

SHELBY IRON WORKS
Birmingham Industrial District
Shelby County Route 42
Shelby
Shelby County
Alabama

HAER No. AL-42

HAER
ALA
59-SHEL,
1-

PHOTOGRAPHS

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Department of the Interior
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ADDENDUM TO
SHELBY IRONWORKS

HAER
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HAER No. AL-42

Location: Shelby County Road 42. To reach Shelby Ironworks at the town of Shelby off I 65, exit at Calera, take Shelby County 25 northeast headed to Columbiana, go five miles, turn right onto Shelby County 42, travel seven miles to the ironworks site. To reach Shelby Ironworks from U.S. 280, take Shelby County 25 to Columbiana, at Columbiana veer left on Shelby County 47 to Shelby County 42, right on 42 one quarter mile to the ironworks.

Date of Construction: 1841-1922

Ownership: Robert Waite, Sr. owns 500 acres of the site, including the superintendent's house, the mining lakes and all industrial structures to the south of the machine shop site. The Historic Shelby Association owns approximately seven acres, which includes the machine shop site and the park. The Shelby Hotel is owned by Robert Waite. Additional company housing is owned by private residents in the town of Shelby.

**Builder/Architect/
Engineer:** Horace Ware, and others

Project Information: This report is based upon written documentation donated by the Birmingham Historical Society, reformatted to HABS/HAER guidelines.

Description: The ironworks site includes extensive structures, foundations and transportation systems associated with the charcoal iron and by-product plants operated here from 1841 to the 1920s. Principal industrial remains include the 80' square brick stack and foundations of the 1860 machine shop and grist mill, foundations of the 1860s furnace, hot blast flue, roaster, ore and rock bin, stoves and extensive underground brick tunnels that diverted furnace gases to the 1919 and 1922 chemical plants (built to manufacture wood alcohol and sulfuric acid), the concrete-clad, three-story steel frameworks of which remain.

Mining pits (now lakes), cemeteries, the 1901 hotel, the 1870 post office, the company park site, the wall and foundations of the 1850s Gothic Revival style Superintendent's House and other late 19th century company houses as well as railroad scales and roadbeds also remain on the relatively compact site.

Significance: The Shelby Ironworks represents a unique continuum in the development of the charcoal iron industry from the 1840s to World War I. This industrial center was the site of major advances in the technology and business organization of ironmaking in the District during the antebellum period. In 1860, the Shelby Ironworks erected the first rolling mill in the state, a move to process pig iron that was key to the site's economic diversification and growth. Due to its large supply of rich brown ore, Shelby produced a very high grade pig iron. During the Civil War, iron rolled here was shipped to arsenals in Selma and Columbus, Georgia for use in building Confederate iron clads, an advanced naval technology.

During Reconstruction, Shelby built one of the largest charcoal furnaces in the United States and, together with other furnaces located along the Selma, Rome and Dalton Railroad, became the South's leading producer of chilled-iron railroad wheels, dominating this market for 20 years. Consistently, Shelby led technical innovations in fuel conservation and charcoal by-product recycling. During World War I, the U. S. Government selected Shelby for chemical production. Remaining structures and extensive foundations, underground tunnels, brown ore pits, company buildings and railroad beds stand as evidence of Shelby's role in the charcoal iron industry from the 1840s to World War I.

HISTORICAL OVERVIEW

In 1841, ironmaster Horace Ware purchased virgin lands in Shelby County and began construction of an early iron furnace. Lack of sufficient capital delayed construction, and Ware was unable to complete his establishment until arrangements were made with John M. McClanahan, a Shelby County planter, to come into the business as part owner, thus furnishing the necessary capital to complete the works. The furnace was erected near what is now known to be

a single immense brown ore deposit covering less than one square mile. By 1849, the Shelby Ironworks was in full operation. (Woodward 120) The furnaces were fired with charcoal. The 1850 census reports that Ware and McClanahan owned six slaves jointly. The tax on these slaves was 30 cents. (Woodward 122) In 1855 Ware experimented with the first hot blast equipment in the state. (Woodward 123)

Incorporated in 1858 as the Shelby Iron Manufacturing Company, the establishment managed by Horace Ware and his partners led Alabama in iron production. While the plant supplied the nearby farming community, it also exported iron via a narrow gauge railroad to the Coosa River (and thence to Prattville). The company's major customer was Daniel Pratt's Cotton Gin Works in Prattville, Alabama.

