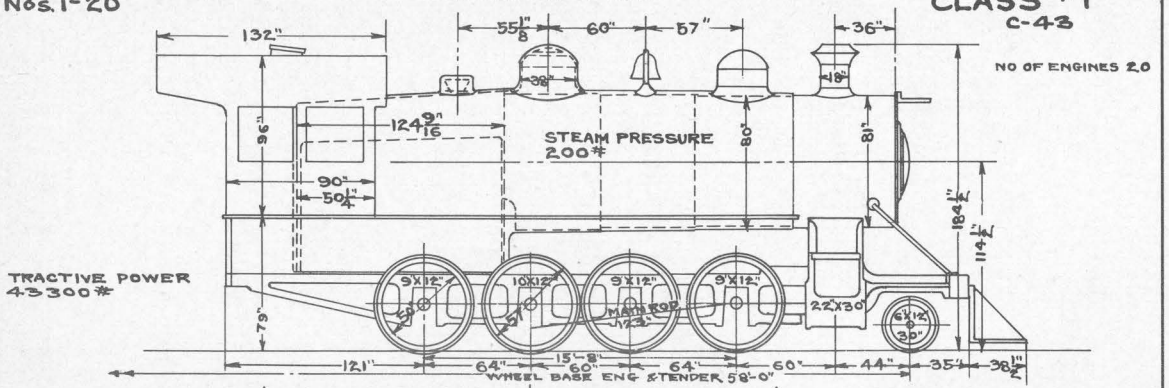
ON THE READY TRACKS AT KEDDIE ON A WARM SPRING AFTERNOON IN 1938.

Nos. 1-20

CONSOLIDATION FREIGHT

CLASS #1
C-43

NO OF ENGINES 20



FIRE BOX		
LENGTH	INSIDE	121"
HEIGHT	FRONT	80 5/8"
"	BACK	78 1/2"
WIDTH TOP	FRONT	72"
"	" BACK	60"
"	BOTTOM	40"

* TUBES	
NUMBER	390
DIAMETER	2"
LENGTH	
*OVER TUBE SHEETS	14'-5"

HEATING SURFACE	
TUBES	SQ.FT. 2912
FIRE BOX	SQ.FT. 217
TOTAL	SQ.FT. 3129

BUILT BALDWIN. SEPT TO NOV 1906

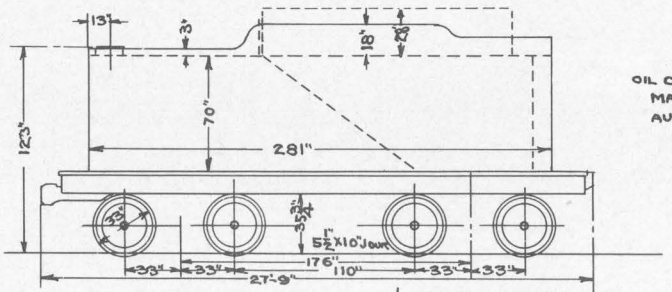
LOADED WEIGHTS	
WEIGHT ON DRIVERS	185000 LBS
" ON TRUCK	22000 LBS
" OF ENGINE TOTAL	207000 LBS
" OF ENGINE & TENDER	360000 LBS

LIGHT WEIGHT ENGINE 183000 "

Nos 1-20

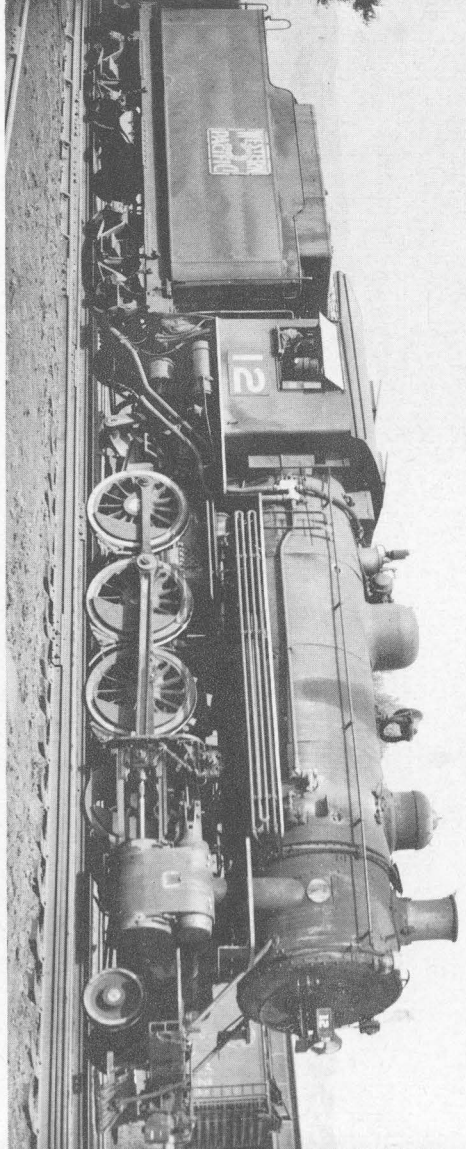
CLASS #1

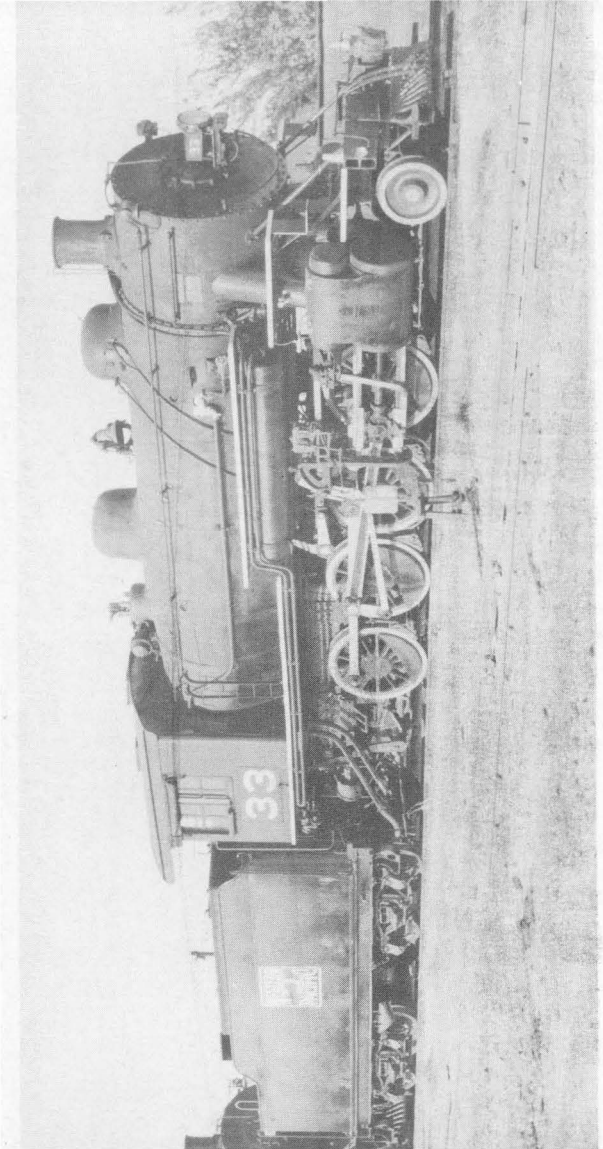
NO OF TENDERS 20



OIL CAPACITY
MAIN TANK 1466
AUX TANK 2090

WATER CAPACITY	8000 GALS.
FUEL OIL CAPACITY	3556 GALS.
COAL CAPACITY	14 TONS.
WEIGHT LIGHT	58300 LBS
WEIGHT LOADED	153000 LBS.



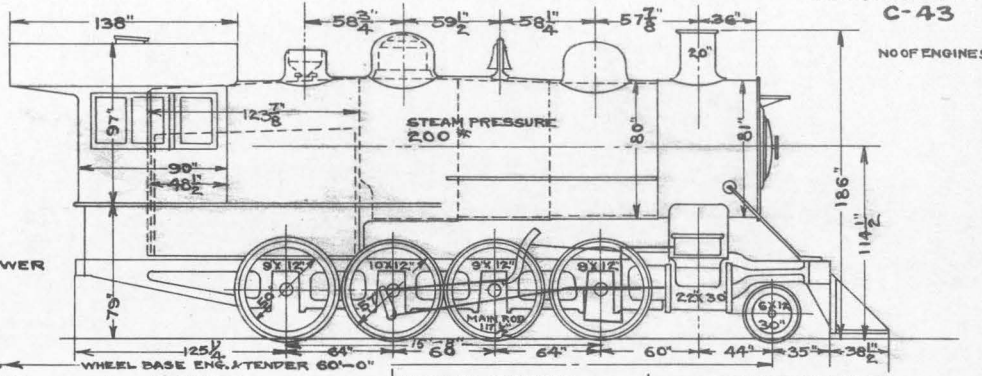


Nos 21-65

CONSOLIDATION FREIGHT

CLASS #21
C-43

NO OF ENGINES 45



FIRE BOX	
LENGTH INSIDE	121"
HEIGHT FRONT	80 1/2"
" BACK	78 5/8"
WIDTH TOP FRONT	72
" BACK	60"
" BOTTOM	40"

* TUBES	
NUMBER	380
DIAMETER	2"
LENGTH	
* OVER TUBE SHEETS	14'-5"

HEATING SURFACE	
TUBES SQ FT.	2852
FIRE BOX SQ FT.	218
TOTAL SQ FT.	3070

LOADED WEIGHTS	
WEIGHT ON DRIVERS	184000 LBS
" ON TRUCK	19000 LBS
" OF ENGINE TOTAL	203000 LBS
" OF ENGINE & TENDER	358000 LBS

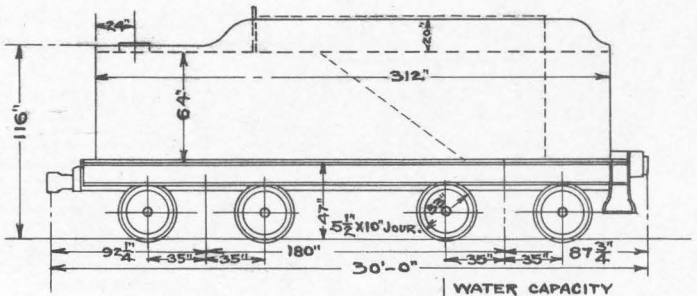
BUILT SCHENECTADY WORKS AUG.-SEPT. 1909

LIGHT WEIGHT ENGINE 179000#

Nos 21-65

CLASS #21

NO OF TENDERS 45



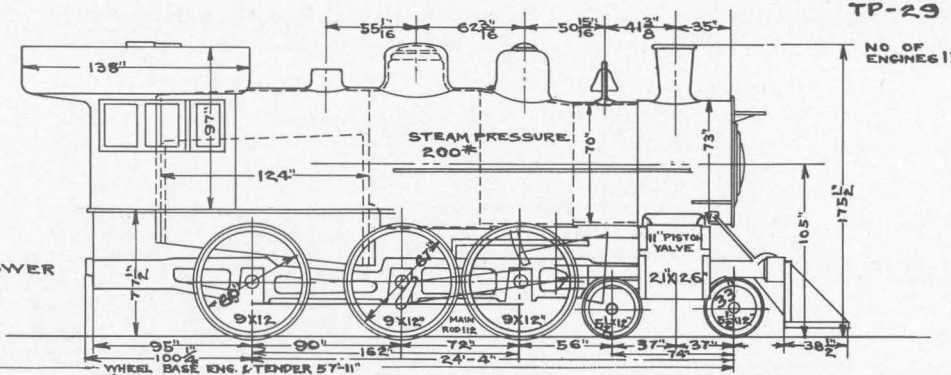
WATER CAPACITY	8000 GALS.
FUEL OIL CAPACITY	3000 GALS.
COAL CAPACITY	14 TONS
WEIGHT LIGHT	60300 LBS.
WEIGHT LOADED	155000 LBS.

Nos 71-85

10 WHEEL PASSENGER

CLASS # 71
TP-29

NO OF ENGINES 15



TRACTIVE POWER 29100

FIRE BOX	
LENGTH INSIDE	120 1/8"
HEIGHT FRONT	80"
" BACK	61"
WIDTH TOP FRONT	67"
" " BACK	61"
" BOTTOM	40 1/4"

* TUBES	
NUMBER	347
DIAMETER	2"
LENGTH OVER TUBE SHEETS	13'-3 13/16"

HEATING SURFACE	
TUBES SQ. FT.	2404
FIRE BOX SQ. FT.	193
TOTAL SQ FT.	2597

BUILT BROOKS WORKS. NOV.-DEC. 1908

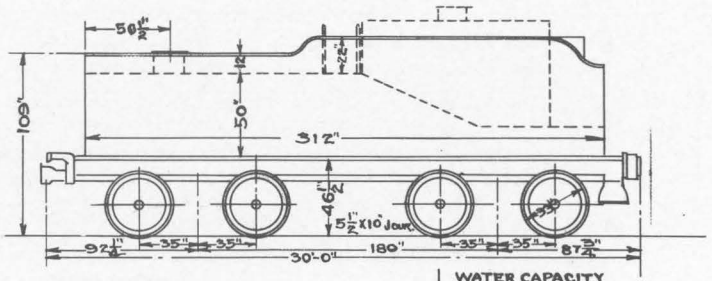
LOADED WEIGHTS	
WEIGHT ON DRIVERS	135000 LBS.
WEIGHT ON TRUCK	46000 LBS.
WEIGHT OF ENGINE TOTAL	181000 LBS.
WEIGHT OF ENGINE & TENDER	308460 LBS.

LIGHT WEIGHT ENGINE 152000 "

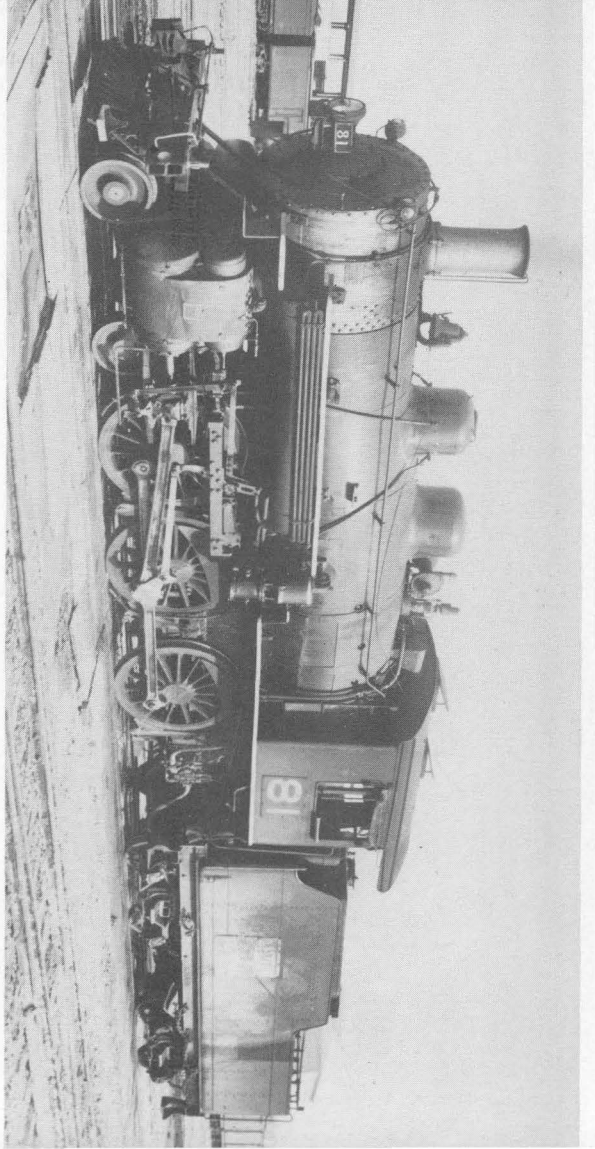
Nos 71-85

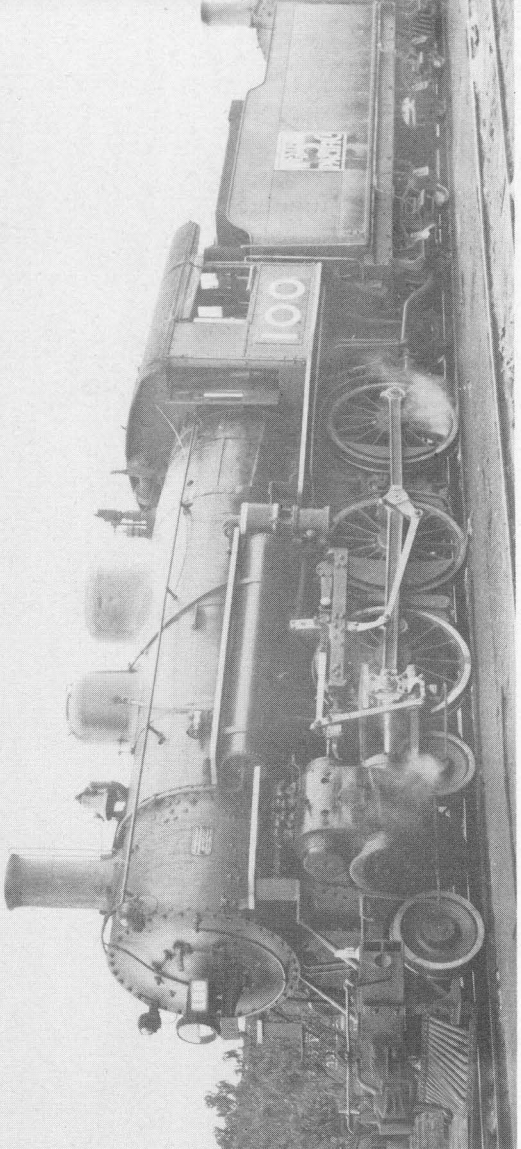
CLASS # 71

NO OF TENDERS 15



WATER CAPACITY	6000 GALS.
FUEL OIL CAPACITY	3070 GALS.
COAL CAPACITY	12 TONS
WEIGHT LIGHT	53420 LBS.
WEIGHT LOADED	127460 LBS.





