

# Columbus



Eagle & Phenix Mills and the Chattahoochee above the dam. The powerhouses are at the far right.

## The EIGHTH ANNUAL CONFERENCE—COLUMBUS, GEORGIA

26th - 29th April 1978

"NO DOUBT ABOUT IT", they all said, "it's been the best ever and no way in the world to do better" . . . those who attended the Society's most southerly conference to date. The implied fascination of a part of the world essentially new to most members was clear just from the enrollment. Some 120 people attended a meeting that lay at least 700 miles away for most, and considerably further for a fair number. It was, in the event, well worth it. The weather was ideal for the entire weekend, the sites visited were never less than interesting and at best astonishing, the papers were up to the normal high standard, the company was congenial, and overspreading all was an effusion of that singular cultural expression known to the world outside as Southern Hospitality.

Believe those of us who experienced it on this occasion—those of you who haven't experienced it at all—you don't know what the phrase means. Even for those of you who think you know what it's all about, it now has a *new* meaning. There seemed clear evidence for all this in the constant whispering among the Northern visitors of plans for emigration.

The conference moved immediately into forward motion with a reception on Thursday evening at Rankin Square, a major restoration encompassing an entire city block of 19th and early 20thC commercial structures. The privately financed project has progressed sufficiently far that its ultimate success is apparent.

### THE FRIDAY TOUR

The all-day tour emphasised the operating industries peculiar to the South's post-1865 industrialism; mainly cotton textiles and machinery. Of special concern was the group of industrial sites that were fully recorded by the Historic American Engineering Record during its 1977 Columbus Survey. That project strongly influenced the declaration of the combined sites as the Columbus Historic Riverfront Industrial District, and the district's subsequent designation as a National Historic District (1978) [SIAN Nov. 78:1]. A secondary focus of the tour was the close relationship of the city's industries — particularly the earlier ones — to the Chattahoochee River, which forms its western boundary.

Perhaps the most characteristically Southern industry today is the manufacture of cotton cloth. A "typical" mill was seen at Swift

Mfg. Co., whose sole product is the classical blue denim, sold to the various jeans makers. Typical, in that the mill itself is an architectural mixture, the oldest block having been built at the firm's founding in 1883 and the latest in the 1970s. This was, incidentally, the city's first large steam mill. The production machinery too, in the traditional fashion, ranges from classical ring-spinning frames to those based on the recent "open-end" process. Weaving is done on a combination of orthodox, and modern shuttleless looms of the air-blast type that run at a speed surpassing the eye's ability or the mind's capacity to take in.

A certain contrast was provided by the **Eagle & Phenix Mills**, perched directly on the river's edge, a cotton complex with antebellum roots but the major elements of whose fabric (no pun intended) were erected between the 1870s and 80s. Here we visited not the mill proper but the far more significant power plant. This consists of two separate hydroelectric stations with the latest equipment installed in 1921. The plant developed gradually between 1844 when the first dam was built, through an interesting series of alterations and additions. The first prime movers were water wheels, succeeded by turbines, their power transmitted to the mills by a variety of systems including rope drive, open shafting spanning the tail race, and finally electricity. The site's evolution is an enormously interesting one, all thoroughly documented by the HAER Survey and set forth in a series of striking, highly descriptive drawings that were displayed for the occasion.

The adjacent Muscogee Mills were seen principally in the negative, conspicuous being a yawning gap where the No. 1 Mill of



Columbus Iron Works, river front, restoration in progress.



1868 had just stood. This, the most architecturally distinctive of the city's mills, was demolished no more than a month before the Conference by the mill's present owners, the Fieldcrest Co.

Columbus was known as widely for machinery manufacture as for textiles, its reputation based principally on the products of the **Columbus Iron Works**. CIW has thrived from the middle of the 19thC. manufacturing, at various times, a great range of agricultural implements, stoves, power transmission machinery, steam engines, and from the 1880s to the 1920s, absorption ice machines (see the Conference announcement). The firm left the site for a suburban one in 1963, and in 1975 the city purchased the majority of the old plant for adaption to a convention



Columbus Iron Works interior, partially restored.

and trade center. We viewed this impressive brick complex—most of which was constructed between 1902 and 1907—with rehabilitation some 50% complete. A certain amount of machinery has been left in place, including the foundry cupola furnace and much line shafting. The heavy timber framing, the vast volumes of the erecting shop, and the general sense of architectural power will produce a facility of stunning impact.