Shelby Ironworks contributed many firsts to Alabama's industrial development, including the 1860 construction of the state's first rolling mill for production of iron plate. The iron works produced high grade iron which was prized for foundry applications. During the 1860s, the Shelby Iron Manufacturing Company became the chief supplier of iron for gunboat armor to various Confederate manufactories in Selma, Mobile and Yazoo City, Mississippi. In 1863, a new brick furnace was constructed and the area's first bell and hopper installed. In the spring of 1864, experiments with bituminous coal were conducted. This was an early experiment in Alabama, and although it proved successful, the shortage of coal in the vicinity made it impossible for the company to adopt this process at that time. Area forests continued to supply ample charcoal. Production of iron came to an abrupt but temporary halt when the iron works was destroyed by Wilson's Raiders on March 31, 1865.

Between 1867 and 1869 New York and Connecticut capitalists purchased the Shelby Iron Manufacturing Company and built an iron shell furnace. Continuing to operate with charcoal, the plant produced a high grade iron which was used to manufacture wheels. In 1890 the company was purchased by a firm based in New Jersey. The town plat was laid out at this time and a major industrial boom era predicted. It did not materialize.

With the development of the Birmingham area, the Shelby Ironworks declined in importance. Transportation facilities, the distance from newly discovered coal fields and the difficulty in smelting the ore in the Shelby vicinity prevented further growth and development of a great industrial center at Shelby. The company could not compete with Birmingham District furnaces. These were located closer to high quality iron ore, surrounded by coal fields and served by the railroad lines which provided efficient shipment of the iron produced. The company continued operations

during the Spanish American War and World War I. During World War I, the federal government constructed two plants to produce wood alcohol. In 1929 the Shelby Furnaces were sold to a Birmingham firm for scrap. Dismantling of the furnaces was completed in 1930. Extensive furnace foundations and underground tunnels remain to this day.

DESCRIPTION (continued)

The following is a list of historic resources extant at the site of and adjacent to the Shelby Ironworks:

1. Community Structures

These structures include homes and schools of the historic Shelby community. They have not been inventoried but appear to be linked to the ironworks operation in the late 19th century.

2. Main Street (Silk Stocking Road)

Main Street passed in front of the Shelby Hotel, Commissary, and Officers' houses. Local residents referred to Main Street as Silk Stocking Road because women who visited the Shelby Hotel from the North often wore stockings, a luxury not found in the wilds of Alabama. Other structures remaining from the subdivision of the company town in the 1880s are located on: First Street, Second Street, Third Street, Fourth Street, Fifth Street, Sixth Street, Eighth Avenue, Seventh Avenue (now Parker Street), and Sixth Avenue.

3. Old Montgomery Road

Old Montgomery Road, now Shelby County Highway 47, was the historic route to Columbiana, the Shelby county seat. During the early years of the ironworks, horse-drawn wagons transported iron products to Columbiana where they were shipped by train.

4. Shelby Hotel (1901)

The Shelby Hotel was reconstructed in 1901 after a fire damaged much of the original structure. The hotel is listed on the Alabama Register of Historic Places as the first electrically powered hotel in the state. Electricity was provided from the furnace. Notable guests included two governors and their wives. Local residents long enjoyed their Sunday dinners at the hotel's restaurant. At one time, the hotel featured two tennis courts and a softball field to entertain guests.

The hotel was originally named the new Dinnamore Hotel. Dinnamore, Sweden was an area known for production of high grade iron to which the high quality Shelby Iron was often compared. By 1905, date of a Sanborn map, the property was listed as the Shelby Hotel. It is currently owned by Robert Waite.

5. Shelby Post Office (1870)

The board and batten Shelby Post Office was located at the end of the Old Post Road and included post boxes for residents and company officers. Opened for business in January 1870, it is currently owned by the Waites.

6. Shelby Ironworks Park (1890)

The one-acre Shelby Ironworks Park was created by the Shelby Iron Company for company employees. It was designed as part of the new industrial town plan of 1890. Between 1900 and 1930, community picnics and barbecues were held here. The site featured tables and benches and flower beds. Special events such as the Chautauqua were also held here. The park is currently owned by the Historic Shelby Association.

7. Machine Shop Foundations and Smokestack (1860s)

Documented on an 1869 map of Shelby Ironworks and the Sanborn Maps of 1905, 1910, and 1923, the machine shop foundations of the three-story grist mill (later storeroom and pattern shop), engine shop and machine shop and the square brick 80' stack remain.

The seven acre area surrounding the machine shop, formerly quite swampy, was leveled and filled in the 1970s. Then existing railroad tracks were destroyed. The railroad scales remain. The shop and surrounding area are the property of the Historic Shelby Association.

8. Horace Ware - Shelby Iron Superintendent's House (late 1850s)

This structure served as the residence of the company superintendent. Located on a hill overlooking the ironworks site and company town, the Gothic style house featured a balcony at the superintendent's bedroom window from which he could survey the town. The house burned in early 1991. Walls and foundations remain standing.

9. Chemical Plant I (c. 1919)

This steel and concrete framework was constructed by the federal government during World War I to produce wood alcohol. A 1923 Sanborn Map indicates an intent to manufacture sulfuric acid at the site. The plant was never put into operation. Local residents referred to the structure as the "Chemical Plant."