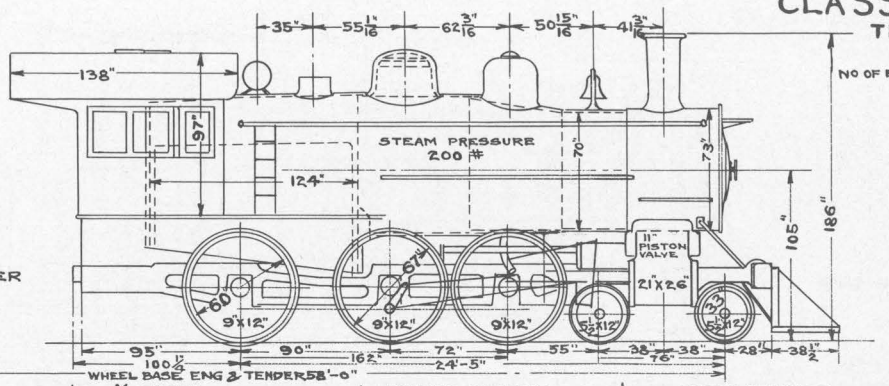
Nos. 86-106

10 WHEEL PASSENGER

CLASS 86

TP-29

NO OF ENGINES 21



TRACTIVE POWER 29100 #

FIREBOX	
LENGTH IN SIDE	120 1/8"
HEIGHT FRONT	80"
" BACK	61"
WIDTH TOP FRONT	67"
" " BACK	61"
" BOTTOM	40 1/4"

* TUBES	
NUMBER	347
DIAMETER	2"
LENGTH OVER TUBE SHEETS	13'-3 13/16"

HEATING SURFACE	
TUBES SQ FT.	2404
FIRE BOX SQ FT.	193
TOTAL SQ FT.	2597

LOADED WEIGHTS	
WEIGHT ON DRIVERS	135000 -LBS.
" " TRUCK	46000 -LBS.
" OF ENGINE TOTAL	181000 -LBS.
" OF ENGINE & TENDER	316800 -LBS.

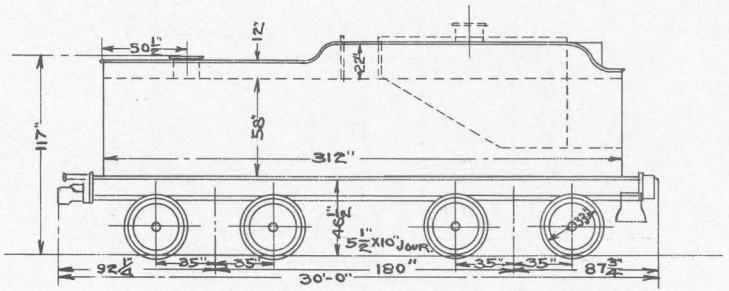
BUILT BROOKS WORKS SEPT-OCT 1909

LIGHT WEIGHT ENGINE 157700 "

Nos. 86-106

CLASS 86

NO OF TENDERS 21



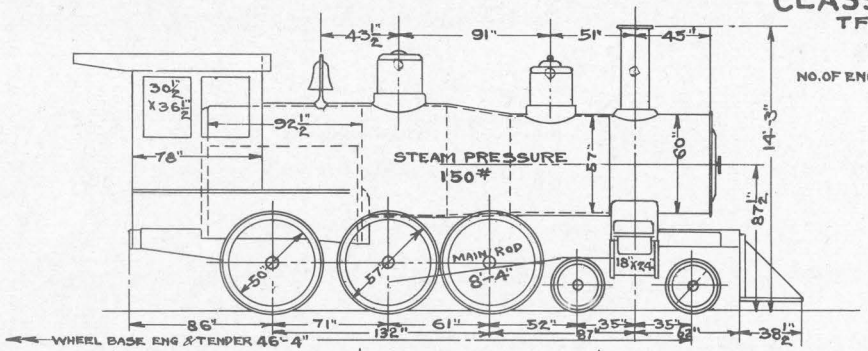
WATER CAPACITY	7000 GALS.
FUEL OIL "	3019 GALS.
COAL CAPACITY	12 TONS
WEIGHT LIGHT	53420 LBS.
WEIGHT LOADED	135800 LBS.

Nos 121-122

10 WHEEL FREIGHT

CLASS# 121
TF-17

NO. OF ENGINES 2



TRACTIVE POWER 17400 #

FIRE BOX	
LENGTH INSIDE	87"
HEIGHT FRONT	61"
" BACK	53"
WIDTH TOP FRONT	53¾"
" BOTTOM	42½"

TUBES		
NUMBER	240	
DIAMETER	2"	
LENGTH OVER TUBE SHEETS	12'-2"	

HEATING SURFACE		
TUBES	SQ.FT.	1528
FIRE BOX	SQ.FT.	131
TOTAL	SQ.FT.	1659

LOADED WEIGHTS		
WEIGHT ON DRIVERS	82500	LBS
" ON TRUCK	32000	"
" OF ENGINE TOTAL	114500	"
" OF ENGINE & TENDER	190500	"

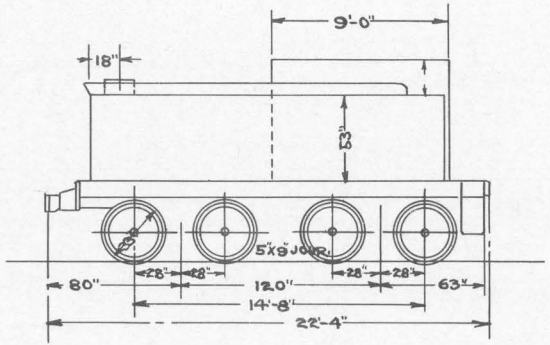
BUILT RICHMOND LOCO. WKS. 1896
OLD NOS. A1 & A2 FROM A.&S.J. RR CO.

WEIGHTS ESTIMATED

Nos 121-122

CLASS# 121

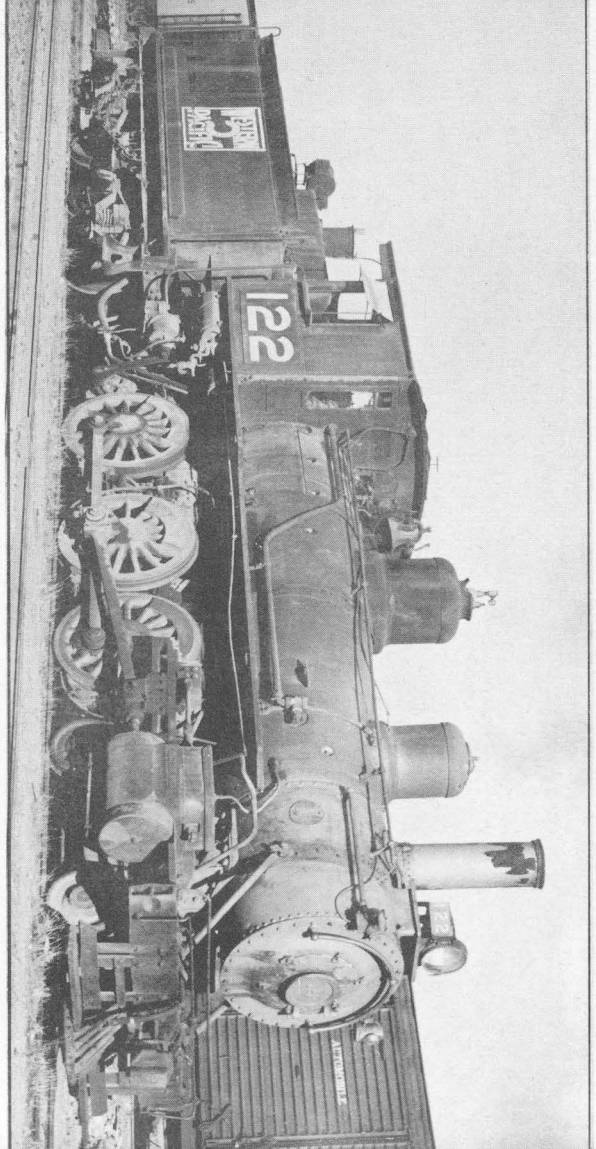
NO OF TENDERS 2

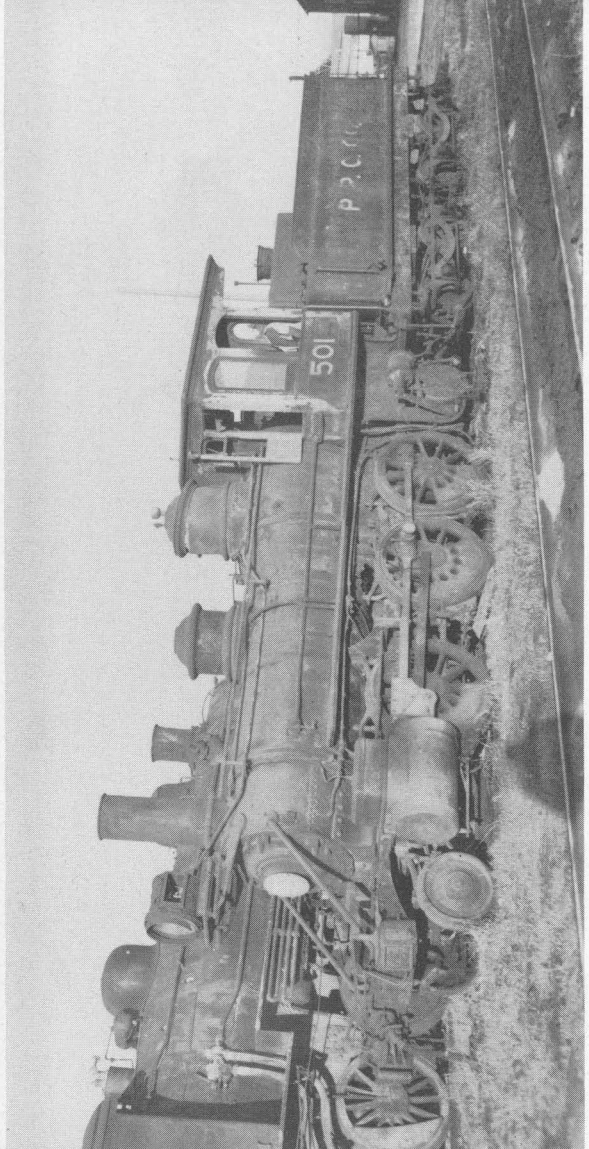


TENDER # 122 HAS AUXILLARY FUEL OIL TANK 960 GALS.

WATER	CAPACITY	4000 GALS.
FUEL OIL	"	1584 "
WEIGHT	LIGHT	32,000 LBS.
WEIGHT	LOADED	76000 "

WEIGHTS ESTIMATED



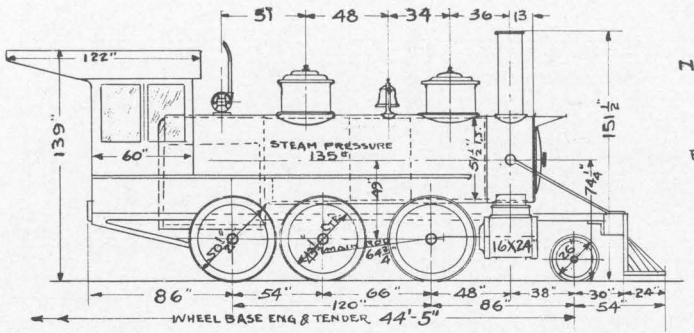


8 WHEEL FREIGHT

CLASS #123
EF-14

No 123
OIL BURNING

TRACTIVE POWER
14,000 #



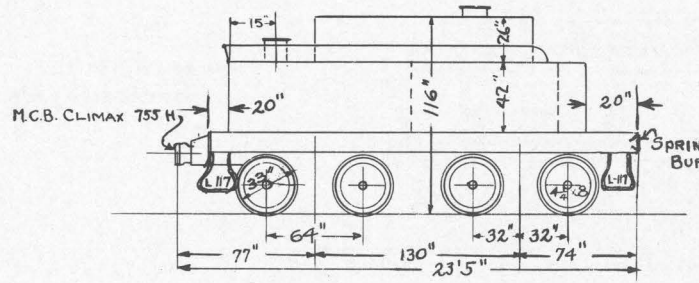
No OF ENGINES- 1
OIL BURNER

B.L.W # 3891

FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE	71 11/16"	NUMBER	167	TUBES SQ.FT.	835	WEIGHT ON DRIVERS	71300 LBS.
HEIGHT FRONT	49 3/4"	DIAMETER	2"	FIREBOX SQ.FT.	93	" " TRUCK	11000 "
" BACK	49 1/2"	LENGTH OVER TUBE SHEETS	120 1/4"	TOTAL SQ.FT.	928	" OF ENGINE TOTAL	82300 "
WIDTH TOP FRONT	41"					" " " & TENDER	149900 "
" BOTTOM	34 3/8"						

OLD No 4- FROM B+L Ry Co

CLASS #123



OIL TANK CAPACITY
BOTTOM TANK - 624 GAL.
AUX. " 969 "

COMMON SENSE STEEL TRUCK
BOLSTER + FRAME.

WATER CAPACITY	2800 GAL.
FUEL OIL "	1593 "
WEIGHT LIGHT	31874 LBS.
" LOADED	67600 "

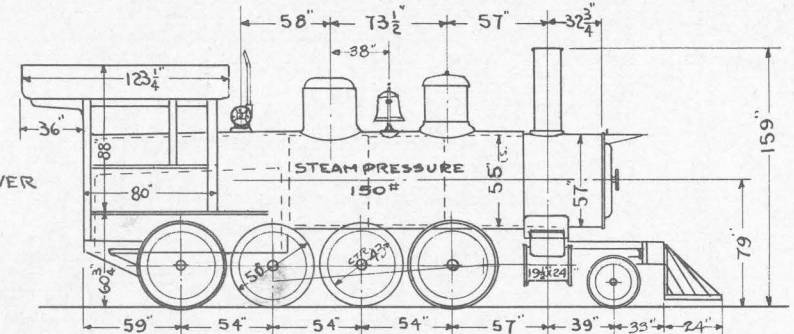
B+L-4

NEW UNDERFRAME BUILT + TRUCKS APPLIED - JEFFERY SHOPS - AUG. 1919.

No. 124
OIL BURNING

CONSOLIDATION FREIGHT

CLASS 124
C-23



TRACTIVE POWER
23300#

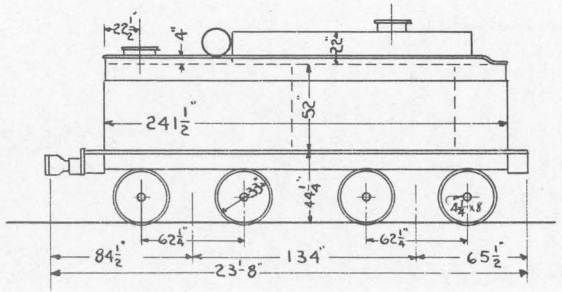
No. OF ENGINES- 1
OIL BURNER

B.L.W. #6085

FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE	118⅝"	NUMBER	190	TUBES SQ.FT.	1083	WEIGHT ON DRIVERS	95000 LBS.
HEIGHT FRONT	53½"	DIAMETER	2"	FIRE BOX " "	152	" " TRUCK	13000 LBS.
" BACK	50½"	LENGTH OVER		TOTAL " "	1235	" OF ENGINE TOTAL	108000 LBS.
WIDTH TOP FRONT	49"	TUBE SHEETS	136¾"			" " & TENDER	178000 LBS.
" " BACK	47"						
" BOTTOM	33¼"			OLD No 5- B+L-RY Co		WEIGHTS ESTIMATED	

