

More than Cotton Industrial Alabama

The mining and metal industries of the Birmingham District, the chemical and space industries of the Muscle Shoals/Huntsville corridor, the ubiquitous textile and railroad industries, and the native industries of cotton gin manufacture and brickmaking, suggest that Alabama's reputation as a bastion of southern industry is at least as important as its cotton heritage. In over 20 projects, HAER has developed an archive of historical reports, drawings, and photographs that testify to the diversity, longevity, and national significance of the state's industrial heritage.

One of the most important industrial regions in the state is the five-county area around and including Birmingham. Seven years ago in *CRM*, University of Alabama/Birmingham industrial archeologist Jack Bergstresser reported on the activities of the 1992 summer teams documenting the heritage of the Birmingham Industrial District, the first since the Sloss Furnaces project in 1976.* Cosponsored by the Birmingham Historical Society, under the direction of Marjorie White, teams of students and scholars recorded railroad lines, metal working industries, coal and coke works, and a variety of "less-traditional" engineering sites, such as company housing, and archeological remains of mine sites. The combination of infrastructure survey and extensive site recording established the primacy of iron-related industrial activity, and laid the foundation for additional work in the District.

Documentation over the next three years focused on the Birmingham District's rich metallurgical heritage. In 1993, HAER documented Tannehill, the state's first blast furnaces. Constructed originally in 1863, Tannehill's furnaces were destroyed two years later by Union forces, and were subsequently rebuilt in their original stone configuration. In 1995, a team recorded some of the newest iron-melting technology in the state, the electric induction fur-

naces of Southern Ductile at Bessemer. Housed in a historic iron foundry, Southern Ductile produces a general range of castings in ductile iron, an innovation dating from 1948 that yields iron far less brittle than that cast by traditional means. Stockham Valve, recorded in 1994, produced iron, bronze, and steel castings. This company was once one of the country's largest valve and fittings makers, but is now out of business.

At U.S. Pipe and Foundry's Bessemer plant, HAER recorded in 1996 the evolution of cast-iron pipe production from pit to centrifugal casting. The Bessemer plant began pipe production in 1888, using the pit casting process and pioneered the development of deLavaud centrifugal casting in the 1920s. Documentation traced the evolution of cast-iron pipe production through a series of historic photos in the plant meeting room, production records, technical information, and physical evidence of jib crane supports and hot metal. Since U.S. Pipe owned and operated Sloss Furnaces for a good part of the 20th century, this project was, in effect, a continuation of HAER's first documentation in Alabama at Sloss Furnaces.

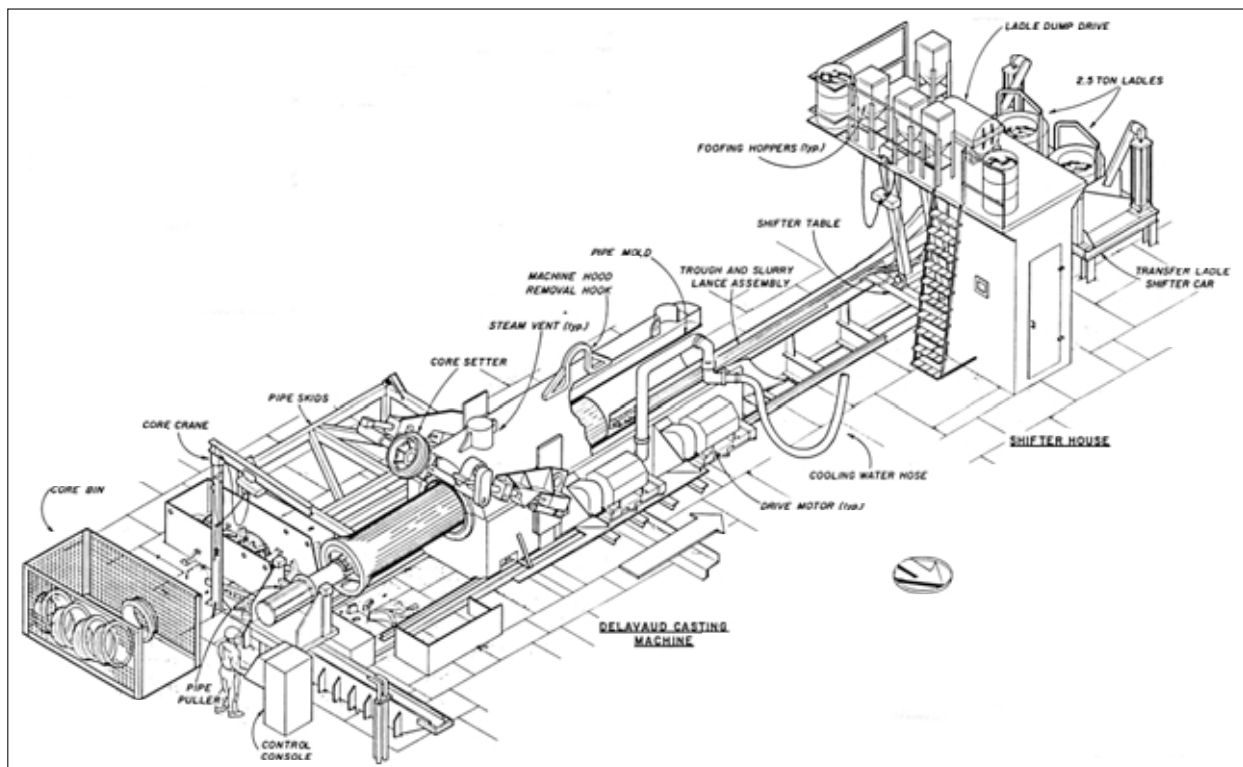
Simultaneously, federally funded industrial developments in water power, chemicals, and the space industry were recorded in a series of projects centered along the Tennessee River corridor. At Wilson Dam, built during World War I but part of the TVA system since the 1930s, HAER recorded a rare 1943 Oilostatic transmission system, 1927 oil circuit breakers, and a 1925 turbine, as the site was undergoing renovation and artifacts were being tagged for removal. Wilson Dam served as the primary power source for U.S. Nitrate 1 and 2, large plants planned to provide explosive-grade nitrates for World War I ordnance. Completed after the war ended, they later supplied nitrates for domestic fertilizers and ordnance compounds for World War II. HAER documented the nitrate production process at U.S. Nitrate 2 in 1994. In articles elsewhere in this issue, Tom Behrens discusses recording projects at Huntsville's Marshall Space Flight Center and Lisa Davidson describes aspects of Alabama's textile history encountered in HAER's Southern Textile Industry Project.

