

Red Mountain Park's Historic Redding Shaft

This is the story of a little-known Red Mountain mine that was operated by the Woodward Iron Company from 1917 to 1927. The Redding Shaft is among several Red Mountain Park sites that were recently photo-documented with financial support from a 2008 SIA Industrial Heritage Preservation Grant. What sets the Redding Shaft apart historically is that it is one of only two vertical-shaft iron-ore mines in the Birmingham (Ala.) District (tour site—1999 SIA Fall Tour), and the only such mine actually located on Red Mountain. Other area underground mines typically consisted of early drifts and surface workings along the ore outcropping, and later slopes sunk along the dip of the ore seam that entered at the outcropping and ended deep under Shades Valley. The Redding Shaft hoist house is of particular interest because of its Mission-style architecture. These factors, and the fact that it is the lone Woodward Iron historical site within park property boundaries, make it a worthy attraction to the new Red Mountain Park.

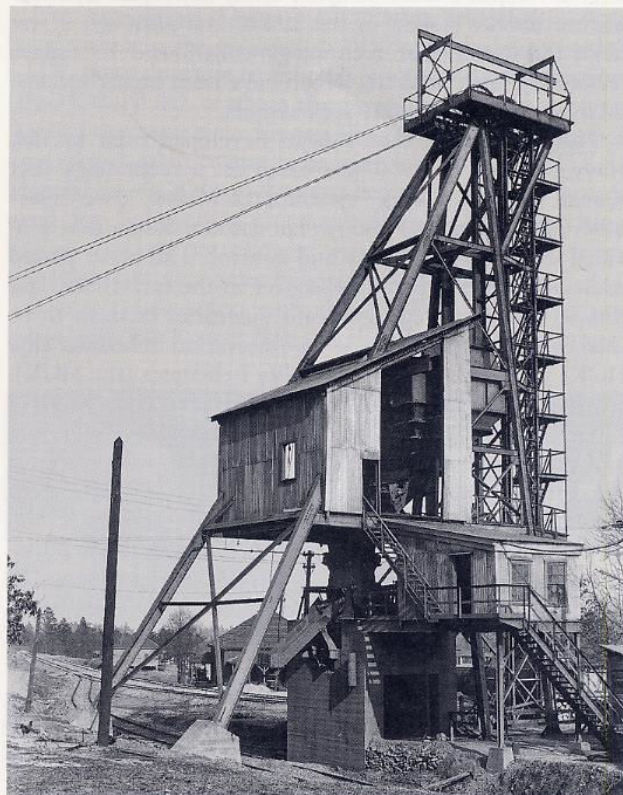
Woodward Iron had its “ducks in a row” from day one, unlike some of Birmingham’s other iron and steel players. In 1869 industrialist Stimpson Woodward visited Red Mountain and left after purchasing 550 acres of ore and coal land. As he was conservative in nature, no decision was

made to begin Birmingham iron-making operations until after the construction of the town’s first blast furnace, Alice, in late 1880. Unfortunately, those operations would have to be undertaken by Stimpson Woodward’s sons as he died about seven months before Woodward Iron was formed. The new company constructed a furnace facility near the Hueytown area southwest of Birmingham and mined ore, coal, and limestone at its nearby properties. These raw materials were transported from the various mines to the furnace complex over the company’s industrial railroad. This control of raw materials, their transport, and a conservative management style ultimately made Woodward Iron a very successful business venture.

The story of Woodward’s Redding Shaft begins in 1917 and is part of the complex story of competition within the iron-producing region. That year Tennessee Coal & Iron (TCI), a Woodward competitor, purchased the rail network on the north side of Red Mountain from the Louisville & Nashville RR (L&N). This deal effectively cut Woodward’s rail connection to its Songo 1 slope mine. Woodward’s solution to the challenge was the Redding Shaft, located 1,000 ft. south of the Songo 1 entry, and its shaft dropped right into the existing mine workings. This location took advan-



Woodward Iron Co., Redding Shaft Mine Hoist House, 1917-1927.



