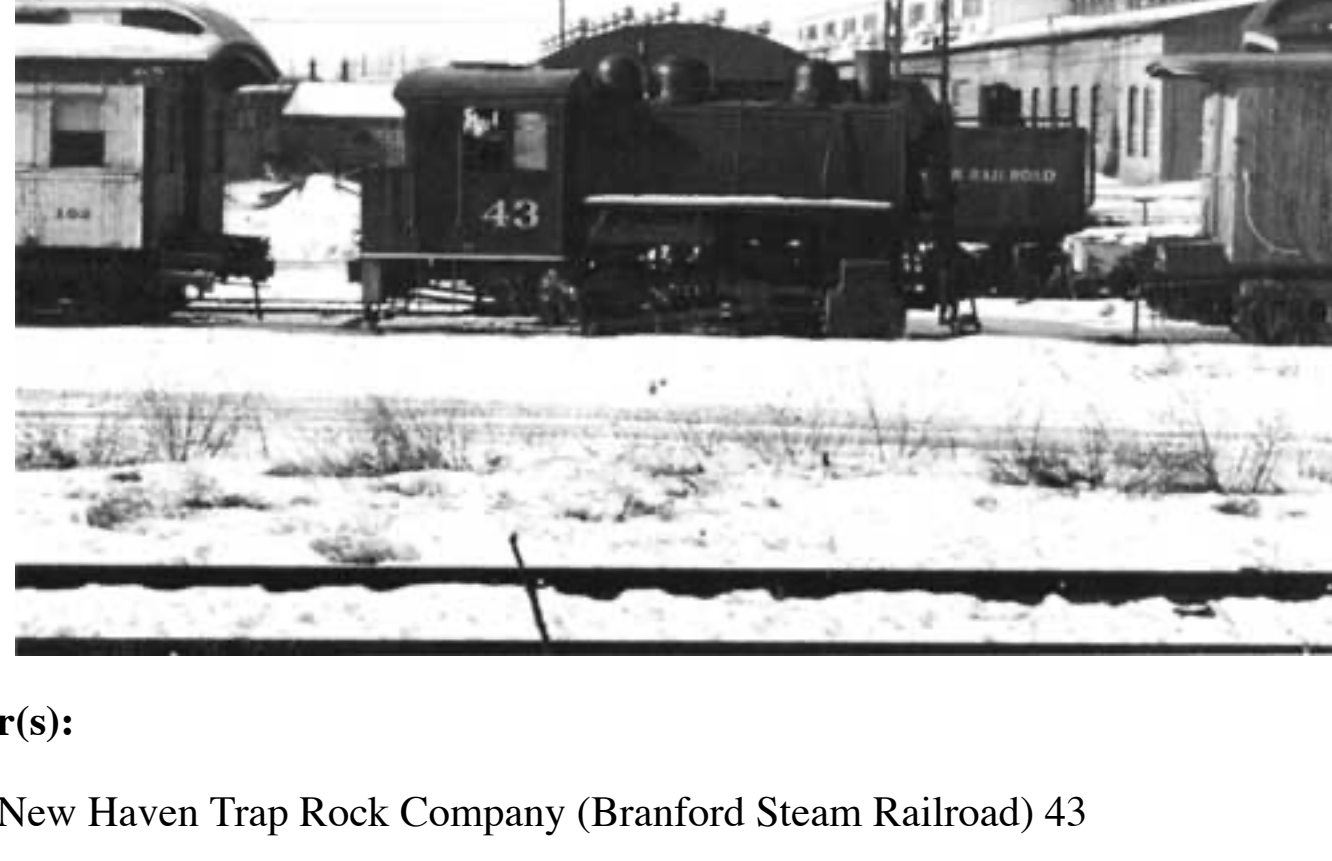


NEW HAVEN TRAP ROCK COMPANY NO.43



Owner(s):

New Haven Trap Rock Company (Branford Steam Railroad) 43

Whyte System Type: 0-4-0T Saddletank
Class:

Builder: Vulcan Iron Works, Wilkes-Barre, Pennsylvania
Date Built: December 1919
Builder's Number: 2888

Cylinders (diameter x stroke in inches): 14 x 20
Boiler Pressure (in lbs. per square inch): 150
Diameter of Drive Wheels (in inches): 37
Tractive Effort (in lbs.): 13,450

Tender Capacity:
Coal (in tons):
Oil (in gallons): Not applicable
Water (in gallons): 1,250

Weight on Drivers (in lbs.): 80,000

Remarks: Built in Wilkes-Barre, Pennsylvania

New Haven Trap Rock Company 0-4-0T Saddletank Locomotive No. 43

History: Employees of the New Haven Trap Rock Company and its Branford Steam Railroad like to say that the story of their operation began about 200,000,000 years ago when a volcanic extrusion of hot basalt created what the local Indians would eventually call Totoket Mountain. But that is a matter more of geology than of history.

There seem instead to have been several over threads of history which, once interwoven, created the Branford Steam Railroad. An entrepreneur named Louis Fisk had built, probably in the 1890s, a trotting park for horses called the Branford Driving Park in Branford, Connecticut. To connect it with the tracks of the Shore Line Division of the New York, New Haven and Hartford Railroad, Fisk built the three-mile-long Damascus Railway. Meanwhile, creation of the Palisades Interstate Park Commission of New York and New Jersey forced the closing of basalt quarries along the Hudson River, creating an increased market from Connecticut quarries. This same Louis Fisk decided to get into the quarrying business by opening a quarry on Totoket Mountain in North Branford.

On March 19, 1903, Fisk got the Connecticut State House of Representatives to authorize incorporation of the Branford Steam Railroad to take over the property of and succeed the Damascus Railway. In the 1900s the name "Branford Steam Railroad" suggested some short tourist-carrying railroad featuring the use of an antique steam engine, because the use of the term "steam" in a railroad's corporate title generally appears in that context, but this railroad's owners' inclusion of the term steam in 1903 allowed them to use the name Branford and yet distinguish their firm from the Branford Electric Railway, a streetcar system operating in that vicinity.

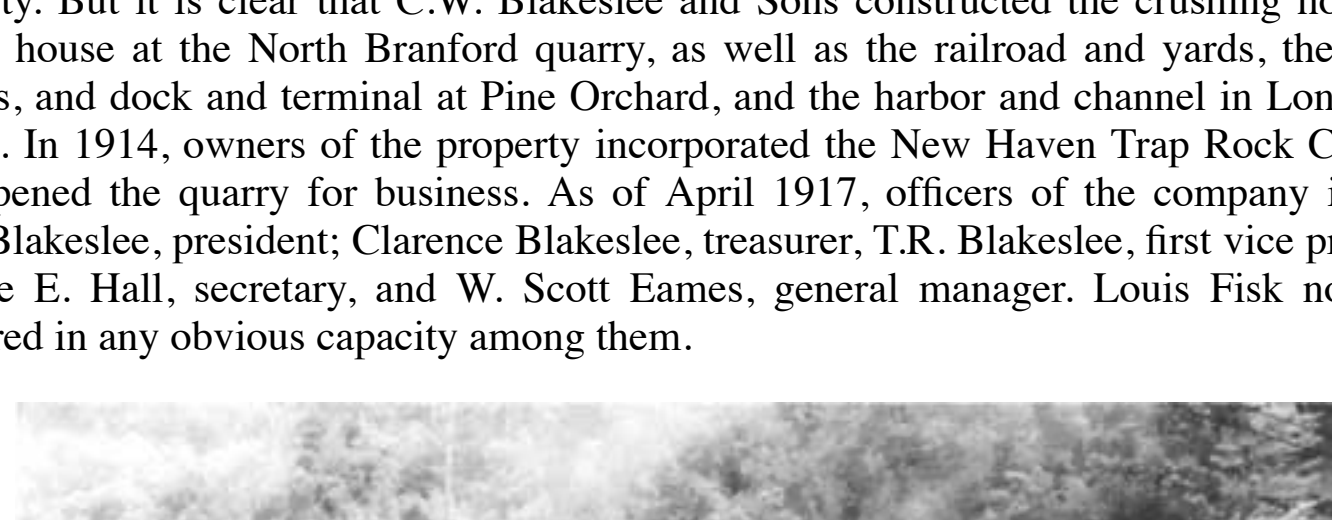
Fisk, meanwhile, began acquiring what would add up to 319.5 acres of Totoket Mountain and capital with which to establish his quarry. On April 29, 1909, he secured authority from the Connecticut House for the Branford Steam Railroad to construct trackage southward to a dock he owned at Juniper Point on Long Island Sound, where his railroad would also reach the tracks of the New York, New Haven and Hartford Railroad over the three miles of track built by the Damascus Railway.