At the steamboat landing adjacent to CIW the U.S. Army Corps of Engineers had kindly moored for the tour's benefit the steam, sternwheel snagboat *Montgomery*, built in 1926 and still in the full



Snagboat *Montgomery*, bucket down, at the landing below Columbus Iron Works.

flush of a productive career. Her principal duty is to remove snags from the channels of the Apalachicola, Chattahoochee, and Flint rivers. (Snags are the submerged logs and trees so feared by riverboatmen both before and since they were so vividly described by Mark Twain.) All is original, including engines (14" x 72", 20 rpm) and boiler (Scotch marine, 210 psi.), everything built in Charleston, S.C.



Assembling a cotton gin at Lummus Industries

Despite CIW's departure, machinery manufacture still is alive and well in Columbus. At **Lumms Industries** we saw at close range the manufacture of another distinctively Southern product: the cotton gin, as well as its close associate, the cotton press, and other allied products. Of particular interest was the diversification of manufacturing machinery and methods. Efficiency is achieved by retention of a certain amount of early equipment for low-production or occasional operations, with entirely modern machinery for high-production, high-repetition work. Very sensible arrangement, that.

All was not IA, of course. There was the occasional diversion of a pass-by and look-at some notable feature of local culture. (The SIA has long recognized that all IA, and no play, makes a long day, so to say.) The clear favorite among these high-speed respites unquestionably was the internationally celebrated Columbus Stockade,<sup>1</sup> the inspiration in 1927 for Thomas Paul Darby's eternal folk classic, *Columbus Stockade Blues* . . .

Way down in Columbus, Georgia,  
(I) Want to be back in Tennessee.  
Way down in Columbus Stockade,  
My friends all turned their backs on me . . .

For many the day's high spot was the visit to the **City Mills**, a large flour and feed mill that began operation on the site in 1828. Present buildings date from 1869 with many additions to 1914.



City Mills, downstream side. At the left are the remains of the Columbus RR Co. hydroelectric station (1894-96), largely dismantled in 1950; in the center the mill's wheelhouse containing three 62-inch Leffel vertical turbines; and at the right the flour mill of 1891.



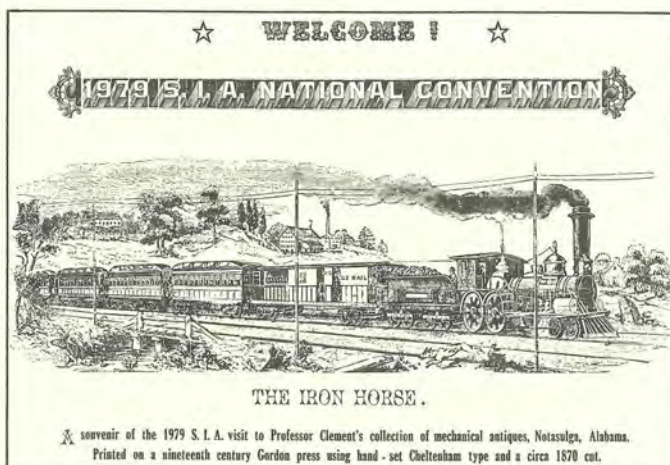
A section of the hurst frame (1908) at City Mills.

Only feed is milled today. Of great interest was the hydraulic power equipment of which much survives, although inoperative. A "hurst frame" of 1908 — a massive timber structure supporting the run of seven buhr stones and their respective bevel gearing — was the most arresting feature in the mill. It served to isolate the vibration of the gearing, and also to maintain the precise relationship between stones, and driving and driven gears—all this by its structural independence from the principal framing of the mill.

After a trip through **Goldens' Foundry & Machine Co.** (1890-1910), the tour ended with a supplement for the hard-core only: a detour across the river to once-notorious Phenix City, Alabama to gain a striking panorama of Columbus' river-front mills and other industrial structures, bathed in a perfect western light.

<sup>1</sup> Stockade: n. Vernacular, esp. South. US. A jail or lockup.





## THE EVENTS OF SATURDAY EVENING

Here was something new and extraordinary. No sit down at a banquet; no get on a boat and go up the river or down the bay; no steam train ride. No. Pile into busses. Stop first at the **Bickerstaff Clay Products No. 3 Brick Yard** south of Phenix City, Ala., which

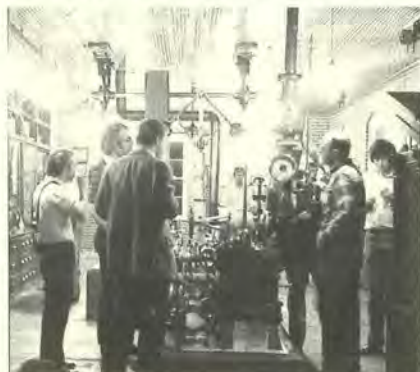


Beehive brick kilns (1919), Bickerstaff Brick Co.

is in full, high-production operation, while preserving a dozen obsolete beehive brick kilns of 1919 plus a variety of other antiquarian machinery, all very impressive.