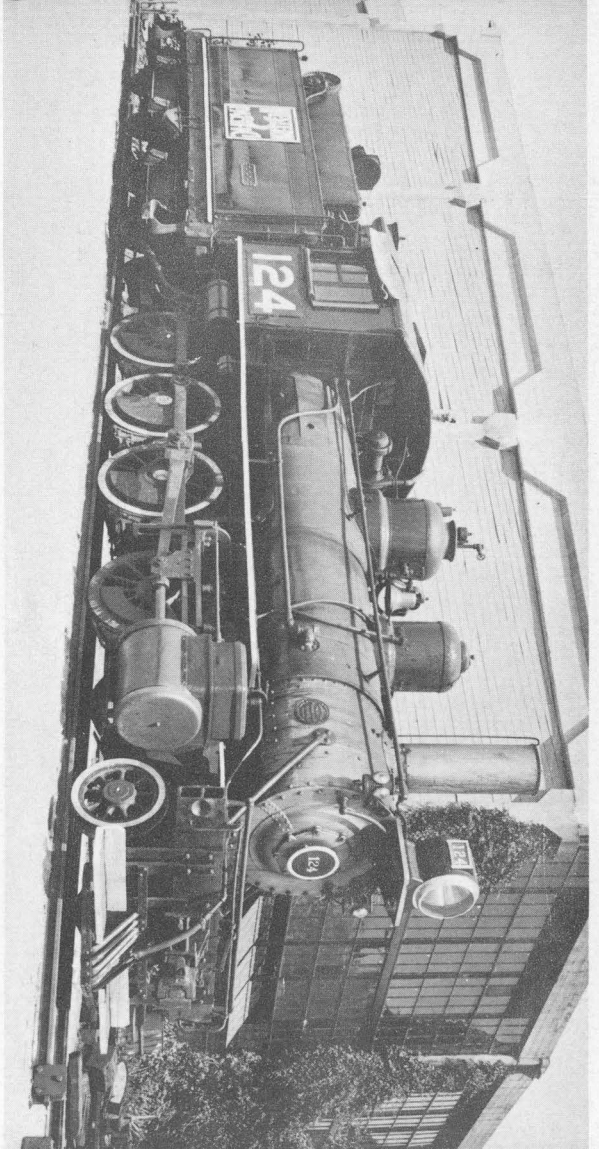
CLASS # 124

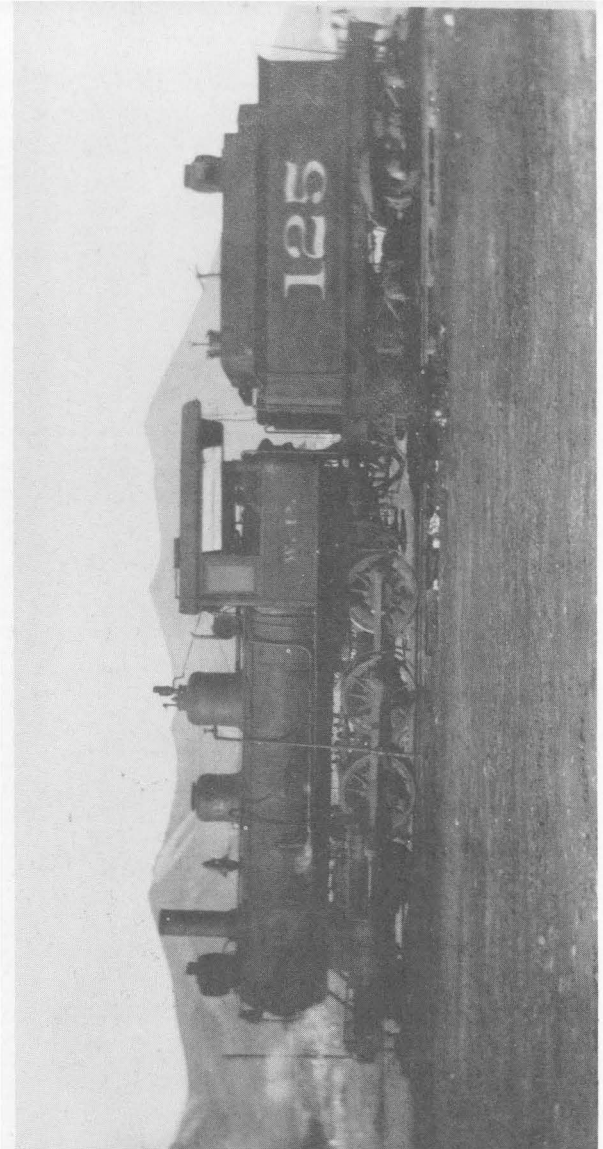
B+L-5



OIL CAPACITY
MAIN TANK 798 GAL.
AUX. " 1280 "

WATER CAPACITY	4000 GAL.	
FUEL OIL CAPACITY	2078 "	
WEIGHT LIGHT	21000 #	EST
WEIGHT LOADED	70000 #	"





Nº 125
OIL BURNING

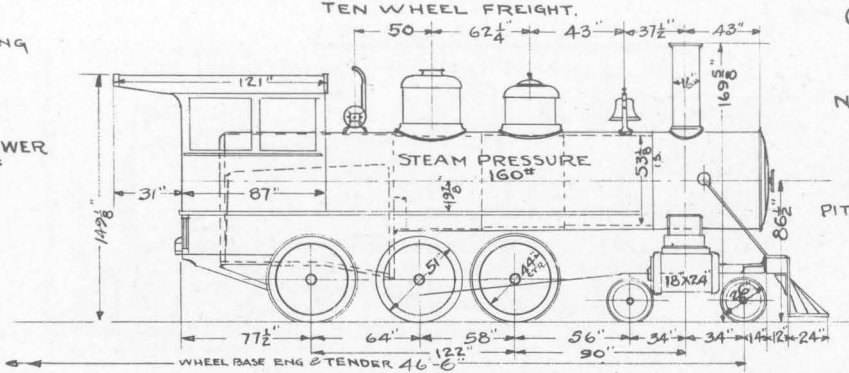
TEN WHEEL FREIGHT.

CLASS #125
TF-21

Nº ENGINES - 1
OIL BURNER

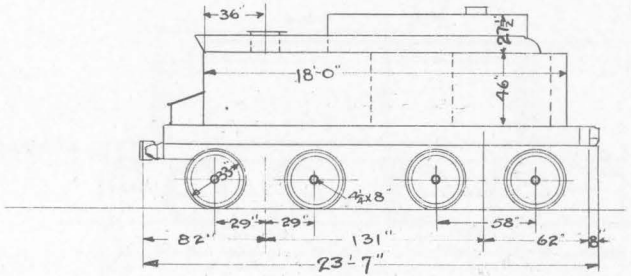
PITTSBURGH # 978

TRACTIVE POWER
20800 #



FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE	96"	NUMBER	174	TUBES SQ. FT.	1044	WEIGHT ON DRIVERS	72500#
HEIGHT FRONT	61¼"	DIAMETER	2"	FIRE BOX " "	127	" " TRUCK	28000#
" BACK	56¾"	LENGTH OVER TUBE SHEETS	142½"	TOTAL " "	1171	" OF ENGINE TOTAL	100500#
WIDTH TOP FRONT	44"					" " " & TENDER	160500#
" BACK	44"			OLD #7 - B&L - RY. Co.		WEIGHTS ESTIMATED	
" BOTTOM	33⅞"						

CLASS #125



WATER CAPACITY - 3000 GALL.
FUEL OIL " 1926 "
WEIGHT LIGHT 20000# EST.
" LOADED 60000# "

B&L-7

No. ~~126~~ T. S. R. R. 1

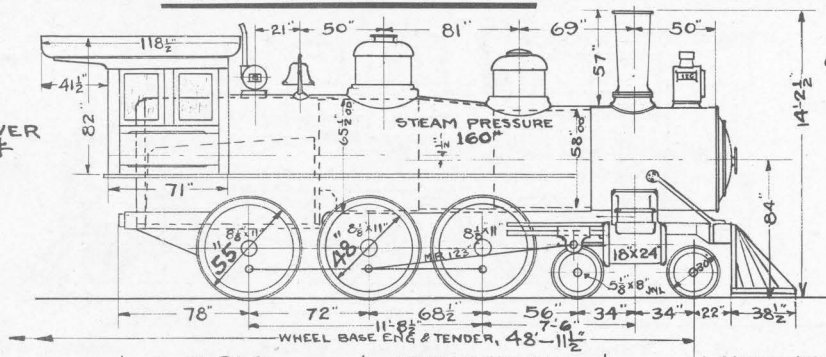
10 WHEEL FREIGHT

SAME CLASS AS ENGS. 127 & DC. 1

CLASS # 126
TF-18

OIL BURNER

TRACTIVE POWER
19228 #



FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE	103"	NUMBER	231	TUBES SQ. FT.	1654	WEIGHT ON DRIVERS	92400 LBS
HEIGHT FRONT	53½"	DIA.	2"	FIREBOX " "	124	" " TRUCK	22400 "
" BACK	51"	LENGTH OVER TUBE SHEETS	13'-3½"	TOTAL " "	1778	" OF ENG. TOTAL	114800 "
WIDTH TOP FRONT	56"			GRATE SURFACE	24.3	" " " & TENDER	198736 "
" BOTTOM	34¼"						(WTS. EST.)

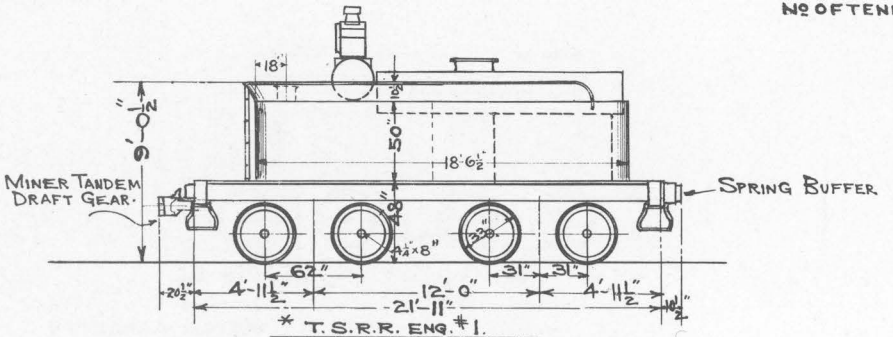
BUILT ROME LOCO WKS FEB 1891 — OLD No 546 FROM DRG AUG. 1917

* ENGINE 126 CHANGED TO OIL BURNER 2-18 SOLD TO T. S. R. R. & NUMBERED T.S

No. ~~126~~ T. S. R. R. 1

CLASS # 126

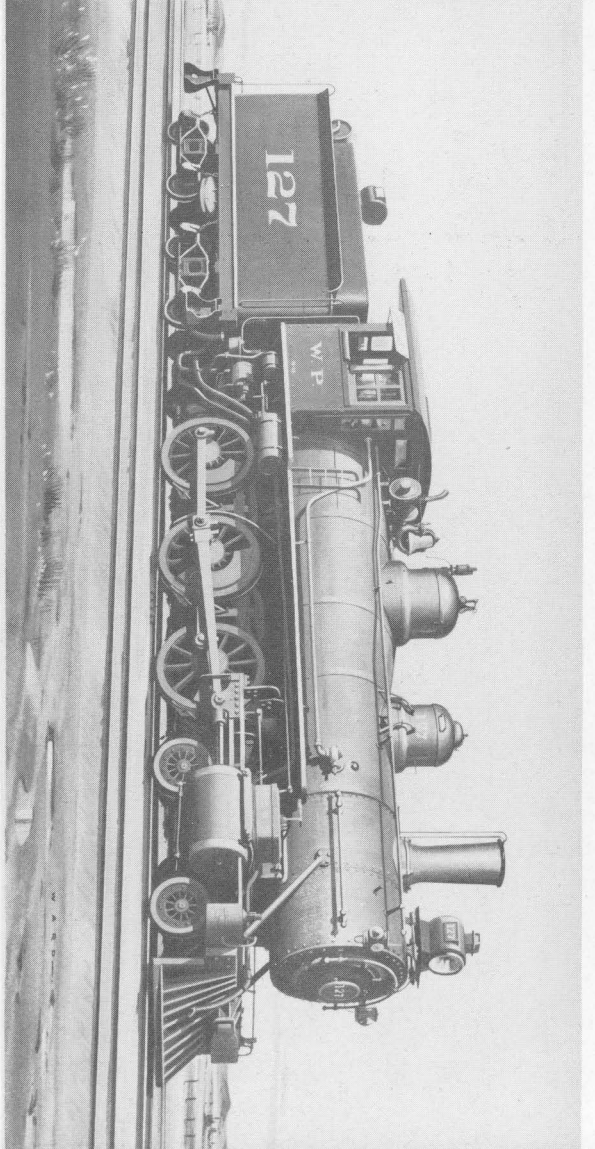
No OF TENDERS — 1

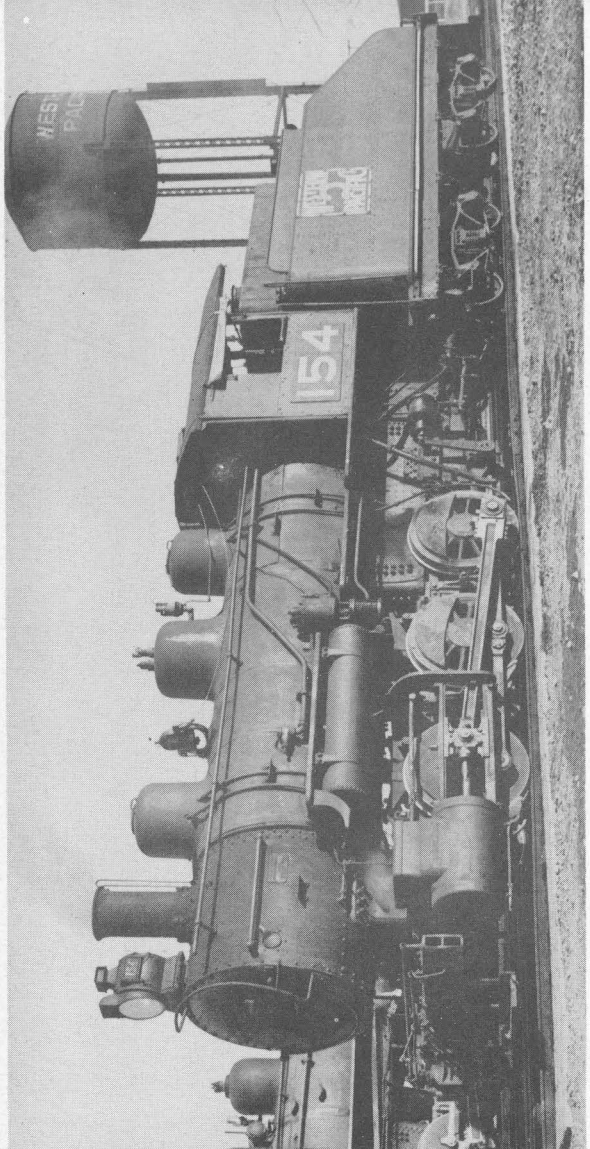


* T. S. R. R. ENG. # 1.

WATER CAPACITY	3500 GALS.
FUEL OIL "	1836 "
WEIGHT LIGHT	40500 LBS.
" LOADED	83986 "

(WTS. EST.)



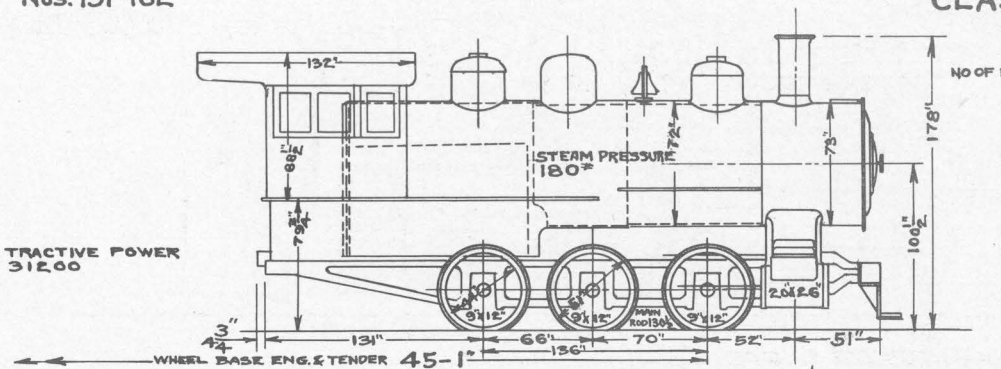


Nos. 151-162

6 WHEEL SWITCH.

CLASS 151
S-31

NO OF ENGINES 12



TRACTIVE POWER
31200

FIRE BOX	
LENGTH INSIDE	108"
HEIGHT FRONT	70"
" BACK	66¾"
WIDTH TOP FRONT	62½"
" " BACK	62"
" BOTTOM	41⅞"

TUBES	
NUMBER	273
DIAMETER	2"
LENGTH	
OVER TUBE SHEETS	11'-6"

HEATING SURFACE		
TUBES	SQ FT.	1632
FIRE BOX	SQ FT.	172
TOTAL	SQ FT.	1804

BUILT PITTSBURG WORKS AUG.-SEP. 1909

LOADED WEIGHTS

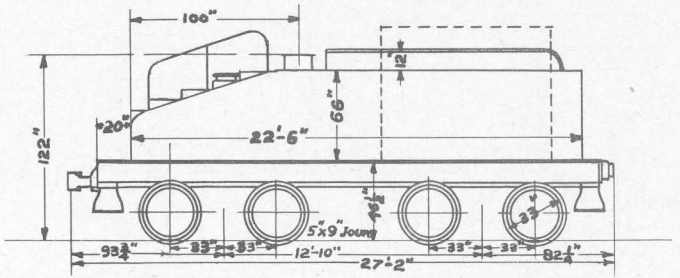
WEIGHT ON DRIVERS	145780 LBS.
WEIGHT ON TRUCK	
WEIGHT OF ENGINE & TENDER	267630 LBS.

LIGHT WEIGHT ENGINE 128400"

No's 151-162

CLASS 151

NO OF TENDERS 12

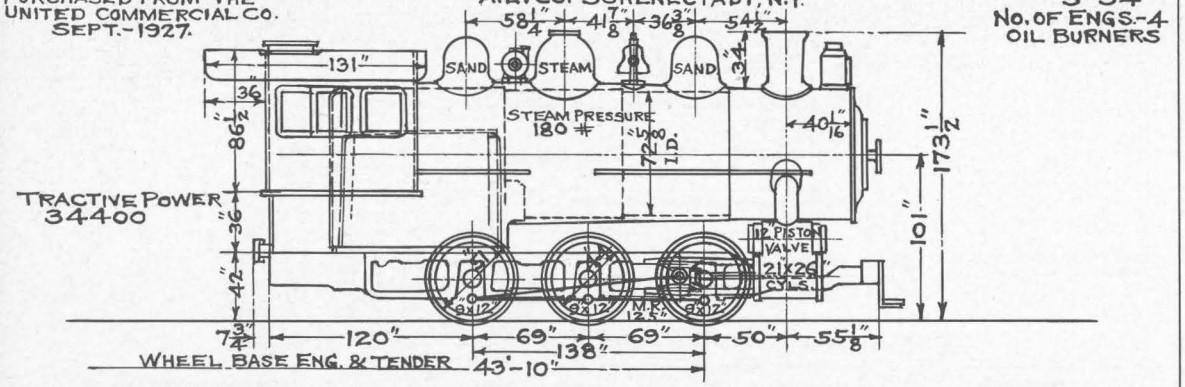


WATER CAPACITY	6000 GALS.
FUEL OIL CAPACITY	2500 GALS.
COAL CAPACITY	10 TONS
WEIGHT LIGHT	51800 LBS.
WEIGHT LOADED	121850 LBS.

Nos. 163–166
PURCHASED FROM THE
UNITED COMMERCIAL CO.
SEPT.–1927.

