

NEW HAMPSHIRE DIVISION OF HISTORICALRESOURCESState of New Hampshire, Department of Cultural Resources603-271-348319 Pillsbury Street, 2nd floor, Concord NH 03301-3570603-271-3558Voice/ TDD ACCESS: RELAY NH 1-800-735-2964FAX 603-271-3433http://www.nh.gov/nhdhrpreservation@nhdhr.state.nh.us

SEWALL'S FALLS BRIDGE CONCORD, NEW HAMPSHIRE

JAMES L. GARVIN STATE ARCHITECTURAL HISTORIAN 18 April 2005

Built in 1915 as part of a major bridge reconstruction effort in Concord, Sewall's Falls Bridge was designed by John Williams Storrs of Concord, at that time New Hampshire's most eminent bridge designer. The bridge is classified as a two-span riveted high Pratt truss, and survives as one of only two bridges of this pattern remaining in New Hampshire. The bridge was determined to be eligible for the National Register of historic Places in 1988.

Sewall's Falls Bridge is the only survivor of a group of four new truss bridges constructed by the City of Concord in 1915 as a major highway modernization effort. The others spanned the Merrimack River at Manchester Street and at East Concord, and the Soucook River between Concord and North Pembroke. All were designed by Concord's own bridge engineer, John W. Storrs. The Sewall's Falls Bridge stands on the massive granite abutments and piers of an older covered wooden bridge that reportedly dated from 1873, although there had been a bridge at this crossing since 1832.

John Williams Storrs (1858-1942) was the only New Hampshire engineer to specialize in bridge design during the early twentieth century. He achieved eminence in that field, but also enjoyed a long career in other arenas of public service. Before establishing his private practice in 1906, Storrs worked with the Concord and Montreal and Boston and Maine Railroads, which employed the most knowledgeable bridge engineers in central and northern New England and constructed the longest and strongest bridges in the age before the automobile.

In 1903, the New Hampshire legislature passed legislation that led toward creation of the state's first highway department. Governor Nahum Bachelder appointed Storrs the state highway engineer for Coos, Carroll, and Grafton Counties. Between 1903 and 1905, Storrs worked to

convince an initially skeptical governor and council of the need for three north-and-south "trunk line" highways that became the basis for the state's first improved highway system.

When the Public Service Commission was created in 1911 to assume the duties of the former Board of Railroad Commissioners, Storrs was appointed its chief engineer. Storrs became a member of the Public Service Commission in 1918 and its chairman in 1938. He served five terms as mayor of Concord between 1933 and his death in 1942. When he died in his eightyfourth year, Storrs was regarded as the oldest serving mayor in the United States.

Storrs established his independent bridge design practice in 1906, taking his son, Edward Dow Storrs, as his partner about 1908. In 1918, Storrs and his son published a well-regarded handbook on practical bridge construction for the use of town road agents. Storrs' office records are preserved at the New Hampshire State Archives. They reveal that his firm, Storrs & Storrs, designed over forty metal truss bridges between 1906 and 1926, as well as many bridges of other types and materials. Of these, only nine Storrs-designed metal truss bridges survive in New Hampshire today.

Metal truss highway bridges of the early twentieth century are increasingly endangered. New Hampshire now has only some forty metal truss bridges in use, and several of those are scheduled for demolition in the near future. We have fifty-four covered bridges. Without our realizing it, our metal truss bridges are becoming more endangered than our prized wooden spans. These metal bridges embody the early maturity of American civil engineering. They express the ability of the early twentieth-century engineers to analyze the precise compressive and tensile stresses in a complex structure and to design a bridge that would carry a specific loading with a known factor of safety.

Sewall's Falls Bridge is Concord's last surviving example of a bridge design by New Hampshire's most eminent bridge engineer of the early twentieth century, a designer who maintained his practice in Concord and served the city in many other ways.