It would also be necessary to build a rock crusher plant at the quarry and a quarry railroad, and for these purposes Fisk obtained financial backing for further development from Hayden and Stone of Boston. To build the rock crusher plant, Fisk apparently obtained the services of a well-established New Haven construction firm, C.W. Blakeslee and Sons, and the Blakeslee firm seems to have become a virtual partner of Fisk's in the development of the quarry.

Charles Wells Blakeslee reportedly established a construction business in New Haven, Connecticut, in 1844. In 1872, he took one son into the firm as a partner, renaming the company C.W. Blakeslee and Son, and in 1890, when another son, Dwight W. Blakeslee, became a partner, the firm became C.W. Blakeslee and Sons, a name it would retain until it was taken over by the Westinghouse Electric Corporation in 1969.

C.W. Blakeslee and Sons operated a heavy construction and general contracting business throughout southern New England, but it grew out of origins in New Haven, Connecticut. The firm built railroads, bridges, dams, foundations, highways, conduits, sewers, docks, and tunnels, and paved city streets. It also took on projects in other states such as Pennsylvania and Indiana. In 1873 the firm opened a basalt quarry at West Rock in Westville, Connecticut, where it built the first rock crusher in the country, producing paving rock. Later, New Haven municipal officials wanted the quarry site and what remained of West Rock for a park, and C.W. Blakeslee and Sons began to quarry at Pine Rock, where they produced hand-cut stone blocks for foundations and buildings as well as crushed rock for paving.

Exactly how the Blakeslee firm came to displace Louis Fisk is not known at present; possibly Fisk defaulted on payments to the construction firm and it took over the quarry property. But it is clear that C.W. Blakeslee and Sons constructed the crushing house and screen house at the North Branford quarry, as well as the railroad and yards, the storage trestles, and dock and terminal at Pine Orchard, and the harbor and channel in Long Island Sound. In 1914, owners of the property incorporated the New Haven Trap Rock Company and opened the quarry for business. As of April 1917, officers of the company included D.A. Blakeslee, president; Clarence Blakeslee, treasurer; T.R. Blakeslee, first vice president; George E. Hall, secretary; and W. Scott Eames, general manager. Louis Fisk no longer appeared in any obvious capacity among them.



Edgar T. Mead's photo of No. 43 illustrated its "New Haven Trap Rock Co." lettering and the number on the side of the cab (top); New Haven Trap Rock Company 0-4-0T Locomotive No. 43 (bottom).
Top, Steamtown Foundation Collection. Bottom, Railway & Locomotive Historical Society collection, California State Railroad Museum

The firm of C.W. Blakeslee and Sons used small industrial railroads in various capacities over the years, and the two surviving locomotives of the New Haven Trap Rock Company both were ordered by and built for C.W. Blakeslee and Sons, rather than for the New Haven Trap Rock Company. Whether these locomotives served the Blakeslee firm in its own Pine Rock quarry, or in some other capacity, or whether the Blakeslee firm simply was acting as agent for the New Haven Trap Rock Company in acquiring these locomotives remains unclear.