The 1997-98 documentation of Continental Eagle Gin Company and Guernsey Mills, flanking Autauga Creek in downtown

Prattville, brought HAER to Alabama's earliest and longest-operating industrial sites. Daniel Pratt learned the art of cotton gin manufacture in Georgia in the 1820s, and founded the Pratt Gin Company on Autauga Creek in south-central Alabama the following decade. Bringing with him architectural skills and tastes cultivated in his native New Hampshire, Pratt built classic New England-style mill buildings—narrow, heavily fenestrated, post and beam, brick structures—with cast-iron lintels and sills from his own foundry. The oldest buildings in both complexes were built c. 1848. The 1854 dog-legged building in the Continental complex contains a unique radiating truss system supporting the ceiling of a postless third story. The project documented remains of several power systems, including waterwheel and turbine head-and tail-races, and shafts and pulleys, and determined that Continental Gin (successor to the Pratt Gin Company) operated for a time on power supplied simultaneously by water, steam, and electricity. A twin-blade 1870s Victor Water Turbine was located and documented at Guerne. Pratt's success in the gin business was significant for the later industrialization of the Birmingham area,

where his son-in-law, Henry deBarteleben, developed extensive iron, coal, and real estate interests. The attention HAER brought to the Guerne Mill complex contributed to its recent purchase by a local group intending to rehabilitate and renovate the structures.

At Montgomery, the state's capital, preservationist Rev. Andrew Waldo called HAER's attention to the Western of Alabama (WofA) railroad shop complex, and an abandoned set of brick kilns. Among the earliest railroads in Alabama, the WofA was critical to the South's efforts in the Civil War, and was the central cotton and industrial goods shipper in central Alabama throughout the late-19th and early-20th centuries. The shop complex has been abandoned for over a decade, but is the focus of recent preservation efforts to establish a railroad museum. The bee-hive brick kilns of the Jenkins Brick Company, now operating modern tunnel kilns at a nearby North Montgomery site, were built in the 1920s by Georgia kiln maker M.M. Minter, whose systems of waste heat utilization connected kilns by labyrinths of tunnels, and were installed in brickyards from Quebec to southern Georgia. The Jenkins kilns are among



Axonometric of a deLavaud centrifugal casting machine producing cast-iron pipe, U.S. Pipe and Foundry Co., Bessemer, AL. Drawing by Eric S. Elmer and Jennifer Bruns, 1996.

the last remaining of this unique system. Kim Harden of the Alabama Historical Commission, Carole King of Landmarks Foundation of Montgomery, and Mike Jenkins of Jenkins Brick Co., all headquartered in Montgomery, helped with various parts of these projects.

