

# The History of Frankenstein Trestle

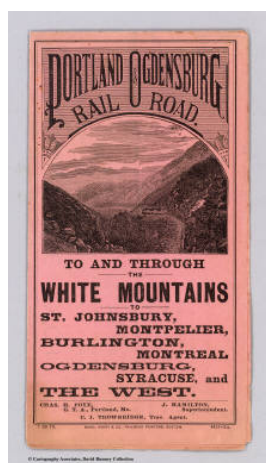


History compiled by the  
Conway Scenic Railroad  
June 2007

Following the end of the American Civil War in 1865, ideas on how to expand this great nation began to surface. The feasibility of a railroad connecting New England with the Great Lakes had been explored earlier in the century; however, the idea was always dismissed because it seemed too difficult and much too costly. In 1867, a group of Maine businessmen, including a former governor, formed the Portland and Ogdensburg Railroad Company for the purpose of building a rail line from Portland, Maine, to Ogdensburg, New York, hoping to connect the profitable seacoast of New England with the growing industrialized mid-western region of the country.



*Map of the P&O Railroad Line*



*P&O RR Cover, c.1879*

Two Portland engineers were hired in July of 1867 to make a preliminary study of the proposed railroad through Maine and New Hampshire. The engineers, John F. Anderson and Charles J. Noyes, presented a report to Portland and Ogdensburg Railroad officials in May of 1868, recommending a route that would bring the line from Portland, ME, to Conway, NH, through the heart of the White Mountains and the rugged area known as Crawford Notch. The estimated cost of such a venture was about three million dollars.

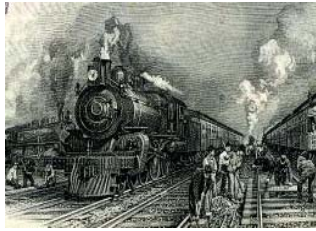
In 1869, the Portland and Ogdensburg Railroad Company was formally organized, and Samuel J. Anderson, brother of Engineer John Anderson, was elected President. As a condition of its approval of the project, the New Hampshire legislature required that the railroad would neither pass around nor run outside of Crawford Notch. Also, the railroad company was to spend \$100,000 in New Hampshire before July 1, 1873, and have

the entire line completed by January 1, 1880.

In 1860, much of Crawford Notch was owned by Dr. Samuel Bemis, who was considered an eccentric recluse, very much into naming places in the area at the time. Frankenstein Cliff (and later its neighbor, the Trestle) was named after Godfrey Nicholas Frankenstein, who was born in Germany in 1820 and immigrated with his family to the United States in 1831. An artist of considerable acclaim, his favorite subject was Niagara Falls, which he painted in all seasons and from all angles. One of his largest works was a panorama of the Falls on canvas: 1,000 feet in length and 900 feet high. While on tour with this canvas, he visited Boston. Here he met Dr. Bemis, and the meeting afforded him the opportunity to visit and paint in New Hampshire's White Mountains, beginning in 1847. He painted the Cliff and the river which flowed below, and his work was used by the P&O Railroad to advertise the beautiful Crawford Notch scenery to bolster tourism to the region. Frankenstein also painted a portrait of Dr. Bemis, which still hangs over the fireplace in the music room of Dr. Bemis' stone cottage, now known as the Notchland Inn.



*Dr. Bemis' Cottage, now the Notchland Inn*



To construct a railroad through the rugged terrain of Crawford Notch in the late 1800s was a remarkable achievement, and many people at the time said it was an impossible engineering feat. The gain of 1,623 feet in elevation in the 30 miles between North Conway and what is now Fabyan Station created great difficulties and expenses, and bridging the gorges proved to be especially challenging. It took 18 months to complete the railroad from Dr. Bemis' house to the

Crawford House, about 26 miles, blasting through granite mountains and overcoming the impossible.

Frankenstein Cliff soars 2,555 feet in an-almost vertical plane, but engineer Anderson maintained that it could be bridged. The decision was made to construct a trestle bridge there in the shape of a keystone arch. As the keystone is pushed downwards by the load above it, its wedge shape means that it pushes outward onto the abutments on each side. The forces are then spread sideways, rather than downwards. Ultimately, the entire load (the weight both of the bridge itself and of any traffic crossing it) is transferred partly down into the ground and partly out to the elements of the bridge to either side of the keystone.