Then back on the motorcoaches, and on due west to Notasulga, to the remarkable **machinestead** of SIA member **Walter B. Clement**, to examine and experience the two remarkable things he has done. First, he has built, from scratch, as handsome, well crafted, and livable a confection of a carpenter-Gothic cottage as has been built in the U.S.A. since 1865. And there he lives in, we should judge, above-average contentment. Then, if that weren't enough, he has built himself a neat little brick engine house off to one side, where there lives his Watts-Campbell Corliss engine of 1903, his print shop based on a Chandler & Price job press, and a variety of other mechanical antiquities. Nearly all were in operation—steam devices *under live steam*—to the complete ecstasy of the crowd.

And yet more. In another small building was the machine shop, the Mietz & Weiss oil engine, and *additional* period machinery, producing in total an atmosphere of an earlier time that was nothing less than spellbinding. A picnic supper was taken on the lawn amidst a constant circulation of the assembled faithful among the various buildings and objects of adoration.



Every man his own stationary engineer. Walter Clement (hand on throttle valve) starts his Watts Campbell Corliss engine for the massed appreciative.

## THE SUNDAY TOUR

With the fine weather continuing, the group moved off for a brisk tour of the districts restored and under restoration by the Historic Columbus Foundation, our hosts for the weekend, who in every sense of the word have created the historical renaissance presently sweeping the city. Then on to the **Confederate Naval Museum**, a unique institution whose principal holdings are the remains of a pair of Confederate vessels: the ironclad *Muscogee* and the gunboat *Chattahoochee*. The former was built in Columbus but burned before it saw combat; the latter, a converted schooner engined at Columbus, was scuttled toward the War's end. During the Civil War Centennial both vessels were raised from their resting places on the bottom of the Chattahoochee and brought to the Museum. Of very special interest were the screw engines of the *Chattahoochee*, among the earliest surviving American marine engines.



Direct-acting, short-stroke screw engines of the *Chattahoochee*.

The tour's final stop was Fort Benning, established during WW-I, famed as the headquarters of the U.S. Army Infantry. Two sites of interest were visited. First was the **Infantry Museum** which houses, along with an interesting variety of infantry objects, a small steam locomotive built for WW-I service but never shipped, used until recent times for hauling recruits to the distant rifle ranges, and—strangest object of all—a portable, mule-drawn sterilizer. This was nothing but a big autoclave on wheels with a vertical boiler on the back, used to sterilize blankets and other items in army field hospitals.



The IA of disinfection: sterilization on the fly.

Easily the most unusual structures seen on the entire weekend were the **parachute jumps**, which may, in fact, appear less surprising if you've read everything else in this issue. Until recently there seems to have been a firm belief at Ft. Benning that one of these 250-ft. "jump" towers which were installed in the early years



The IA of surprise attack. The Jump Towers, Ft. Benning.



of WW-II to train paratroops (there are three—a fourth was destroyed in a 1954 tornado) was indeed the celebrated structure that previously had thrilled thousands at the 1939-40 N.Y. World's Fair. We have seen that it isn't. The more modest Army versions were, however, directly inspired by the original at Flushing Meadows and were built by the same firm: The Safe (sic) Parachute Jump Co.

Those of you who attended this extraordinary event will need no reminding that the pervasive spirit of conviviality and the precise yet easy-going organization of the entire weekend were the consequence of well over a year of planning, estimating, cajoling and sometimes arm-twisting site owners, marshalling, dickering, and nearly perpetual anxiety—all this on the part of Conference Coordinator David M. Sherman and his allies in Columbus. There is considerable irony in the fact that when Mr. Sherman undertook to organize a 1979 conference in Georgia he was firmly entrenched in Atlanta as the state's Historic Preservation Officer. Subsequently he reestablished himself in Washington, but missed not a step in the planning process, wheeling—if not dealing—across a distance of some 750 miles. Formidable.