In several instances, HAER has taken a step back from intensive, site-based recording projects to concentrate on broader surveys and context studies. Marjorie White and the Birmingham Historical Society developed an extensive aerial survey of the District's industrial resources, with Jet Lowe, HAER staff photographer, and published *Birmingham Bound*, an extensive industrial atlas of the region, based on HAER documentation. Jack Bergstresser researched and wrote exceptional context studies of the Birmingham Industrial District's coal and iron ore mining, and blast furnace iron production, ably illustrated by architect Richard Anderson's detailed drawings. Finally, working closely with the Alabama Historical Commission, Georgia Institute of

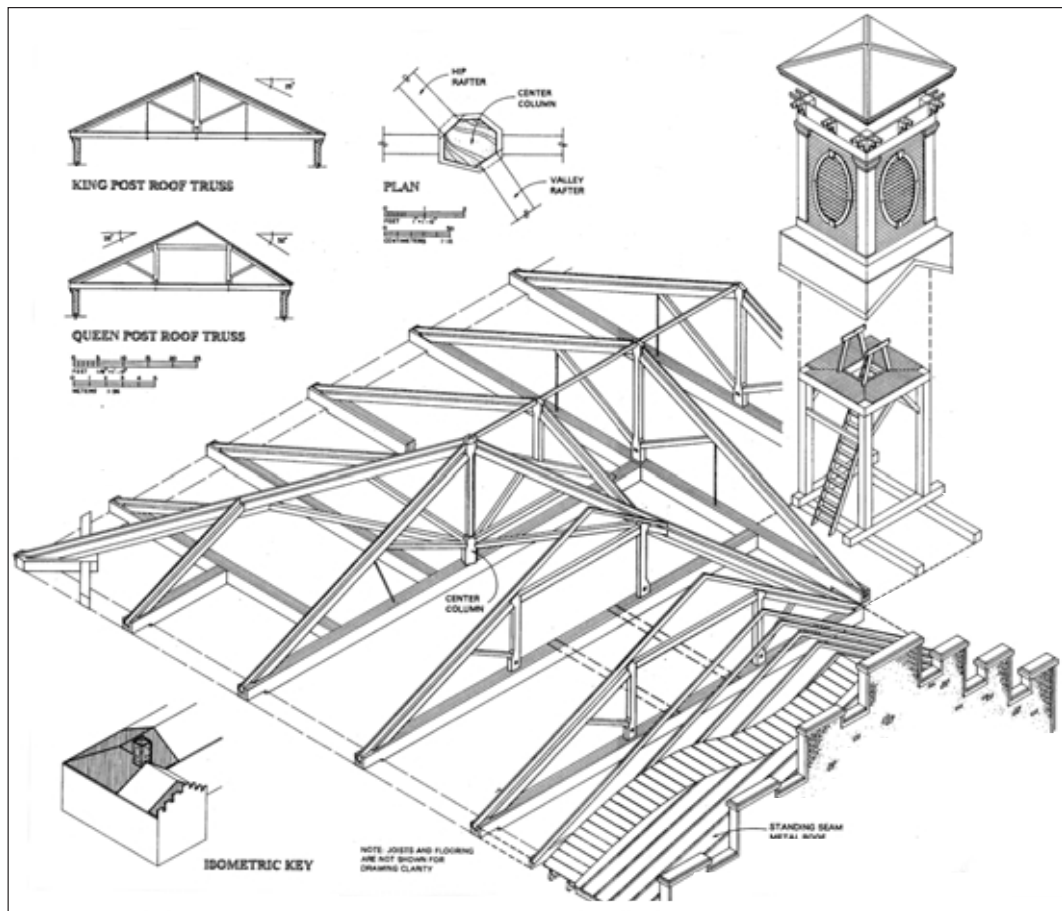
Technology historian LeeAnn Bishop Lands surveyed endangered industrial sites throughout Alabama, providing brief historical reports and field photos of sites considered at-risk. Hopefully, both the context studies and endangered sites survey will be prototypes for future projects in other states and regions.

HAER plans to continue recording Alabama's industrial heritage, with the surveys pointing to future intensive recording projects. Even after nearly a decade of recording in Alabama, the historic industrial resources of entire regions of the state have yet to be fully documented.

Note

* Jack Bergstresser, "Birmingham Industrial District," *CRM* Vol. 16, No. 3 (1993):21-2.

Richard O'Connor is a historian with the Historic American Engineering Record, National Park Service, Washington, DC.



Axonometric of 1854 building showing radiating truss at transition from king- to queen-post truss, Continental Gin Company, Daniel Pratt Cotton Gin Factory Complex, Prattville, AL. Drawing by David Gole, 1997.