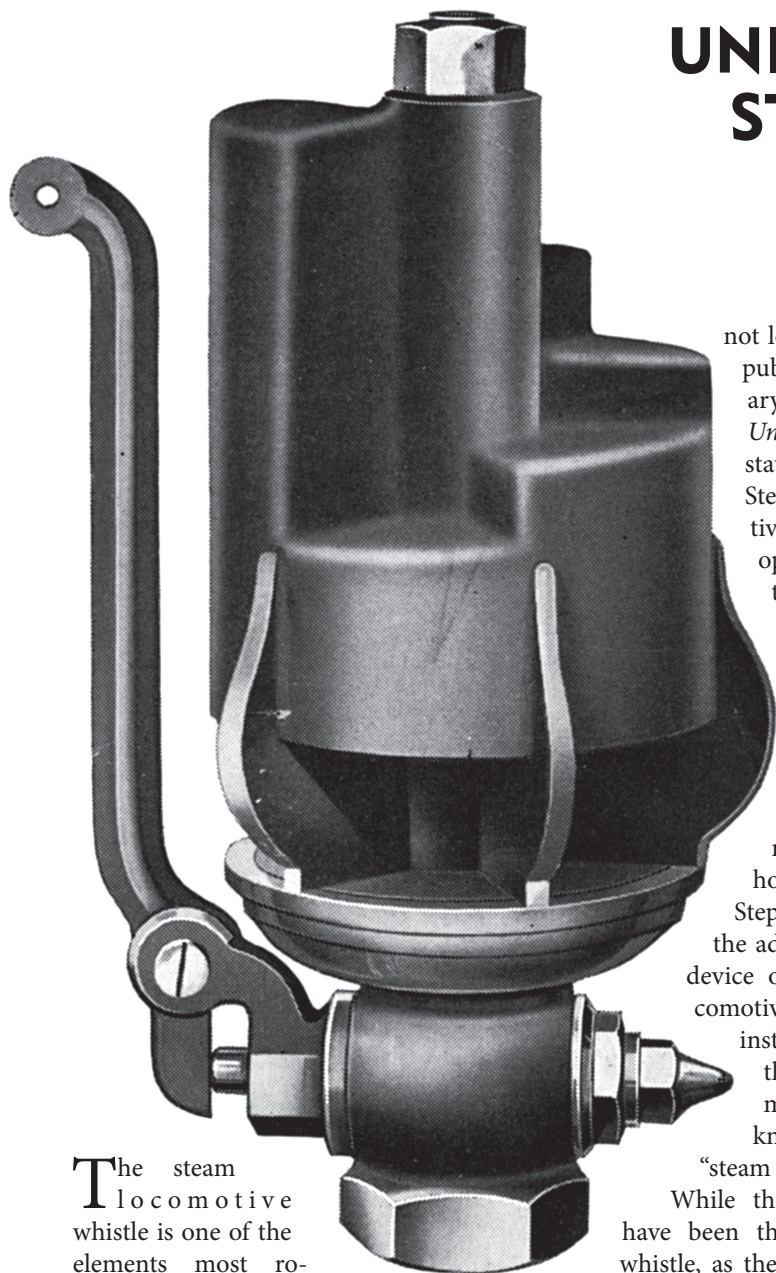


UNION PACIFIC AND THE STAR BRASS 5-CHIME WHISTLE

by John E. Bush



The steam locomotive whistle is one of the elements most romantically associated with railroads. Many stories, songs, movies and simple mentions of this expression have been written and spoken across the globe for nearly two centuries.

Union Pacific's association with this warning and signaling apparatus stretches back to the arrival of the railroad's very first locomotive, and continued uninterrupted through the operation of every single steam locomotive the railroad owned. When Union Pacific acquired Danforth & Cooke built 4-4-0 No. 1 in 1865, the locomotive was fitted with a whistle, by then a fully standard piece of equipment on locomotives.

In fact, use of the steam whistle did not originate with the very earliest use of the steam locomotive, but was created

not long after. An article published in the January, 1932 edition of *The Union Pacific Magazine* stated that after Robert Stephenson's locomotive "Samson" began operation in 1825 on the Stockton and Darlington railroad in England, the directors, following a second accident in 1833, decided to seek a method aimed at reducing the likelihood of similar events. Stephenson suggested the addition of a warning device operated by the locomotive steam. A musical instrument maker in the town of Leicester, known at the time as a "steam trumpet."

While this device may not have been the very first steam whistle, as there was apparently a steam-powered industry in Wales, which was fitted with one earlier the same year and it may have been the first used on a railroad. Thereafter most locomotives were fitted with or constructed with steam whistles of one type or another. In addition to serving as a warning device, the whistle also developed as a signaling device.

The use of whistles became a topic of debate, and the public and writers alike were soon talking and publishing commentary about locomotive whistles with both praise and derision. An editorial in the September 17, 1915 *Railway Age Gazette* provides a good example, noting: "Many years ago the railroads adopted a code of locomotive whistle signals which soon became standard on all lines" and

concluding that "The whistle is a necessary device, but it should not be abused; all playful, slouchy, sloppy, vicious and abusive whistling should cease." The editors reprinted an article from the Alton, Illinois, *Evening Telegraph* imploring locomotive engineers to consider the "other fellow" and use the whistle responsibly. It was not long before the tone made by the single note whistles was accorded the term "hooter," and when one of these whistles is "quilled" by the enginemen, one can definitely understand how this descriptive term came to be applied.

In the early days of American locomotive design and construction almost all whistles were made to a generally similar pattern. These whistles created a single tone, with the pitch varying depending upon steam pressure and engineer's operation of the valve from the cab. Most would, in general, have sounded very similar to one another as they were of approximately the same "bell" dimensions, height and diameter.

In railroad use, and certainly on Union Pacific, most whistles were comprised of a valve body that contained the steam inlet, the passages, which directed steam, and the parts that made up the valve assembly by which steam was admitted, controlled, and shut-off. Located above the valve components was a plate, sometimes known as a "table plate" (also referred to as a "languid," in organ pipe terminology). This plate was a little smaller than the inner edge of the upper diameter of the bowl. The gap created by this difference in diameter was the area through which steam passed at extremely high velocity when the valve was opened by the engineman pulling

Above: Illustration of a "Star Improved Five Tone Locomotive Chime Whistle" from the Star Brass Manufacturing Co. catalog from 1927.
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