Woodward Iron Co., Redding Shaft Mine Headframe, 1917-1927.

tage of existing railroad connections on Red Mountain's southeastern slope, allowing ore to be transported to the Woodward furnaces over the L&N South Branch and Woodward company trackage.

The Redding Shaft operated just ten years, from 1917 until 1927. Though historical documentation is sparse, field and photographic evidence indicate that the operation utilized electric hoisting from its beginning in 1917. One reference in the *Engineering & Mining Journal* (1919) refers to "electrically operated elevators and other time saving devices" being used to "eliminate expensive haulage." In *Iron-Ore Mining Practice in the Birmingham District* (1926), Dr. W.R. Crane gave additional information about the Redding shaft (he also called it Songo). The shaft cross section is 10 ft.-4 in. by 7 ft. and it is "about" 384 ft. in depth.

During the late teens, shaft mines were being discussed in some trade journals as a technical solution to Birmingham's slope mines that had been extensively worked. The typical operation required ever longer slopes to reach beyond worked out areas, and the costs and technical complications were rising as a result. The Redding Shaft predates Woodward Iron's other shaft-type red-ore mine, Pyne, by a year. The 1918 Pyne Mine went on to become a very successful operation, though its opening was delayed until 1942 when high ore demand during WWII required it. Pyne is a sister mine to Redding (but on a much larger scale) and was Birmingham's last operational ore mine. It closed in 1970.

Unlike Pyne Mine, the Redding Shaft was constructed mainly of necessity due to the loss of rail service in 1917, not to overcome the deficiencies of slope mining. That being the case, the operation of the Redding Shaft mine presented some interesting technical challenges. Due to its location near the ore outcrop, the shaft accessed ore that was on about a 15-degree dip. Birmingham's other shaft mines are much deeper and are in areas far enough from the ore outcropping that the ore seam has flattened considerably. The Redding Shaft required ore to be hoisted up-slope

to the bottom of the shaft, dumped into the "pocket" via a rotary dump, and then hoisted vertically to the surface.

In the end, only Woodward Iron and Republic Steel (Gulf States) utilized shaft mining for red ore in the Birmingham District. Republic Steel's Shannon mine was not a true vertical shaft, but a steep incline/skip car-type operation located near Woodward's Pyne Mine in Shades Valley south of Red Mountain. Other major Birmingham iron and steel producers, Sloss and TCI (U.S. Steel), never did embrace the idea of shaft mining. U.S. Steel continued slope ore mining until the early 1960s.

Red Mountain Park is a new 1,100-acre urban park located on former red-ore mining properties. While the park is still in the planning stages, historical preservation of mining heritage will be a top priority. The park is home to 100 years of mining history beginning with Birmingham's oldest commercial ore mine, Eureka 1 (1863).

Planned features of the park include the "Round the Mountain" loop trail, an eight-mile, paved trail (ADA accessible) utilizing parts of the historic L&N South Branch, dating to 1884, and former TC&I railroad beds along the northwest slope of Red Mountain. A scenic overlook at Graces Gap, from which Birmingham's first load of iron was made into blooms in the 1840s, will offer a beautiful view of the city. Also being considered is the reopening of the Wenonah 10 Mine as an underground museum and the reconstruction of the Wenonah 10 tippie for use as a scenic overlook. Mountain bike and hiking challenge trails will eventually complete the planned 18-mile trail network. Pavilions, a visitor's center, possibly a man-made lake, and other recreational amenities will round out the park's attractions. Much of the planned Phase 1 development will take place around and highlight the historic mines of Redding, Alabama. For more information, www.redmountainpark.org or emcferrin@redmountainpark.org.

Eric McFerrin

The Redding Shaft Mine Hoist House, 2009.



Eric McFerrin