6 WHEEL SWITCH
A.L.CO. SCHENECTADY, N.Y.

CLASS #163
S-34
No. OF ENGS.–4
OIL BURNERS



FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS.	
LENGTH INSIDE	96¾"	NUMBER 2" DIA.	182	TUBES SQ.FT.	1416	WEIGHT ON DRIVERS.	160000 LBS.
HEIGHT FRONT	71½"	" 5½" "	24	FIREBOX "	154		
" BACK	67½"	LENGTH OVER TUBE SHEETS	132"	TOTAL "	1570	WEIGHT OF ENGINE TOTAL	160000 "
WIDTH TOP FRONT	61"					" " " & TENDER	262500 "
" " BACK	61"						
" BOTTOM	*38½"	L.S.CO'S. FIRE TUBE, TYPE A, SUPERHEATER				LIGHT WEIGHT, ENGINE	144000"

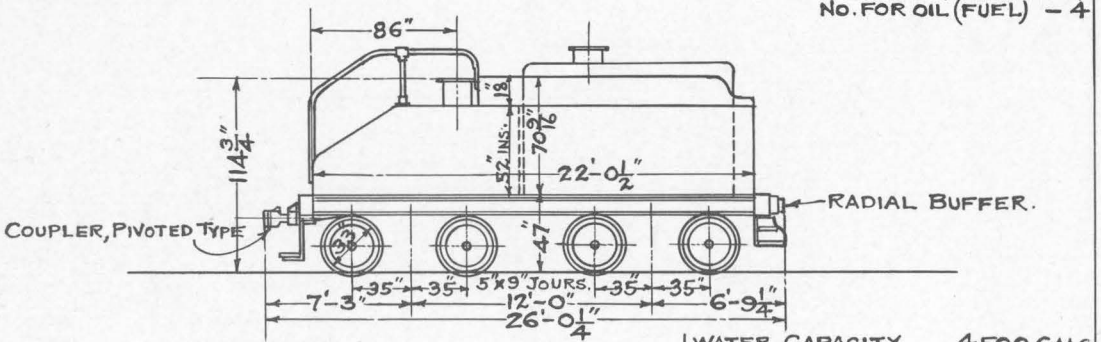
R.J.D.

*=42" ON ENG. 163 ONLY.

Nos. 163–166.
PURCHASED FROM THE
UNITED COMMERCIAL CO.
SEPT.–1927.

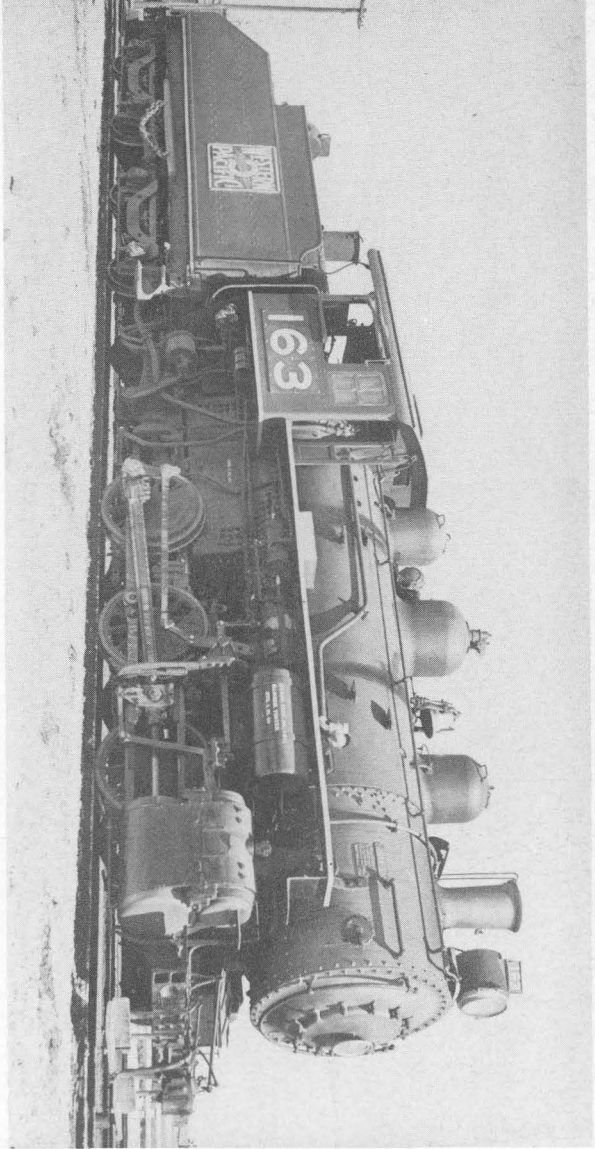
CLASS #163

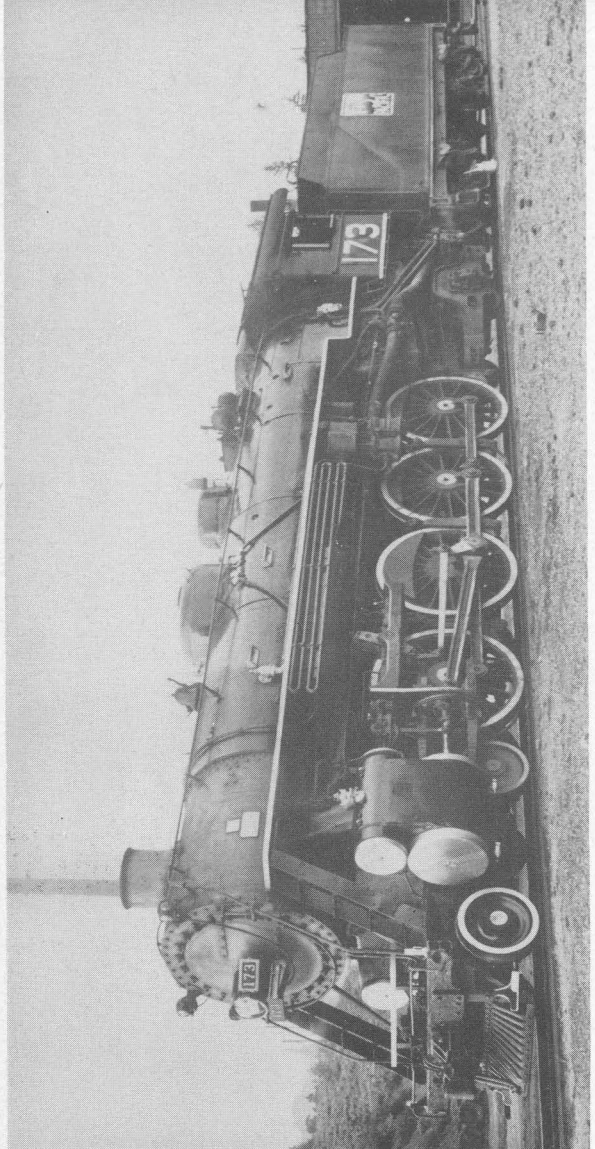
No. OF TENDERS–4
No. FOR OIL (FUEL) – 4



WATER CAPACITY	4500 GALS.
FUEL OIL "	2155 "
WEIGHT LIGHT.	50500 LBS.
" LOADED.	102500 "

R.J.D.





ROAD CLASS 171
SYMBOL MTP-44
FUEL OIL

NOS. 171-180
BUILT-ALCO. 1924 (FOR F.E.C. RY.)
SPEC. NO. A-11636

PURCHASED FROM F.E.C. RY. JULY 1936

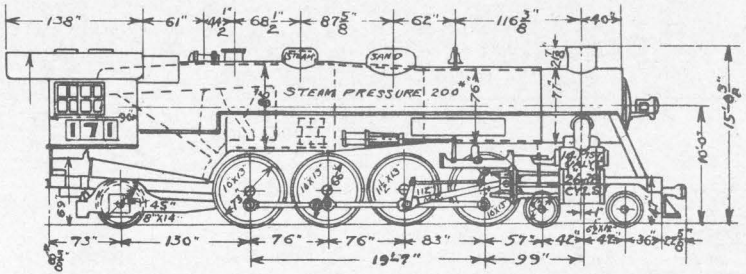
WEIGHTS LOADED	
ON DRIVERS	210500
" ENG TRUCK	53500
" TRAILING TRUCK	49000
ENGINE TOTAL	313000
TENDER LOADED	202000
ENGS TENDER	515000
LIGHT WT. ENG.	279400
LIGHT WT. TENDER	89100
AXLE LOAD	52625

8½" CROSS COMP.
ET-6
TYPE A
BRAD. ROCKER
SELLERS TYPE A.F.
ALCO TYPE "E"

AIR PUMP
BRAKE EQUIPT.
SUPERHEATER
DRAFT GEAR
FEED WATER HEATER
REV. GEAR

TRACTIVE POWER 44000 LBS.
FACTOR OF ADHESION 4.78
STEAM PRESSURE 200 LBS.

MAX. TRACK CURVE 16°



FIREBOX

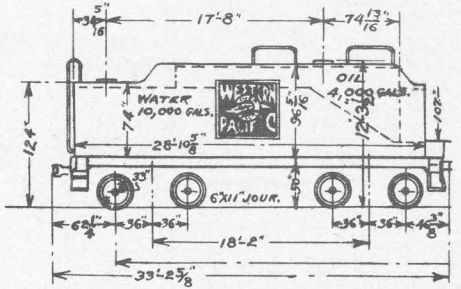
LENGTH, INSIDE	114⅛"
HEIGHT FRONT	82"
" BACK	63½"
WIDTH BOTTOM	84½"

*SYPHONS TWO
GRATE AREA 66.8 SQ.FT.
COMB. CHAMBER SYPHONS NO
ADDED HEATING SURFACE

TUBES
NUMBER 2½ DIA. 181 - 5½ DIA. 36"
LGTH OVER TUBE SHEETS 22'-0"

HEATING SURFACE	
FIRE TUBES, SQ.FT.	3472
SYPHONS " "	60
FIRE BOX " "	280
TOTAL " "	3812
SUPERHEAT " "	944

W BEING APPLIED 4/15/39
12 SQ. FT

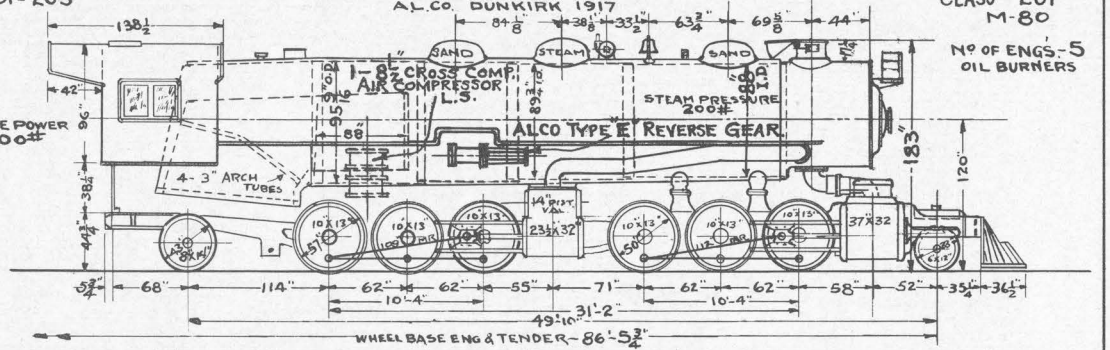


Nos 201-205

MALLET COMP - 2-6-6-2
A.L.CO. DUNKIRK 1917

CLASS # 201
M-80

Nº OF ENGS - 5
OIL BURNERS



FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOT.	108⅜"	NUMBER 2¼" DIA	235	FIRE TUBES SQ.FT.	4550	WEIGHT ON DRIVERS	355500 LBS.
" COMBUST. CHAMB.	88"	" 5½" "	36	ARCH " "	26	" ON LEADING TRUCK	24500 "
HEIGHT FRONT	88"	LENGTH OVER-		FIREBOX "	360	" " TRAILING "	49000 "
" BACK	75½"	TUBE SHEETS	288	TOTAL "	4936	" OF ENGINE TOTAL	429000 "
WIDTH BOT.	96¼"					" " " & TENDER	624000 "
GRATE AREA SQ.FT.	72.2						

EQUIPPED WITH SCHMIDT FIRE TUBE SUPERHEATER

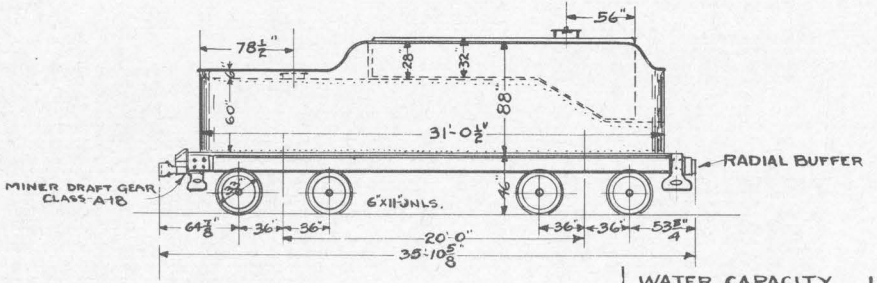
LIGHT WEIGHT ENGINE 377000 "

G-9-6-17

Nos 201-205

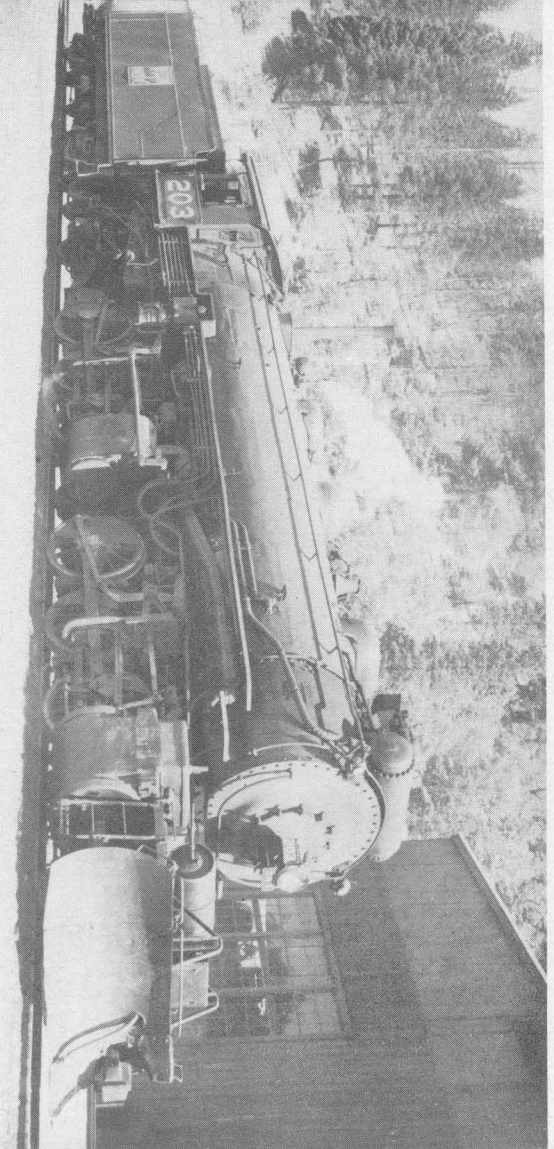
CLASS # 201

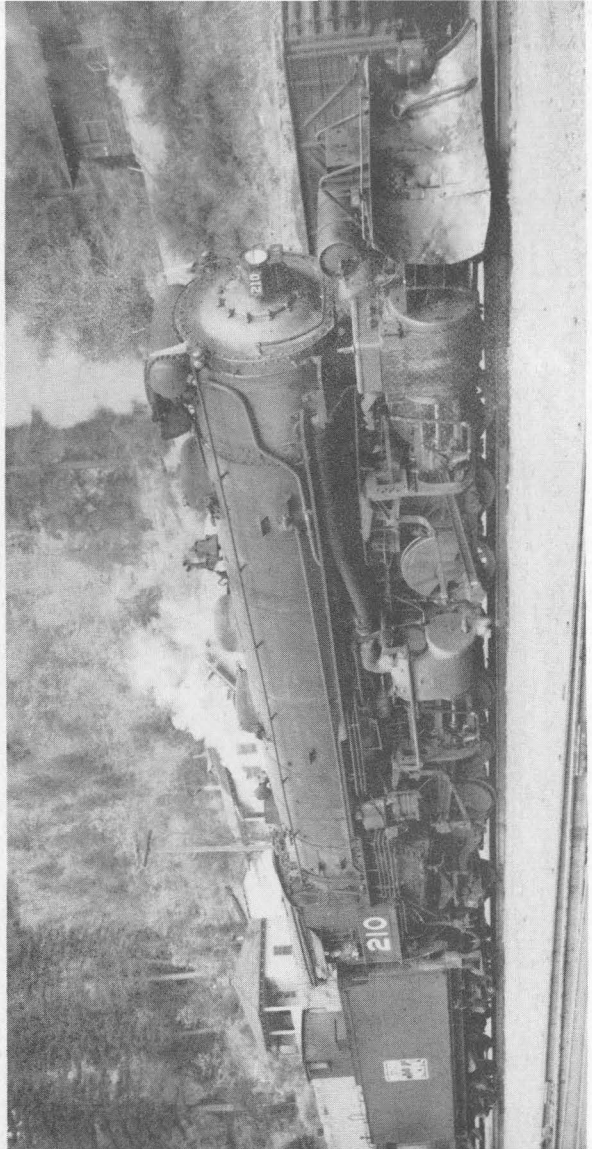
Nº OF TENDERS - 5
Nº FOR OIL FUEL - 5



WATER CAPACITY	10,000 GALL.
FUEL OIL "	4,000 "
WEIGHT LIGHT	81,200 LBS
" LOADED	195,000 "

6-28-17

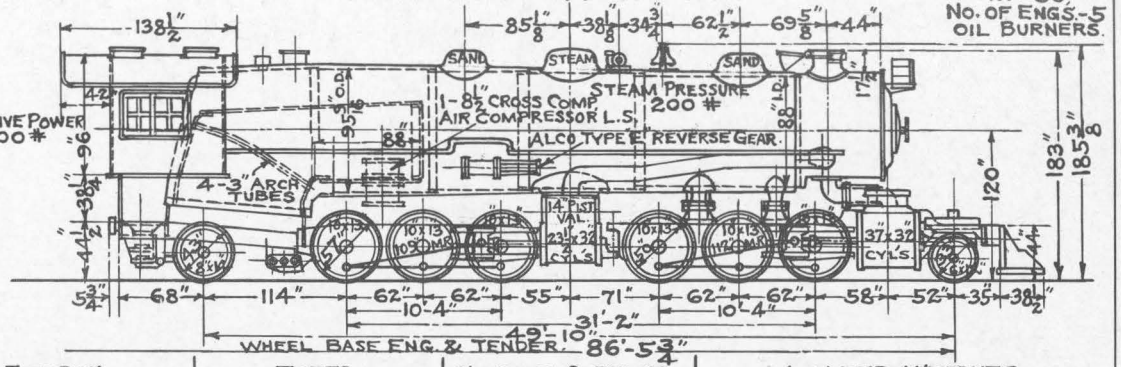




No's. 206-210

MALLET COMPOUND 2-6-6-2
A.L.CO. RICHMOND, VA. APR. 1924.