10. Retaining Wall of Hot Blast Flue (c. 1890)

11. Foundations Furnace No. 1 (c. 1890)

12. Cistern (c. 1890)

Adjacent to Furnace No. 1.

13. Retaining Wall

Adjacent to probable site of 1860s Furnace.

14. Aqueduct

An arched tunnel running from the furnace to drainage ditches.

15. Rail Line Mound

These rail line mounds were constructed for transporting ore, charcoal, and limestone to the ironworks site. They were periodically moved as new pits were mined.

16. Foundations for Roaster

This device cooled ore to drive off the water.

17. Retaining Wall to Support Railroad Trestle

18. Foundation

This foundation has been identified, but its purpose not yet determined.

19. Foundation Ore and Rock Bin

20. Foundations for Four Stoves

21. Chemical Plant II (c. 1922)

The federal government constructed this structure for the production of wood alcohol. The structure was never operated.

22. Mining Roads

These roads wind to and through the surface brown ore pits. Currently in poor condition due to severe erosion, they are impassable at certain points. However, they could easily lend themselves to hiking trails as they provide a comprehensive view of the site.

23. Brown Ore Pit Mine

24. Community Cemeteries

These cemeteries (one now under water) include 20 grave sites with visible headstones (and as many unmarked graves) dating to 1860.

25. Brown Ore Pit

26. Cistern

This cistern was constructed on a bluff overlooking Blue Hole as a reservoir for water used to wash ore. Water was pumped from the lake to the west and was stored here until needed for washing ore at the "sand pits."

27. Blue Hole

Blue Hole (opposite the cemetery) was the largest and deepest of the pits mined at Shelby. The pit was mined to a depth of 75 feet. Also called "Ore Hole" it was mined ("dug out") until the 1960s.

28. Clear Pond

This natural spring 1,000' west of the works was often referred to as Clear Pond. Its waters were used to wash ore.

29. Mine Pit

30. Sand Pits

These pits are filled with sand and clay debris remaining from the ore washing process. The sale of sand to concrete companies remains a current industrial activity on the site.

31. Old Post Road

This road was the postal service route.

32. Company House

The function of this company structure has not yet been determined. Outbuildings on the site include structures appearing to be a shed, henhouse, and outhouse.

33. "Chain Gang Hole" Lake

This lake fills the former "Chain Gang" Hole, a brown ore mining pit.

34. Shelby - Dead Horse Landing Railroad Road Bed (1850s)

Over this narrow gauge railroad the Shelby Iron Company hauled iron eight miles to the Coosa River for transport to Daniel Pratt's cotton gin works at Prattville, Alabama. Pratt was the major client of Shelby Iron. However, iron could only be delivered during high water on the Coosa, i.e. springtime. From the arrival point at Washington's Landing on Autaugua Creek, Pratt built a 10-mile plank road to his gin works.

From Kewahatchie Springs (three miles east of Shelby), the railroad bed is clearly visible on the land all the way to Dead Horse Springs.

35. Foundation, Railroad Scales (1850s)

Used for the railroad that ran from the ironworks to Dead Horse Landing on the Coosa.

36. Dog Town

In these Black quarters to east of furnace site, all houses were painted red, according to local sources. Archaeological investigations of the site have not been made.

37. Charcoal Pits

About 30 cords of wood, burned in the straw and dust pits for 12 days, would yield about 1,000 bushels of charcoal. Extensive pits are located on the site.

38. Footprints of Ware's Charcoal Houses (1850s-1860s)

39. Portions of Civil War Equipment

Union troops who destroyed the ironworks in April 1865 were said to have burned wooden portions of the furnaces and rolling mill and hauled pieces of machinery to wells and streams and dumped them. Portions of Civil War equipment are said to rest visibly at the bottom of nearby wells.

40. Lakes in former brown ore pits: Blackman's Pond, Blue Hole, Wish Hole, Chain Gang Hole, Dog Town Hole

41. C. J. Hazzard House (1860s)

42. Verchot House (1880s?)

Joseph Verchot, a collier who produced charcoal for sale to the Shelby Ironworks, had an itinerant French artist paint murals and graining all over his house in Columbiana. The two-story residence is now owned by Dr. Stancil Hadly.

Note: All foundations on this list are coded to Sanborn and other historic maps in Birmingham Historical Society files.

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Interview with John and Robert Brasher and Jerry Willis, 7/17/91.
These members of the Shelby Historical Association are life long residents of the area who have researched the company papers for years and most recently led the drive to form Historic Shelby and seek preservation of the ironworks site. Foundations listed in the attached descriptions are coded to Sanborn maps in Birmingham Historical Society files as per their knowledge of the site.