At this point it should be explained that the product carried by the railroad, "trap rock," obtained its name from German quarry workers because it broke into steplike blocks, the German word for step being *treppen*, which became corrupted to "trap." Trap rock, a dark steel gray in color and very dense and fine grained, featured a peculiar interlocking crystalline structure that caused it to fracture in a manner which created an angular gravel that, when used for paving purposes, tended to interlock in such a way that it made an exceptionally stable paving material. It also proved to be a very tough rock, not easily pulverized, and its strength also made it an outstanding material for use in foundation blocks for buildings.

When the North Branford Quarry first opened in 1914, it produced 2,000 tons of crushed trap rock daily, and the quarry face rapidly lengthened until it extended over a mile. There, railroad steam shovels operating over the quarry trackage loaded rock into side-dub gondola cars with arch bar brooms which had a capacity of five cubic yards of stone each. Small 15-ton 0-4-0T saddletank locomotives switched the gondolas around the quarry trackage, supplying the steam shovels with empty cars and moving loaded ones to the crusher into which the rock was dumped. The company used a pair of heavier 40-ton 0-4-0T saddletank locomotives to move the loads of crushed rock down the 6.2 miles of railroad to Juniper Point for loading into barges.

The firm of C.W. Blakeslee and Sons ordered in 1918 from the Vulcan Iron Works in Wilkes-Barre, Pennsylvania, 0-4-0T saddle-tank switch Locomotive No. 43. The road numbers of this locomotive may have represented a Blakeslee roster number rather than a New Haven Trap Rock Company (or Branford Steam Railroad) roster number. The little saddle-tanker has cylinders 14 inches in diameter with a 20-inch stroke, with 37-inch drivers.

In addition to this locomotive, at one time or another the New Haven Trap Rock Company operated 0-4-0T engines numbered 5, 27, 32, 35, 36, 37, and 38, probably all originally as quarry locomotives.

To operate the Branford Steam Railroad from quarry to interchange, the company acquired as Branford Steam Railroad No. 1 a 4-6-0 built originally for the Lake Shore & Michigan Southern, and later sold to the parent New York Central to become No. 5120 before coming to Branford, and No. 2, a Mogul-type 2-6-0 with small drive wheels and a high boiler manufactured by H.K. Porter in 1927. The firm retired No. 1 in the early 1930s, but No. 2 lasted until the 1950s, apparently until the company purchased its first diesel in 1951—No. 3, a 44-ton centercab General Electric locomotive—secondhand from the Winona Railroad of Warsaw, Indiana. Saddle tanker No. 43, a 40-ton locomotive much heavier than the 15-ton 0-4-0Ts used originally in the quarry, seem to have served in later years on the Branford Steam Railroad to Juniper Point as needed. The fact that No. 43 clearly carried on its saddle tank the name of the New Haven Trap Rock Company seemingly lacks significance in terms of any distinction between quarry locomotives and those used on the Branford Steam Railroad, for old 4-6-0 No. 1 carried New Haven Trap Rock Company lettering on its tender as well.

Members of the Blakeslee family still controlled the New Haven Trap Rock Company when in 1935 it merged with the Connecticut Quarries Company, and in February of that year the management reincorporated the company under the same name, New Haven Trap Rock Company. As a result of that merger, the company operated not one but six Connecticut quarries, located in Cheshire, Granby, Middlefield, New Britain, and Rocky Hill, as well as at North Branford. At North Branford, meanwhile, the company removed its quarry trackage and replaced the railroad steam shovels used to load rock into gondolas for movement to the crusher with fully revolving electric shovels mounted on caterpillar tracks. It was probably about this time that the company disposed of its small 15-ton quarry locomotives.