CLASS # 206
M-80
No. OF ENGS.-5
OIL BURNERS.



FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	108 1/8"	NUMBER 2 1/4" DIA.	235	FIRE TUBES SQ.FT.	4550	WEIGHT ON DRIVERS.	356500 LBS
" COMBUST. CHAMB.	88"	" 5 1/2" "	36	ARCH " "	26	" ON LEADING TRUCK.	25500 "
HEIGHT FRONT.	88"	LENGTH OVER- "		FIRE BOX "	360	" " TRAILING "	47500 "
" BACK	73 1/2"	TUBE SHEETS	288	TOTAL "	4936	" OF ENGINE TOTAL	429500 "
WIDTH BOTT.	96 1/2"					" " " & TENDER.	619800 "
GRATE AREA SQ.FT.	72.2					LIGHT WEIGHT, ENGINE	377600 "

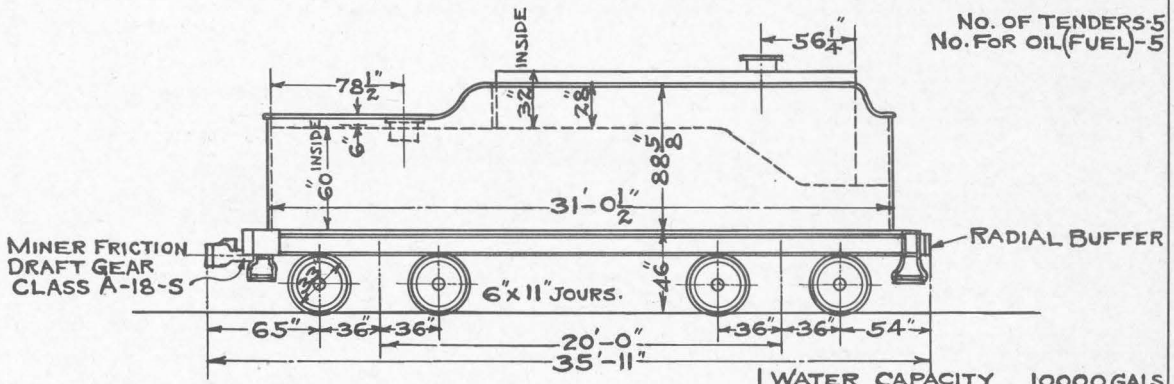
SCHMIDT FIRE TUBE SUPERHEATER.

R.J.D. 7-1-24

No's. 206-210

CLASS # 206

No. OF TENDERS-5
No. FOR OIL (FUEL)-5



WATER CAPACITY	10000 GALS.
FUEL OIL	4000 "
WEIGHT LIGHT	76200 LBS.
" LOADED	190300 "

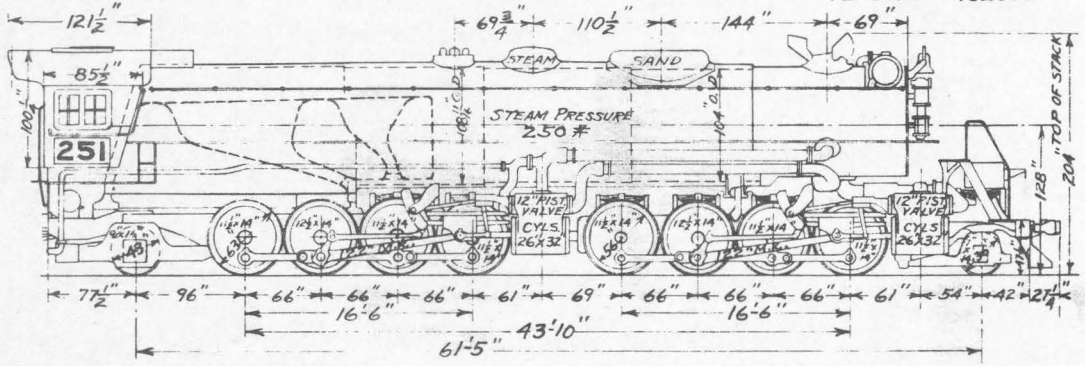
ROAD CLASS 251
SYMBOL M-137-151
FUEL—OIL
BUILT—B.L.W. 1931
SPEC. NO. 31-D-94

TRACTIVE POWER WITHOUT BOOSTER 137000 LBS
" " WITH " 150900 "
FACTOR OF ADHESION, ENGINE 4.03
" " " ENG. & BOOSTER 4.08
STEAM PRESSURE 250 LBS

MAX. TRACK CURVE 16°

WEIGHTS LOADED

ON DRIVERS	552700 LBS
ON ENGINE TRUCK	48700 "
ON TRAILING TRUCK	63700 "
ENGINE TOTAL	665100 "
TENDER LOADED	408250 "
ENGINE & TENDER	1073350 "
LT. WT. ENGINE	593700 "
" " TENDER	182600 "



AIR PUMPS, 2-8½" CROSS COMP.
BRAKE EQUIPT, WEST. ET-6
REVERSE GEAR, ALCO. TYPE G
THROTTLE, AMER. MULTIPLE
SUPERHEATER, TYPE A
DRAFT GEAR, WAUGH TYPE 403
BOOSTER, FRANKLIN TYPE C-2
FEEDWATER HEATERS
ENGS. 251, 252 253-256
HEATER WORTH. 6-S ELESCO K-60-A
PUMP " 6-S " CF-2

TUBES

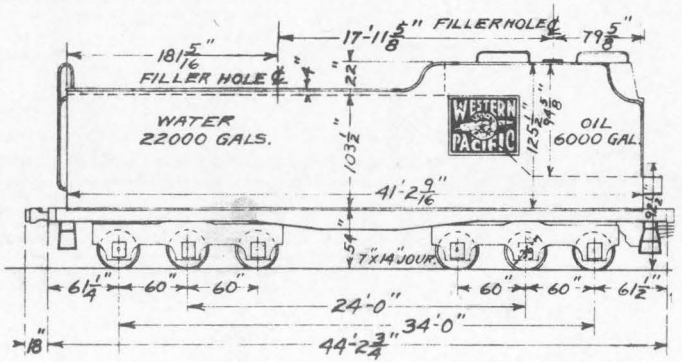
NUMBER, 2¼" DIA. 272-5½" DIA. 75	
LENGTH OVER TUBE SHEETS 23'-0"	
HEATING SURFACE	
FIRE TUBES SQ. FT.	6141
SYPHONS " "	217
FIRE BOX " "	367
COMBUST. CHAMBER " "	155
TOTAL " "	6880
SUPERHEAT " "	2152

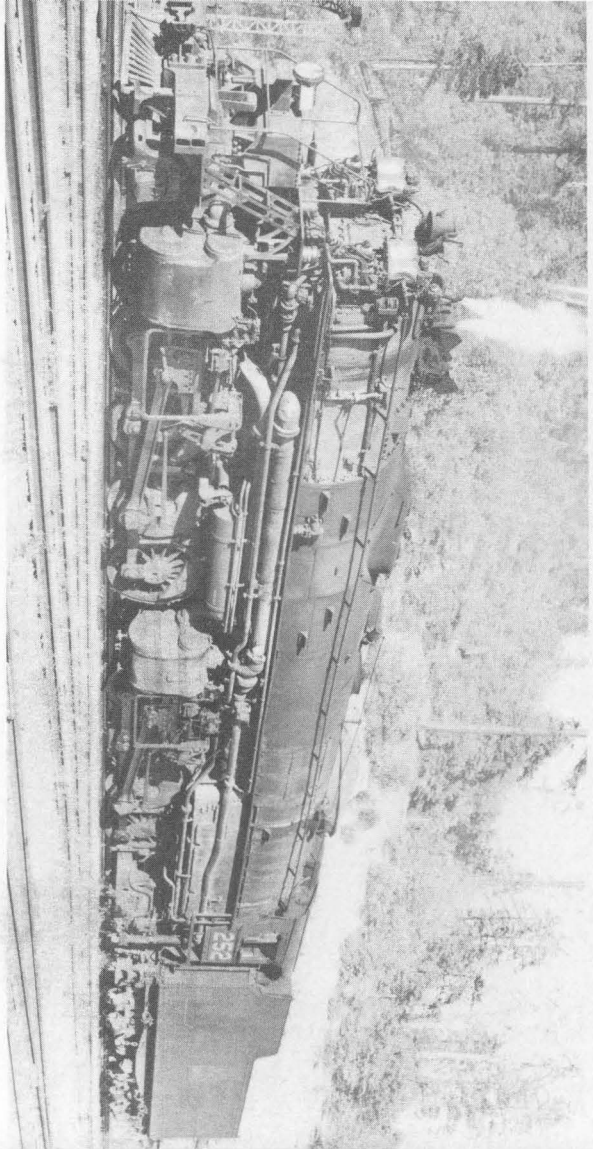
FIREBOX

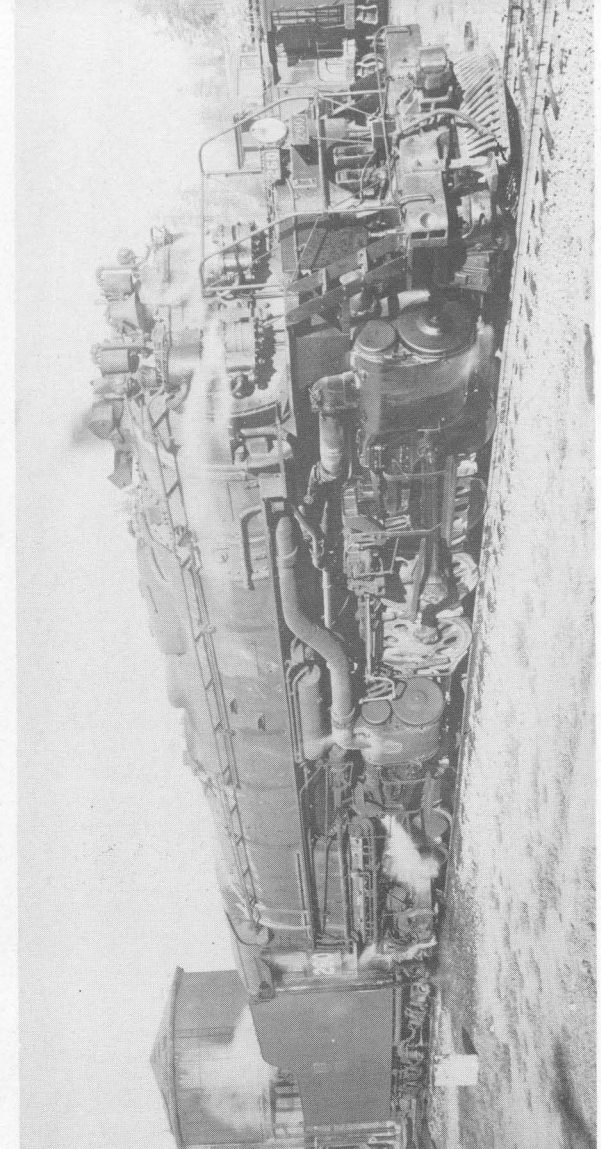
LENGTH INSIDE	204⅛"
HEIGHT FRONT	90⅜"
HEIGHT BACK	77¾"
WIDTH BOTTOM	101¼"
SYPHONS, FIREBOX 3, COMB. CHAM. 2	
GRATE AREA	SQ. FT. 145.0

AXLE LOAD 69088 "

FRONT UNITS ARE EQUIPPED WITH CAST STEEL INTEGRAL ENGINE BEDS.





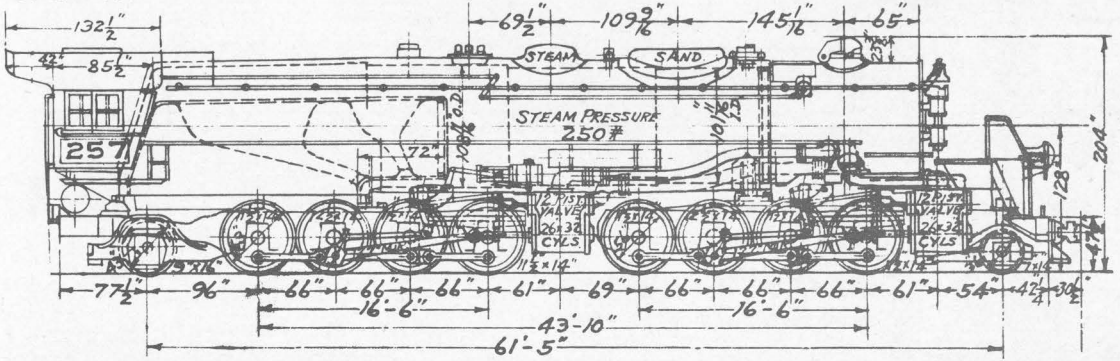


ROAD CLASS 257
SYMBOL M-137-151
FUEL – OIL
BUILT – B.L.W. 1938
SPEC. No. 38-D-39

TRACTIVE POWER WITHOUT BOOSTER 137000 LBS.
" " WITH BOOSTER 150900 "
FACTOR OF ADHESION ENGINE 4.03
" " ENG. & BOOSTER 4.06
STEAM PRESSURE 250 LBS
MAX. TRACK CURVE 16°

WEIGHTS LOADED

ON DRIVERS	549660 LBS
" LEAD TRUCK	48134 "
" TRAILING TRUCK	65310 "
ENGINE TOTAL	663100 "
TENDER LOADED	403350 "
ENG. & TEND. "	1066450 "
LIGHT WT. ENGINE	593150 "
" " TENDER	173750 "

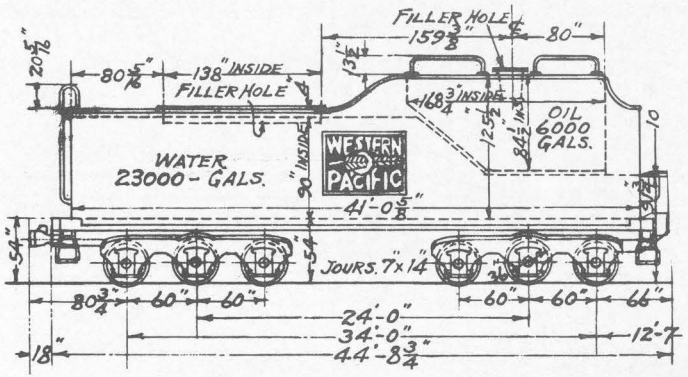


F.W. HEATER, COFFIN II-D
" PUMP " CENTRIF. TYPE D
REVERSE GEAR, A.I.CO. " G
AIR PUMPS, 2-8½" CROSS COMPOUND
DRAFT GEAR, CARD-WEST. FRICT. NY-11-E
BRAKE EQUIPT. WESTINGHOUSE ET-8
SUPERHEATER, SUPERHR. CO. TYPE A
BOOSTER, FRANKLIN TYPE C-2
THROTTLE, AMERICAN MULTIPLE

TUBES		
NUMBER	24 DIA. 272	5½" DIA. 75
LENGTH OVER TUBE SHEETS		23'-0"
HEATING SURFACE		
FIRE TUBES	SQ. FT.	6141
SYPHONS	" "	148
FIRE BOX	" "	367
COMBUST. CHAMBER	" "	155
TOTAL	" "	6811
SUPERHEAT	" "	2152

FIRE BOX	
LENGTH INSIDE BOTTOM	204 1/8"
" COMBUSTION CHAMBER	72"
HEIGHT FRONT	89 3/8"
" BACK	77 3/8"
WIDTH BOTTOM	102"
SYPHONS FIREBOX 2, COMB. CHAM. 1	
GRATE AREA.	SQ. FT. 145.6

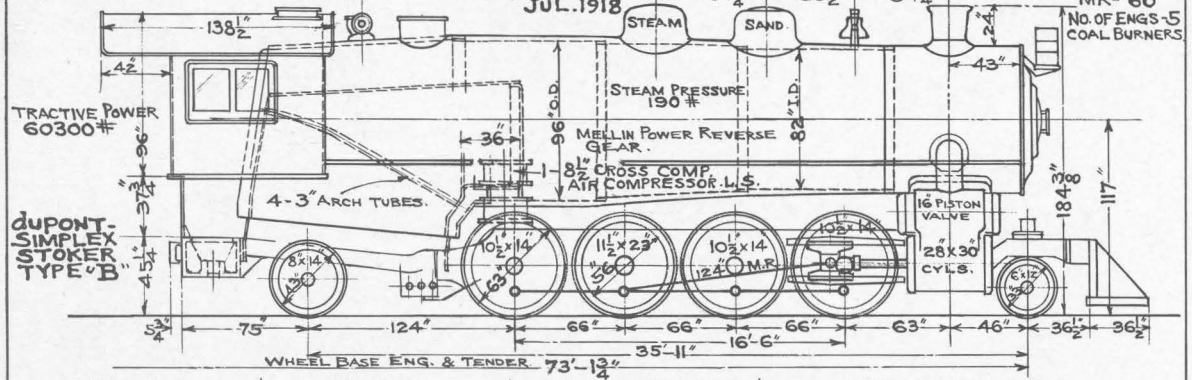
AVG. AXLE LOAD 68707 #



Nos 301-305

MIKADO 2-8-2
A.L.Co. DUNKIRK
JUL. 1918

CLASS #301
MK-60
No. OF ENGS-5
COAL BURNERS



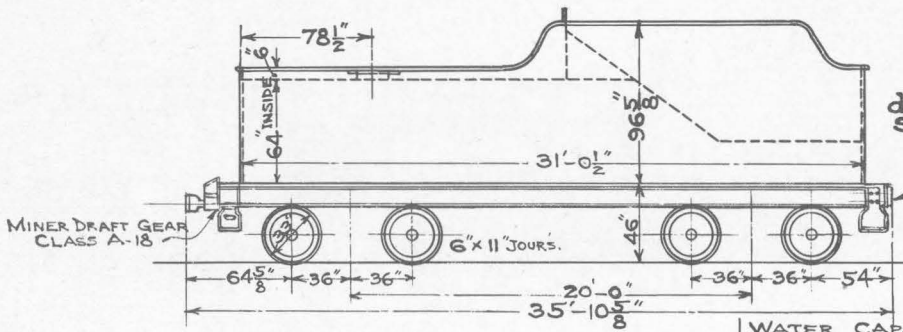
FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	120⅛"	NUMBER 2¼" DIA.	221	FIRE TUBES SQ.FT.	3438	WEIGHT ON DRIVERS.	241500 LBS
" COMBUST CHAMB.	36"	" 5½" "	43	ARCH " "	30	" " LEADING TRUCK	28000 "
HEIGHT FRONT.	89½"	LENGTH OVER TUBE SHEETS	216"	FIRE BOX "	288	" " TRAILING "	46500 "
" BACK.	70"			TOTAL "	3756	" OF ENGINE TOTAL	316000 "
WIDTH BOTT.	84"					" " " & TENDER	504600 "
GRATE AREA SQ.FT.	70.3	SCHMIDT FIRE TUBE SUPERHEATER.				LIGHT WEIGHT, ENGINE	275000 "

D-11-4-18.

