

O&W Ramblings
No. 58 in a Series
NYO&W Passenger Car Lighting – Part II

Pintsch Gas: In similar fashion to the Frost Gas system (ante) the Pintsch Gas fuel tank was piped to multiple lamps in a car interior. The fuel was a highly refined Naphtha compressed and loaded under pressure and contained under pressure (more or less at 80 psi) in underframe tanks. The compressed gas was then drawn from the fuel tank for piping to lamps and had to pass through double reduction, to feed lamps at 5 psi.

The refinement of the Naphtha fuel required a substantial filter / compressor facility, and then with elaborate storage capacity and a pressure loading facility to refuel cars. The endurance of a load of Pintsch gas was such that its use required multiple loading facilities over a line-haul route; -- and expense many roads were unwilling to endure. In the Northeast the NYNH&H made use of Pintsch gas, along with its array of compressors and fueling stations. The O&W would have none of this; -- The Parlor Observation cars (No. 82 & 83) purchased from the Cotton Belt Route in 1918 were originally equipped with Pintsch gas lighting, but upon arrival to the O&W they were summarily shopped and converted immediately to electrical lighting.

Interestingly, even though Pintsch gas lighting was relatively rarely employed by domestic lines (and although popular with some European railroads [as a European development]) “Pintsch Gas” came to be often used as generic term for any lighting suite using hydrocarbon fuel for lighting(!).

Acetylene: In compressed and bottled form, is today used very commonly as a fuel, with compressed and bottled oxygen in “gas” welding and cutting (“burning”) operations on steel substrates, but it historically was also used as a lighting fuel. O&W cars using acetylene carried bottles, with the associated gauges and regulators) in the toilet closets; -- all as set forth, with operating instructions, in the aforementioned “Supplemental Instructions” booklets.

Some O&W locomotives had so-called “Carbide” headlamps, as an advance beyond oil (kerosene) lamps. Those were fueled with acetylene provided by “generators” located on the pilot decks of engines so equipped. An acetylene generator is simply a tank charged with calcium carbide and water, the chemical reaction of which produces acetylene at about 5 psi.

Strange as it may seem, some pioneering automobiles had acetylene headlamps. Those lamps were fed from bottles / generators located on the car running boards. The historic Hende Manufacturing Company of Springfield, Massachusetts produced ca. 1917, its branded “Powerplus” Indian motorcycles with an optional “carbide” headlight(!).

Electric Lights: Generally supplanted other forms of railroad (passenger) car lighting in the beginning decades of the 20th Century. The first O&W steel 57’ steel coaches from AC&F in 1914

had electric lighting. Thereafter, the last new steel passenger cars acquired by the O&W from Osgood Bradley in 1922 had electric lighting. The convenience of electric lighting prompted the O&W to re-quip a number of its "Great Timber Fleet" gas lighted cars with electric lighting. The spotting features included the underframe battery boxes (needed for electricity when cars were standing and the axle driven dynamos were not producing) and rooftop conduits for electrical cables to the lamps beneath. Those conduits are the "tell" for cars once gas lighted, though I don't know of any O&W wood cars originally built delivered with electric lighting. The O&W evidently opted for that exterior / conduit method which excused the shops from tearing away, and then restoring interior ceiling paneling, to route wires beneath.

Mal Houck NMRA MMR #696