Over the years the uses of trap rock evolved. The industry grew up with modernization of railroads and the construction of the highway system in New England, with much of the crushed trap rock going into paving of roads and ballasting of railroad roadbeds. Even the ways roads were paved evolved, and trap rock could be used both in asphalt paving and as an aggregate in concrete. In 1940 the company developed asphaltic concrete plants and commenced manufacturing a paving material known as Blue Diamond Mix, which in turn became a whole variety of mixes. By 1952 the company was producing more than a million tons of crushed stone per year, and it was Locomotives Nos. 38 and 43 that handled the traffic from the North Branford crusher down to the Pine Orchard loading terminal near Juniper Point. By 1960, the North Branford Quarry alone had turned out 28 million tons of trap rock, and the company estimated that it contained sufficient trap rock for another 250 years of operation.

In 1956, the New Haven Trap Rock Company purchased two General Electric center-cab diesel switchers, which replaced the steam locomotives on the run from the crusher at North Branford to the Pine Orchard terminal. The company apparently kept Locomotive No. 43 around as switch engine at the crusher and the terminal for several more years, until it retired the old steam engine in 1959. Another source reported the New Haven Trap Rock Company's retired Locomotives Nos. 38 and 43 in January 1960 upon arrival of the company's third diesel, No. 5, a 44-tonner that was originally New York, New Haven & Hartford No. 0813. Just as steam locomotives gave way to diesel motive power on the Branford Steam Railroad, the side-dump gondola cars gave way to triple-bay hopper cars lettered for the New Haven Trap Rock Company. Whereas the steam locomotives had been lettered for the same company (No. 43, at least, carried the words "N.H. Trap Rock Co." on her saddle tank), some of the new diesels ironically carried the lettering of "The Branford Steam Railroad," despite the fact that it no longer was a steam railroad. As for the steam locomotives, Nos. 38 and 43 apparently rested in retirement in North Branford until 1962, when the Steamtown Foundation acquired them.

As for the New Haven Trap Rock Company, in 1971 it merged with the firm of Angelo Tomasso, Inc., losing its historic name in the process. The Tomasso firm was a more recent company, founded during the 1930s, but that did not prevent the older name from being scrapped, and eventually the firm adopted the name of Tilcon Tomasso Inc., when it became a subsidiary of Tilcon, Inc. Thus the Branford Steam Railroad, which antedated the creation of the New Haven Trap Rock Company, also outlived the quarrying firm, continuing to operate under a name now meaningless in the era of the diesel locomotive.

About 48 0-4-0T locomotives survive in the United States, including the New Haven Trap Rock Company engine No. 43. They are scattered rather widely around the country in railroad museums and on tourist railroads and are also exhibited in small parks. Typically they served industries as plant switchers, or in a few instances operated on an industry-associated railroad as at North Branford, and a few served as shop switchers at the railroad shops of major railroad companies. Wherever they worked, the little 0-4-0T saddle tankers made a small contribution to the operation of the railroad industry in the United States, as well as to other industries that shipped by rail, and are a part of its overall history.

Condition: Mechanical condition of the locomotive is unknown, although No. 43 is known to have operated at Bellows Falls, Vermont, after being acquired by the Steamtown Foundation.

Recommendation: The National Park Service should preserve New Haven Trap Rock Company Locomotive No. 43, which was built in Wilkes-Barre, Pennsylvania, near Scranton. The NPS should commission a historic railroad locomotive report on No. 43, during the preparation of which its mechanical condition should be investigated and evaluated. The report should include a complete history and physical history of the locomotive; and ascertain whether it was ever lettered for either the Branford Steam Railroad, C.W. Blakeslee & Sons, or both, and what color(s) the locomotive was painted and lettered during its history. The report should also settle the question of how and why Louis Fisk dropped out of the company and the Blakeslees got in. Intensive research into these matters in the New Haven, Connecticut, area is necessary to answer these questions. A thorough photographic history of the locomotive should be included as a part of the report, including acquisition of all historic photographs of this particular locomotive that can be obtained, as well as some that illustrate the general history of the Branford Steam Railroad and its terminals and the New Haven Trap Rock Company and its North Branford quarry.

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Some of the newspaper and magazine items cited above are in the Steamtown locomotive files under "New Haven Trap Rock Co. Locomotive No. 43." They were originally collected in the New Haven Public Library, under "New Haven Industries" in that library's vertical files.