Nos. 301-305

CLASS #301

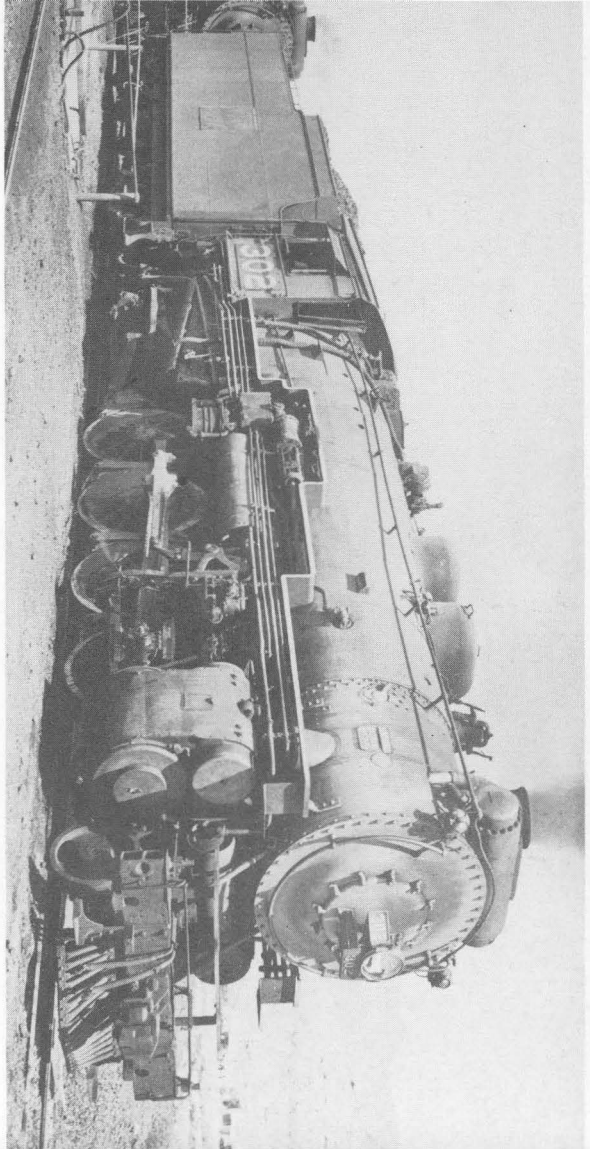
No. OF TENDERS. 5
No. FOR COAL - 5

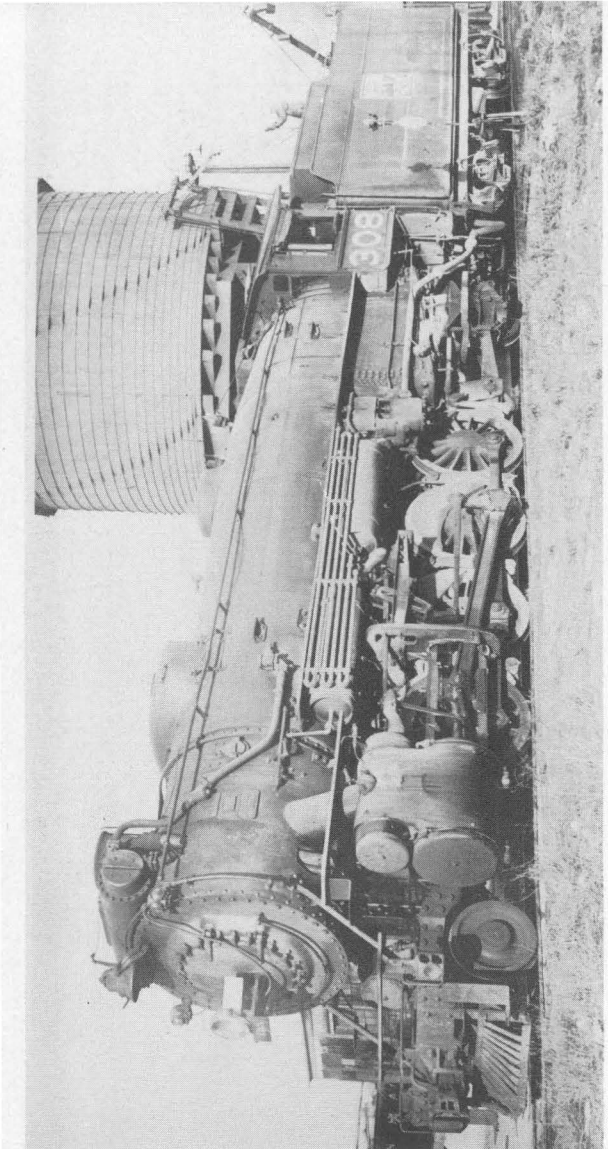


dupont-SIMPLEX STOKER TYPE "B"

WATER CAPACITY	10000 GALS.
COAL "	18 TONS.
WEIGHT LIGHT	69300 LBS.
" LOADED AS ABOVE	188600 "

D-11-4-18.

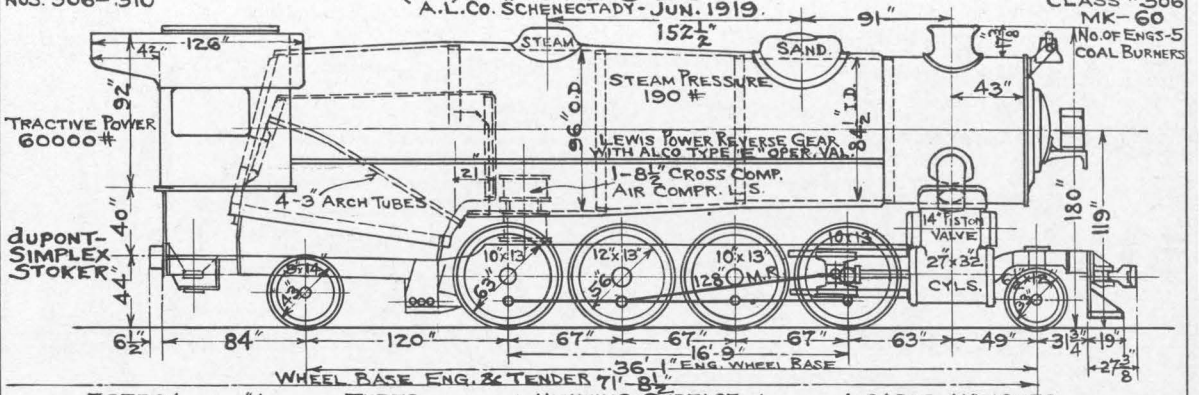




Nos. 306–310

(U.S.) MIKADO 2-8-2 B
A.L.CO. SCHENECTADY - JUN. 1919.

CLASS # 306
MK-60
No. OF ENGS-5
COAL BURNERS



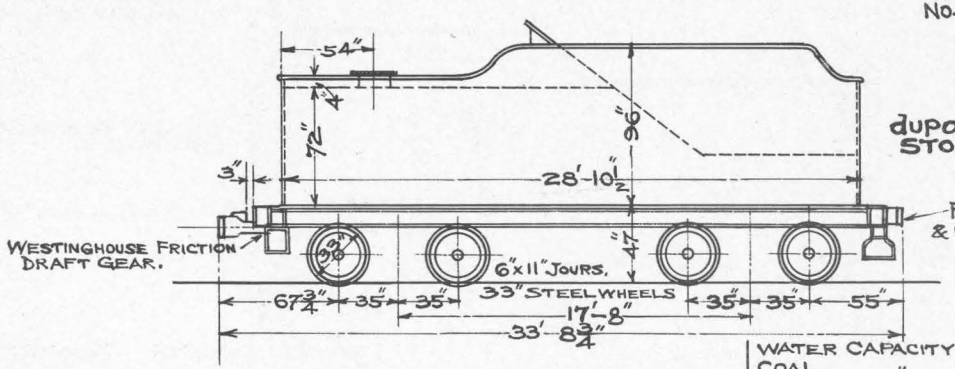
FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	120⅛"	NUMBER 2¼" DIA.	247	FIRE TUBES SQ.FT.	3978	WEIGHT ON DRIVERS	239000 LBS.
" COMBUST. CHAMB.	21"	" 5½" "	45	ARCH " "	28	" " LEADING TRUCK	24000 "
HEIGHT FRONT	90"	LENGTH OVER TUBE SHEETS	228"	FIREBOX "	279	" " TRAILING "	57000 "
" BACK	68"			TOTAL "	4285	" OF ENGINE TOTAL	320000 "
WIDTH BOTT.	84½"			SUPERHEATING SURFACE "	993	" " " & TENDER	504900 "
GRATE AREA SQ.FT.	70.3	SCHMIDT FIRE TUBE SUPERHEATER.				LIGHT WEIGHT ENGINE	277600 "

R.J.D 5-25-20.

Nos 306–310

CLASS # 306

No. OF TENDERS - 5
No. FOR COAL - 5



WATER CAPACITY	10000 GALS.
COAL "	16 TONS.
WEIGHT LIGHT	69600 LBS.
" LOADED	184900 LBS.

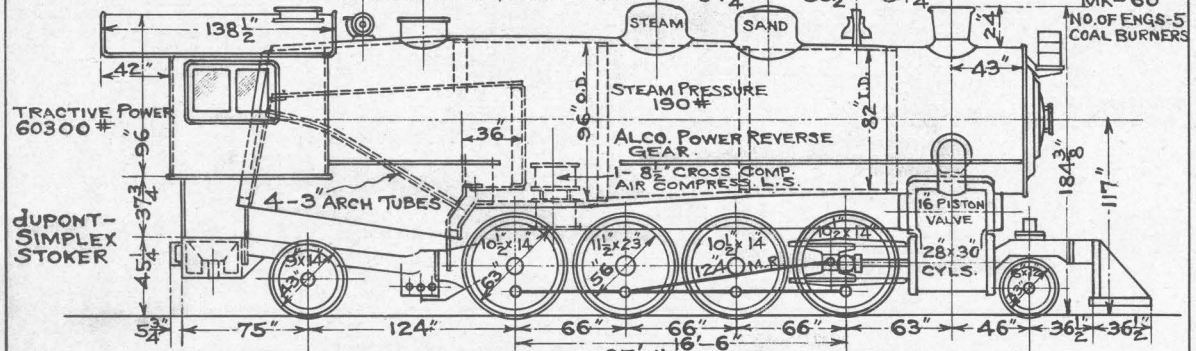
D-5-7-19.

Nos 311-315

MIKADO 2-8-2

A.L.Co. DUNKIRK, N.Y. APR. 1921.

CLASS #311
MK-60
NO. OF ENGS-5
COAL BURNERS



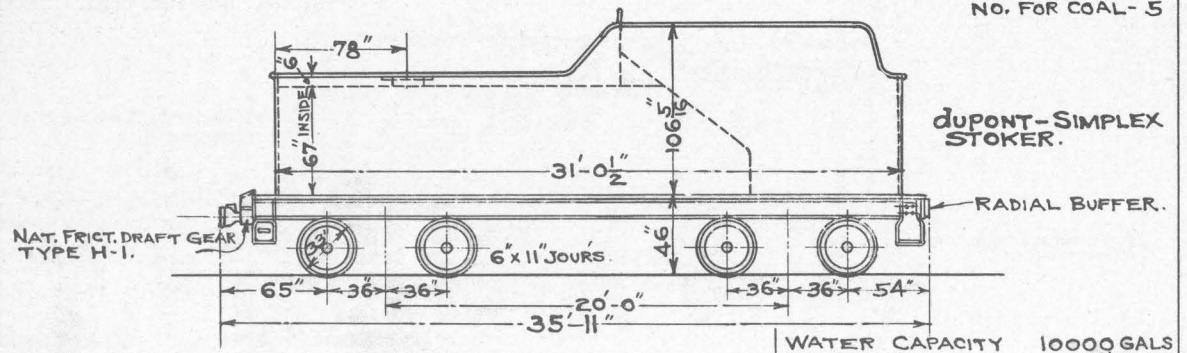
FIREBOX	"	TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	120⅛	NUMBER 2¼" DIA.	221	FIRE TUBES SQ.FT.	3438	WEIGHT ON DRIVERS	246000 LBS
" COMBUST. CHAMB.	36⅞	" 5½" "	43	ARCH " "	30	" " LEADING TRUCK	24500 "
HEIGHT FRONT	89⅞	LENGTH OVER TUBE SHEETS	216"	FIREBOX "	284	" " TRAILING "	52500 "
" BACK	65"			TOTAL "	3752	" OF ENGINE TOTAL	323000 "
WIDTH BOTT.	84¼					" " " & TENDER	510700 "
GRATE AREA SQ.FT.	70.3	SCHMIDT FIRE TUBE SUPERHEATER.				LIGHT WEIGHT. ENGINE	284100 "