The trestle originally was to have been constructed with wood over the winter of 1874, but the schooner carrying a load of pine from the South was overdue, and Niagara Bridge Works out of Buffalo, NY, offered to erect an iron trestle at 125% of the estimated cost of the wooden one. The schooner and its pine cargo were later reported lost at sea.<sup>1</sup> The first trestle was quite small and narrow and described as "spindly." Approximately 520' in

length, it hung 85' above the ravine floor at its highest point.



Godfrey Frankenstein never had the opportunity to see the Trestle named after him. He died in 1873, two years before the trestle was completed. A short time before his death, having learned about the Cliff being named after him by Dr. Bemis, he wrote a letter to the doctor, "... Mr. Clark told my brother that there is a Cliff in the White Mountains which they call 'Frankenstein Cliff.' When you named it that, I had no idea that I should hear of it 22 years afterwards. So the name actually stuck, and I am much obliged to you for the compliment."<sup>2</sup>

Frankenstein Trestle was completed in June of 1875, and the first excursion train crossed it on June 29<sup>th</sup>. A week later, construction crews who had been working from the end of the Boston, Concord and Montreal line at Fabyan's reached the summit of the Notch from the West, and August 7<sup>th</sup> was a day of celebration, as a special train from Portland brought officials and the press to New Hampshire's White Mountains. This time, the train ran all the way through the Notch, and, just after noon, the ceremonial last spike was driven by blows from a hammer wielded by Samuel Anderson. Regular service, two daily



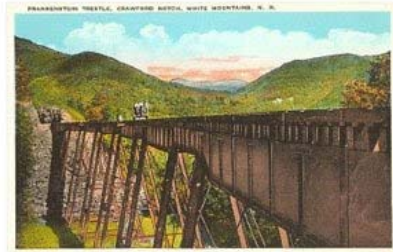
From the CSRR archives, date unknown

<sup>1</sup> From *Hart's Location in Crawford Notch*, by Marion Varney

<sup>2</sup> From *Hart's Location in Crawford Notch*, by Marion Varney

passenger trains and one freight train each way, between Portland and Fabyan's began on August 9. Crawford Notch had been conquered, and fulfillment of the P&O Railroad dream was within sight.<sup>3</sup>

However, following a series of financial setbacks due to construction costs, the P&O Railroad went bankrupt in 1888. The line, now under the name of *Mountain Division*, was leased by the Maine Central Railroad which eventually bought it in 1943.



Returning to the 1800s, a new wrought iron Frankenstein Trestle with concrete abutments was constructed in 1892 by the Union Bridge Company of Athens, PA, so that the trestle could accommodate heavier locomotives and trains.



As railroads began carrying larger rail cars, the Trestle needed to be strengthened again to carry the heavier loads. In 1930, additional steel girders, pier bents, and two granite block and concrete piers were added to the existing structure. Additional modifications were made in 1950 to support even heavier railroad cars.

Trains remained a popular mode of transportation into the 1940s. However, with Americans' growing use of automobiles, patronage of the nation's rail lines started to decline, and such was the case with the passenger trains in New Hampshire. Railroads no longer found their operations profitable, and, though Maine Central Railroad continued to provide passenger service into the 1970s, the last passenger trains through Crawford Notch ran in 1958.

Since September of 1995, the Conway Scenic Railroad has offered seasonal, passenger excursion trains on a five-hour round trip through the Notch. Starting at its 1874 Victorian station in North Conway Village, the "Notch Train" proceeds through Crawford Notch State Park and the White Mountain National Forest to Crawford Depot, and includes traveling over the Frankenstein Trestle. Crawford Notch is part of the White Mountain Trail, designated a National Scenic Byway in 1998, and visitors can also drive through this landscape, which still is largely unspoiled by development. Today, the historic and magnificent Frankenstein Trestle still makes observers gasp with wonder.



*The Frankenstein Trestle then.....*



*.....and now*

For more information, please contact Susan Logan at [SusanL@ConwayScenic.com](mailto:SusanL@ConwayScenic.com)  
Tel: (603) 356-5251, ext. 21

<sup>3</sup> *The Mountaineer*, © 1998, Massachusetts Bay Enthusiasts, Inc.