R.J.D. 5-11-21

Nos 311-315

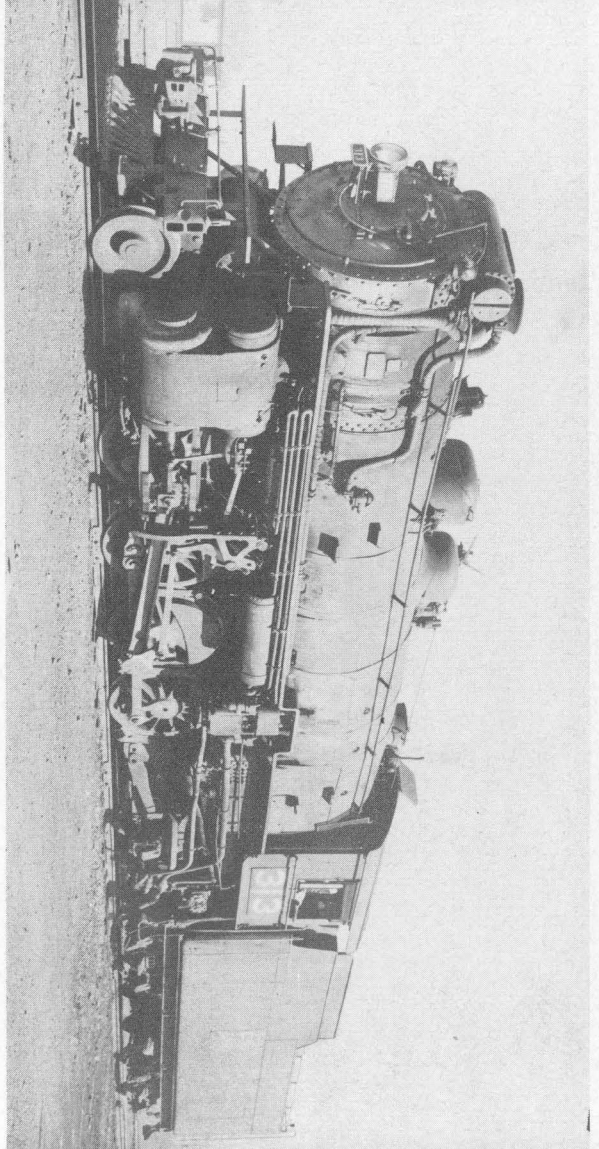
CLASS #311

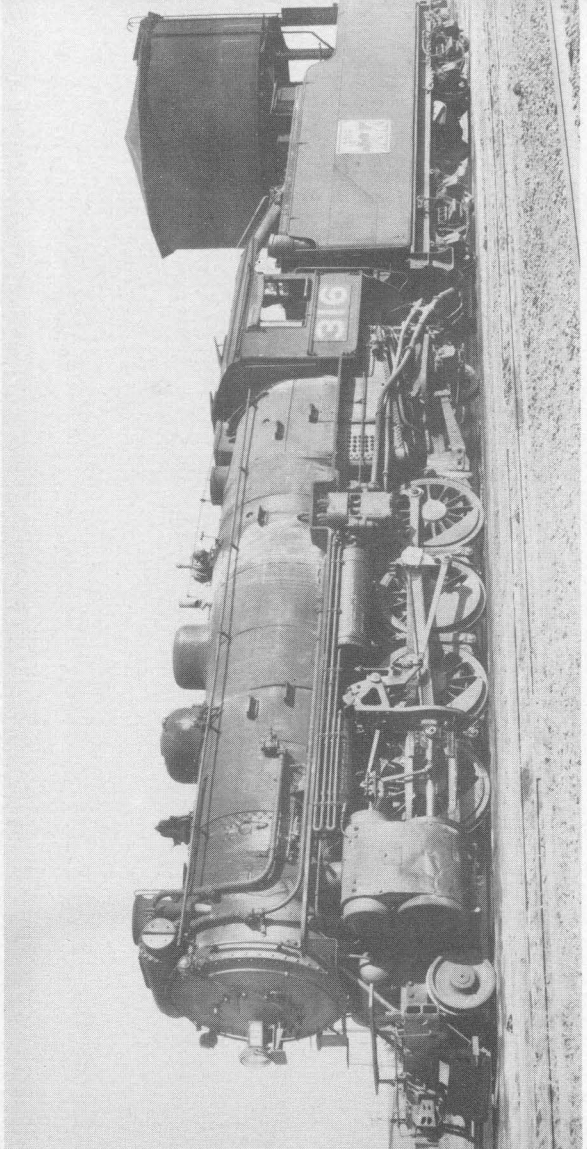
NO. OF TENDERS-5
NO. FOR COAL- 5



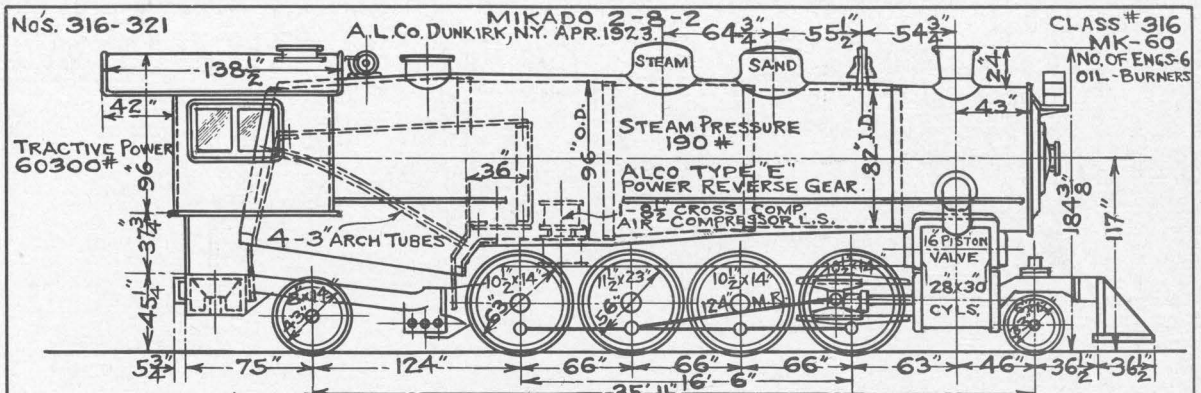
WATER CAPACITY	10000 GALS
COAL "	16½ TONS
WEIGHT LIGHT.	71400 LBS
" LOADED AS ABOVE	187700 LBS.

R.J.D. 5-11-21.





Nos. 316-321 — MIKADO 2-8-2 — A.L.Co. DUNKIRK, N.Y. APR. 1923. — CLASS #316 MK-60 — NO. OF ENGS-6 OIL-BURNERS

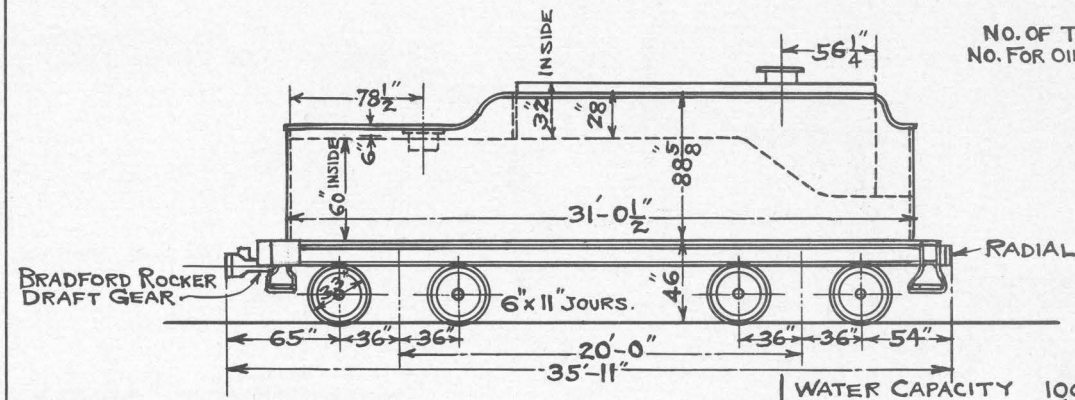


FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	120⅛"	NUMBER 21" DIA.	221	FIRE TUBES SQ. FT.	3438	WEIGHT ON DRIVERS	246000 LBS.
" COMBUST CHAMB.	36"	" 5½-¼ "	43	ARCH "	30	" " LEADING TRUCK	24500 "
HEIGHT FRONT	89½"	LENGTH OVER TUBE SHEETS	216"	FIREBOX "	284	" " TRAILING "	44500 "
" BACK	65½"			TOTAL "	3752	" OF ENGINE TOTAL	315000 "
WIDTH BOTTOM	84⅛"	SCHMIDT FIRE TUBE SUPERHEATER.				" " " & TENDER	506400 "
GRATE AREA SQ. FT.	70.3					LIGHT WEIGHT, ENGINE	279500 "

R.J.D. 7-23-23.

Nos. 316-321 — CLASS #316.

NO. OF TENDERS-6
NO. FOR OIL (FUEL)-6



WATER CAPACITY	10000 GALS.
FUEL OIL "	4000 "
WEIGHT LIGHT	77300 LBS.
" LOADED	191400 "

R.J.D. 7-23-23.

Nos. 322-326

MIKADO 2-8-2

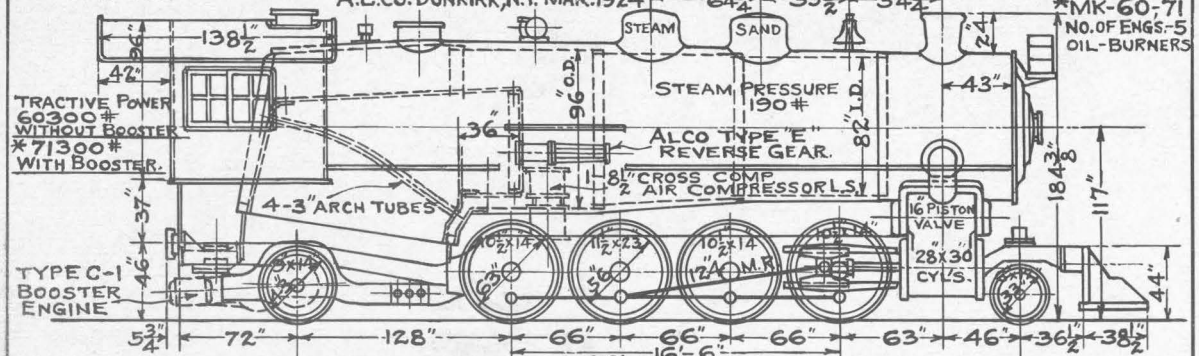
A.L.Co. DUNKIRK, N.Y. MAR. 1924

CLASS #322

*MK-60-71

NO. OF ENGS.-5

OIL-BURNERS



FIREBOX		TUBES		HEATING SURFACE		LOADED WEIGHTS	
LENGTH INSIDE BOTT.	120⅜"	NUMBER	221	FIRE TUBES SQ.FT.	3438	WEIGHT ON DRIVERS	245000 LBS.
" COMBUST CHAMB.	36"	DIA	2"	ARCH "	30	" " LEADING TRUCK	24500 "
HEIGHT FRONT	89½"	LENGTH OVER-	21'	FIRE BOX "	284	" " TRAILING "	57500 "
" BACK	65-1"	TUBES SHEETS	216"	TOTAL "	3752	" OF ENGINE TOTAL	327000 "
WIDTH BOTTOM	84½"					" " " & TENDER	518600 "
GRATE AREA SQ.FT	70.3	SCHMIDT FIRE TUBE SUPERHEATER.				LIGHT WEIGHT. ENGINE	291200 "

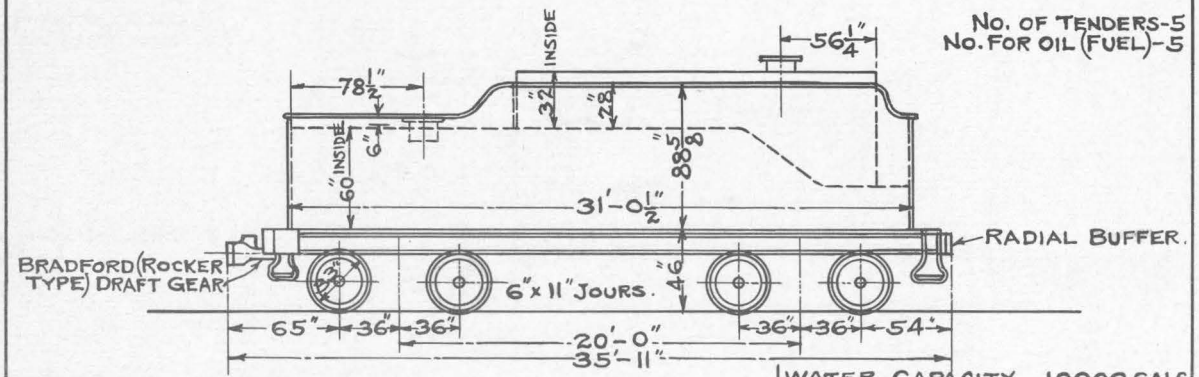
R.J.D. 7-1-24

Nos. 322-326

CLASS #322

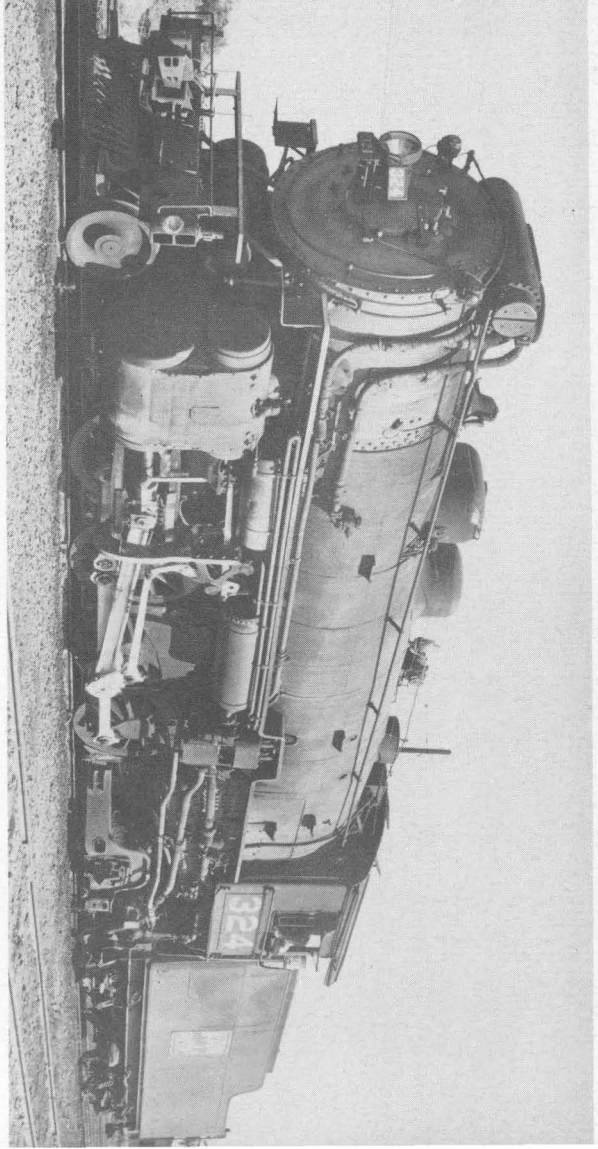
No. OF TENDERS-5

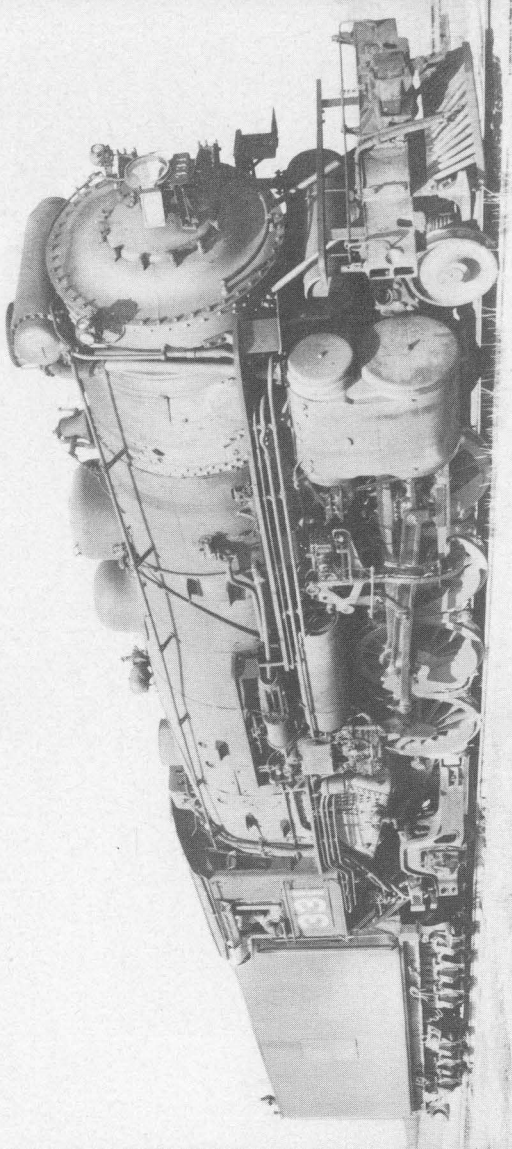
No. FOR OIL (FUEL)-5



WATER CAPACITY	10000 GALS.
FUEL OIL	4000 "
WEIGHT LIGHT	76500 LBS.
" LOADED.	191600 "

R.J.D. 7-1-24





Nos. 327–331

MIKADO 2–8–2

A.L.Co. SCHENECTADY, N.Y. MAY 1926

CLASS #327

*MK-60-71

NO. OF ENGS.-5

OIL-BURNERS

FEEDWATER HEATER.

TRACTIVE POWER 60300 # WITHOUT BOOSTER

*71200 # WITH BOOSTER

TYPE C-2 BOOSTER ENGINE

STEAM PRESSURE 190#

ALCO TYPE "E" REVERSE GEAR.

1-8½" CROSS COMP. AIR COMP. R.S.

FEED WATER PUMP L.S.

2-3" ARCH TUBES. 3-SYPHONS

14" PISTON VALVE

28"×30" CYL'S.

WHEEL BASE ENG. & TENDER 73'-2½"

FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS.	
LENGTH INSIDE BOTT.	120⅛"	NUMBER	213	FIRE TUBES SQ.FT.	3407	WEIGHT ON DRIVERS	247500 LBS.
" COMB. CHAMBER	36⅞"	DIA.	2¼"	ARCH "	15	" " LEADING TRUCK	25000 "
HEIGHT FRONT	89½"	"	5½"	SYPHONS "	92	" " TRAILING "	57500 "
" BACK	65⅛"	LENGTH OVER TUBE SHEETS	216"	FIRE BOX "	284	" OF ENGINE TOTAL	330000 "
WIDTH BOTTOM	84¼"			TOTAL "	3798	" " " & TENDER	594000 "
GRATE AREA SQ.FT.	70.3	SCHMIDT FIRE TUBE SUPERHEATER				LIGHT WEIGHT ENGINE	293800 "

R.J.D. 6-23-26.

Nos. 327–331

CLASS #327

NO. OF TENDERS-5

NO. FOR OIL (FUEL)-5

RADIAL BUFFER

WESTINGHOUSE FRICT. DRAFT GEAR TYPE N-11

6"×11" JOURS.

WATER CAPACITY	15000 GALS.
FUEL OIL "	4000 "
WEIGHT LIGHT	111000 LBS.
" LOADED	264000 "

R.J.D. 6-23-26.

Nos. 332–336

MIKADO 2-8-2

A.L.Co. SCHENECTADY, N.Y. MAY 1929.

CLASS #332

MK-60-71

NO. OF ENGS.-5

OIL-BURNERS.

FEEDWATER HEATER.

TRACTIVE POWER
60300 #
WITHOUT BOOSTER
* 71300 #
WITH BOOSTER

STEAM PRESSURE 190#

ALCO TYPE-G REVERSE GEAR.

1-8½" CROSS COMP. AIR COMP. R.S.

2-3" ARCH TUBES
3-SYPHONS

FEED WATER PUMP L.S.

14-PISTON VALVE

28"x30" CYL.S.

TYPE C-2 BOOSTER ENGINE

WHEEL BASE ENG. & TENDER 73'-2½"

FIRE BOX		TUBES		HEATING SURFACE		LOADED WEIGHTS.	
LENGTH INSIDE BOTT.	120⅛"	NUMBER 2¼" DIA.	213	FIRE TUBES SQ.FT.	3407	WEIGHT ON DRIVERS	249000 LBS
" COMB. CHAMBER.	36"	" 5½" "	45	ARCH "	15	" " LEADING TRUCK	25500 "
HEIGHT FRONT	89½"	LENGTH OVER TUBE SHEETS	216"	SYPHONS "	92	" " TRAILING "	57500 "
" BACK	65½"			FIRE BOX "	284	" OF ENGINE TOTAL	332000 "
WIDTH BOTTOM	84¼"			TOTAL "	3798	" " " & TENDER	599000 "
GRATE AREA SQ. FT.	70.3	SCHMIDT FIRE TUBE SUPERHEATER.				LIGHT WEIGHT ENGINE	296400 "

R.J.D.

Nos. 332–336

CLASS #332

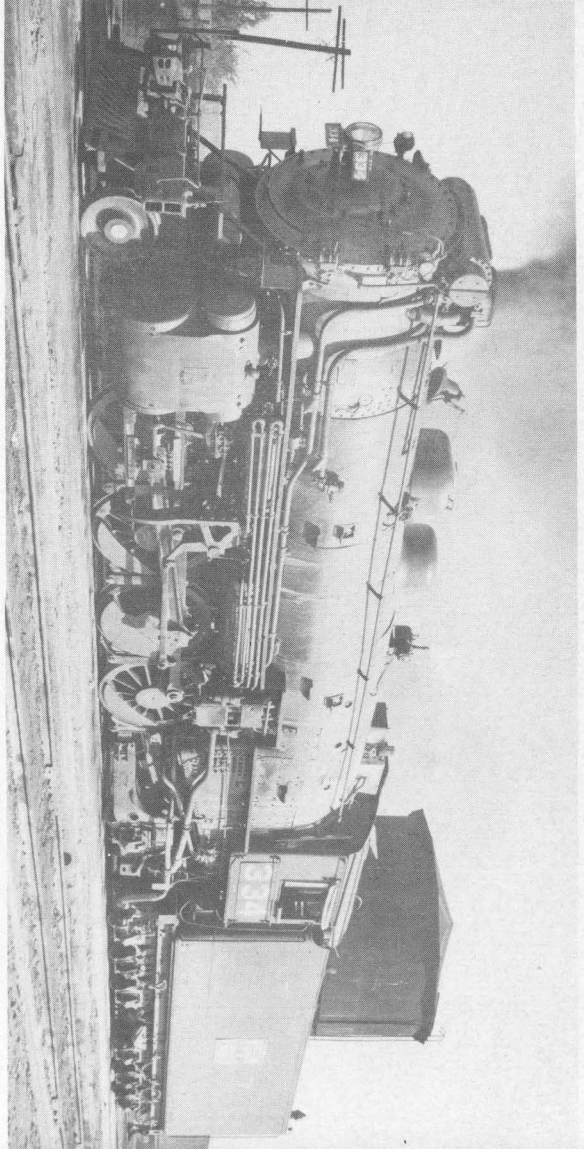
NO. OF TENDERS-5
NO. FOR OIL (FUEL)-5

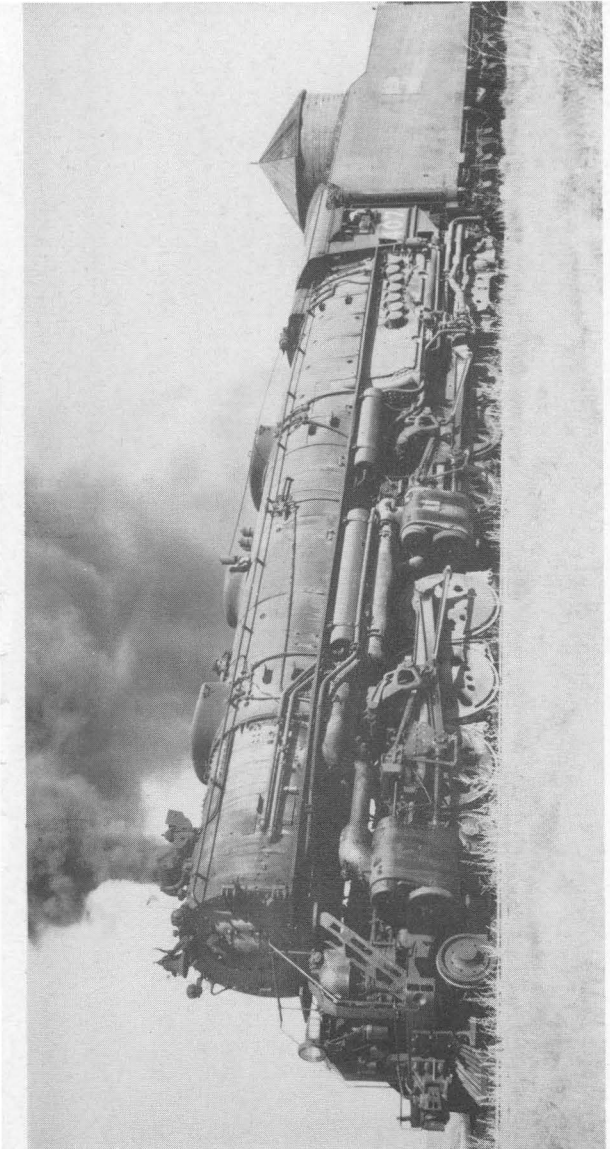
RADIAL BUFFER

MINER DRAFT GEAR
TYPE A-79 X B

6"x11" JOURS

WATER CAPACITY 15000 GALS.
FUEL OIL " 4000 "
WEIGHT LIGHT 114300 LBS.
" LOADED 267000 "



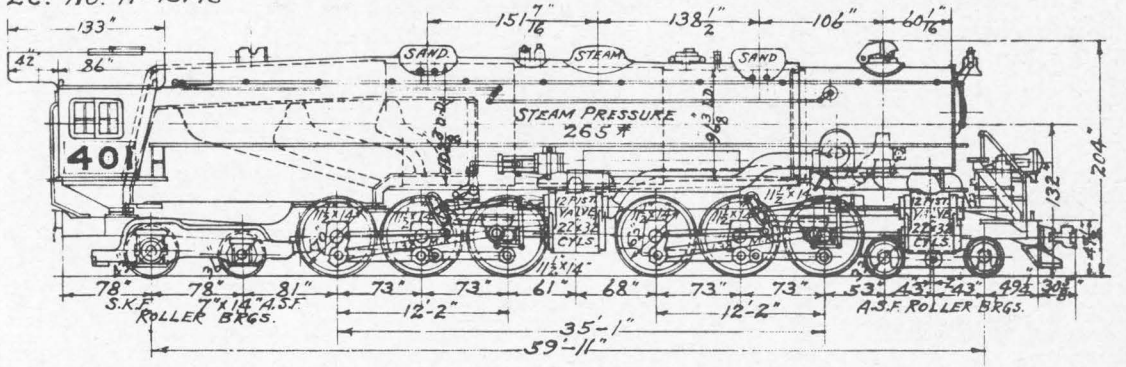


ROAD CLASS 401
SYMBOL M-100
FUEL - COAL
BUILT - ALCO. 1938
SPEC. NO. A-13148

TRACTIVE POWER	99600 LBS.	
FACTOR OF ADHESION	4.16	
STEAM PRESSURE	265 LBS.	
LIGHT WT, ENGINE	531000 "	
" " TENDER	76900 "	
AVG. AXLE LOAD	69300 "	

WEIGHTS LOADED

ON DRIVERS	416000 LBS.
" LEAD TRUCK	78500 "
" TRAILING TRUCK	112300 "
ENGINE, TOTAL	607000 "
TENDER LOADED	401500 "
ENG. & TEND. "	1008500 "



F. W. HEATER, COFFIN 11-D
" PUMP " CENTRIF. TYPE D
REVERSE GEAR, ALCO. " G
AIR PUMPS, 2-8½" GROSS COMPOUND
DRAFT GEAR, CARD-WEST. FRICT. NY-11-E
BRAKE EQUIPT., WESTINGHOUSE, ET-8
SUPERHEATER, SUPERH.CO. TYPE A
STOKER, STANDARD B-K
THROTTLE, AMERICAN MULTIPLE

TUBES

NUMBER 2¼" DIA.	222	5½" DIA. 60
LENGTH OVER TUBE SHEETS		276"

HEATING SURFACE

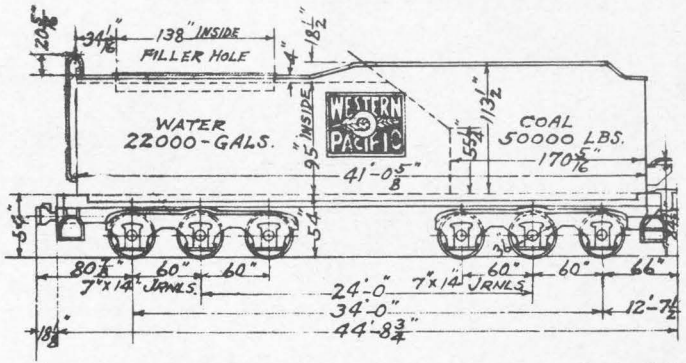
FIRE TUBES,	SQ. FT.	4974
SYPHONS	" "	132
FIREBOX	" "	541
TOTAL	" "	5646
SUPERHEAT	" "	1724

FIREBOX

LENGTH, INSIDE BOTTOM	213 7/16"
" COMBUSTION CHAMBER	82"
HEIGHT, FRONT	84 3/4"
" BACK	80"
WIDTH, BOTTOM	108 1/4"
SYPHONS, FIREBOX	4
GRATE AREA,	SQ. FT. 108.2

COMB. CHAMBER SYPHONS APPLIED TO NOS. 401, 403, 404

MAX. TRACK CURVE 20°

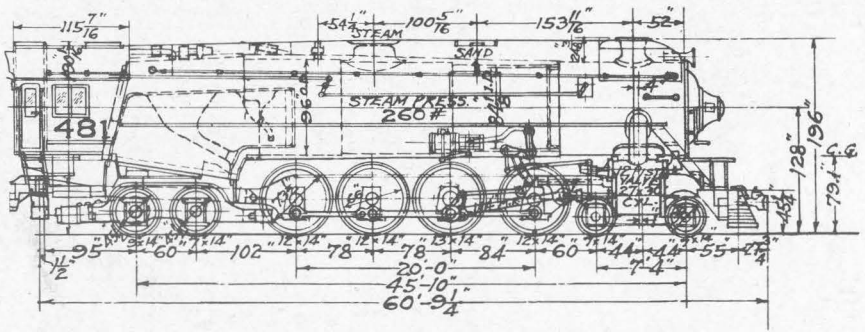


R.J.D. 3-38.

ROAD CLASS 481
SYMBOL GS-64-77

Nos. 481-486
BUILT-LIMA LOCO. WKS. INC. 1943
SPEC. No. A-2913

F.W. HEATER WORTHINGTON 5-SA TRACTIVE POWER WITHOUT BOOSTER 64200 #
" " WITH BOOSTER 75500
REVERSE GEAR ALCO TYPE G. FACTOR OF ADHESION ENGINE 4.38
AIR PUMP 2-8½" CROSS COMP. " " " ENG. & BOOSTER 4.54
DRAFT GEAR WAUGH TYPE WMGLE STEAM PRESSURE 260 LBS
BRAKE EQUIPT. WESTINGHOUSE E.T.
SUPERHEATER TYPE-E
BOOSTER, FRANKLIN " C-2-S MAX. TRACK CURVE 18°



FUEL - OIL

WEIGHTS LOADED

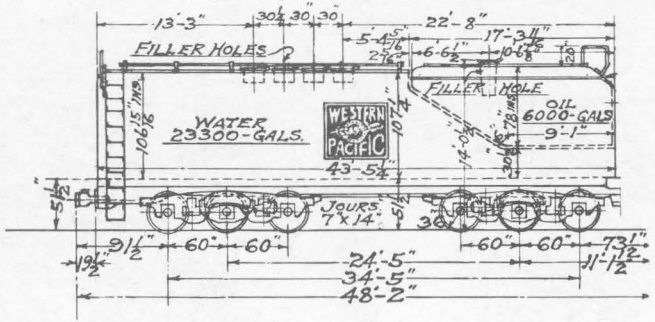
ON DRIVERS	280950 LBS
" LEAD. TRUCK	73650 "
" TRAILING "	111500 "
ENGINE TOTAL	466100 "
TENDER LOADED	397700 "
ENG. & TEND. "	863800 "
LIGHT WT. ENGINE	417600 "
" " TENDER	153520 "
AVG. AXLE LOAD	70237 "

FIREBOX

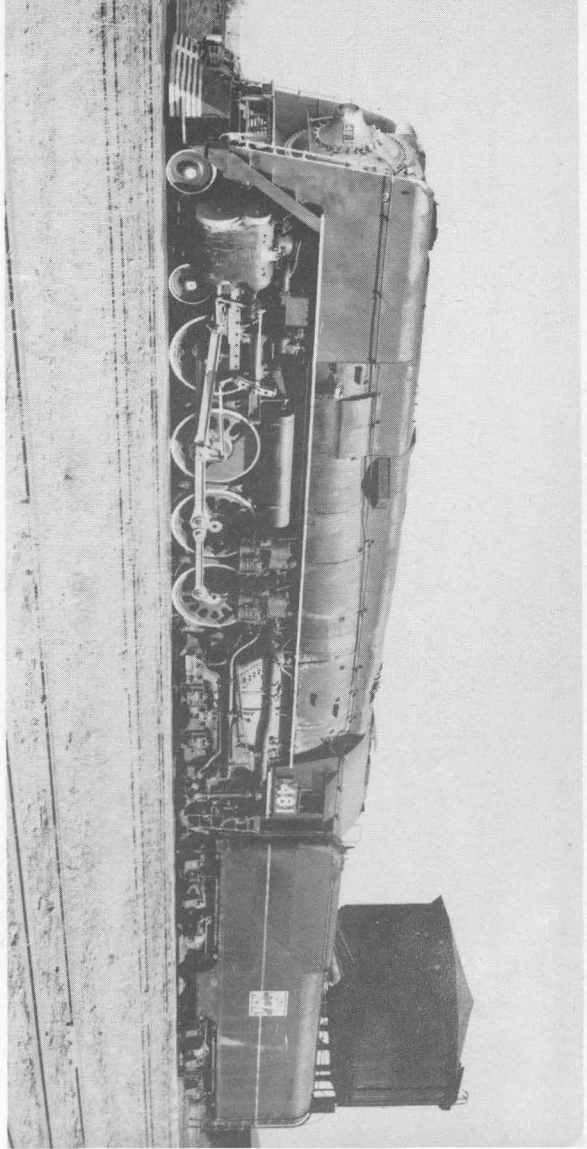
LENGTH INSIDE BOTTOM	127"
" COMBUSTION CHAMBER	60"
HEIGHT FRONT	89"
" BACK	68¼"
WIDTH BOTTOM	102¼"
SYPHONS, FIREBOX	4
GRATE AREA	90.2 SQ. FT.

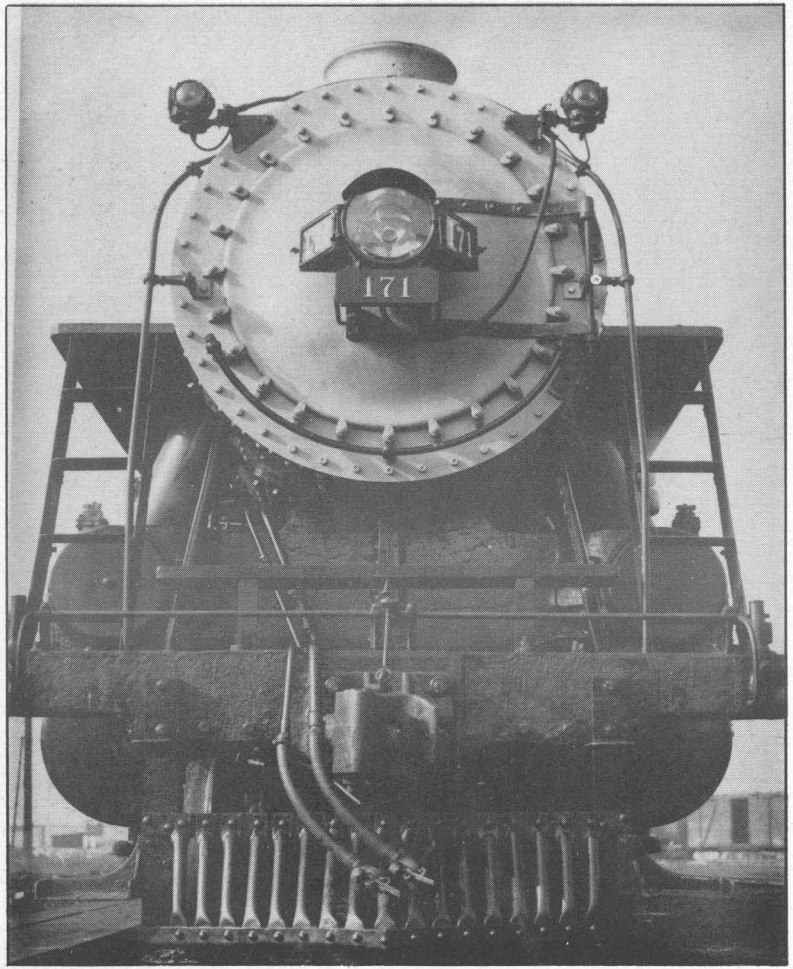
TUBES

NUMBER 2¼" DIA. 49, 3½" DIA. 198		
LENGTH OVER TUBE SHEETS 258		
HEATING SURFACE		
FIRE TUBES	SQ. FT.	4502
SYPHONS	" "	101
FIREBOX	" "	350
TOTAL	" "	4922
SUPERHEAT	" "	2086



R.J.D. 9-43.

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