The critical key, he is the first to say, was his above-mentioned colleagues. Janice Biggers, Executive Director of Historic Columbus Foundation, the Conference's host, in every sense carried the entire affair on her able back, turning not only her own staff but much of the city inside-out to make the event the stunning success it was. This was apparent not only in the underlying organization, but in the constant high energy brought to bear by Mrs Biggers and her associates on every element of the meeting, ensuring the perfection of each. (It was Mrs Biggers, incidentally, who in 1977 led HCF's efforts to raise the \$14,000 local share of the funding for the HAER Survey.)

John S. Lupold of Columbus College was not only author of the superb Tour Guide, one of the most complete and well-organized of these to date, but also conducted the planning and scheduling for the Friday and Sunday field trips, a task seemingly simple—until you've tried it yourself. Prof Lupold in the course of this coordinated the site guides—many of them volunteers, reassured uneasy managers and owners, and drilled the other tour guides to the point that all went like a Swiss movement.

It was, in total, a heroic effort on the part of these principals and the many others who struggled with them. The lucky ones who were at Columbus know that it was worth it.

## THE ANNUAL BUSINESS MEETING—

28 April 1979

The Annual Meeting was held in the Springer Opera House (Built in 1871, handsomely restored in 1964-65, site of performances by such luminaries as Lillie Langtry [1889]), a full report of which is printed separately and accompanies this issue.

**ELECTION.** Edward S. Rutsch, Chairman of the Nominations Committee, announced the results of the election of officers and board members for 1979-80, which were as follows:

### Officers

- President**—Theodore Z. Penn, Sturbridge, Mass. Researcher in Technology, Old Sturbridge Village. (to 1980)  
**Vice President**—John Bowditch, Ann Arbor, Mich. Curator of Power & Shop Machinery, Henry Ford Museum. (to 1980)  
**Secretary (and Hon. Counsel)**—Brenda Barrett, Ickesburg, Pa. Administrator, Protective Services, Pa. Historical & Museum Commission. (to 1981: elected 1978)  
**Treasurer**—Marlene Nicoll, Greenwich, Conn. Data Dictionary Administrator, American Can Co. (to 31 Dec. 1981: elected 1978)  
**Past President**—George M. Notter, Washington. Principal, Anderson Notter Finegold Assoc. (architects), (to 1980: non-elective)

### Standing Directors

- Mary Jane Rutsch**, Newton, N.J. Principal, Cultural Resource Management, Inc. (to 1980)

**David M. Sherman**, Washington. Special Asst. to the Asst. Secy. for Fish & Wildlife & Parks, Dept. of the Interior. (to 1980)  
**Jeffrey L. Brown**, Chattanooga, Tenn. Assoc. Prof. of Anthropology & Director, Inst. of Archaeology, Univ. of Tennessee at Chattanooga. (to 1981)

### Newly Elected Directors

- Brent D. Glass**, Chapel Hill, N.C. Deputy State Historic Preservation Officer, N.C. (to 1982)  
**Larry D. Lankton**, Washington. Historian, Historic American Engineering Record. (to 1982)

### Elected to the Nominations Committee

- Merrill Ann Wilson**, Denver. Historical architect, Natl. Park Service, Denver Service Center. (to 1982)

### Editors

(Serving indefinite terms, at the Board's discretion)

- IA**—Dianne Newell, London, Ontario. PhD Candidate in History, University of Western Ontario. (See *SIA Affairs*, below.)  
**Newsletter**—Robert M. Vogel, Washington. Curator of Mech. & Civil Engineering, Natl. Museum of History & Technology.

### Local Chapter Presidents

(Elected by chapter membership)

- Montgomery C. Meigs Original Chapter** (Greater Washington)—Robert B. Hoke, Columbia, Md.  
**Southern New England Chapter** (Conn., Mass., R.I.)—Patrick M. Malone, Lincoln, R.I.  
**Roebling Chapter** (Greater N.Y.C.)—Terry Karschner, Bordentown, N.J.  
**Great Lakes Chapter** (Detroit/Windsor area & beyond)—John Bowditch, Ann Arbor, Mich.  
**Northern California Chapter**—Raymond L. Wilson, San Francisco.  
**Latrobe Chapter** (Greater Baltimore)—Mark R. Edwards, Annapolis, Md.

## MISC CONFERENCE NOTES

The run of John S. Lupold's *Industrial Archeology of Columbus, Georgia*, the tour guide, unfortunately was sufficient only for distribution at the event. There is hope of a second printing of this outstanding document, which will be announced here if it occurs. We recommend, in the interim, his equally fine *Columbus Georgia 1828-1978*, a thorough history of "The Lowell of the South" which deals with and illustrates most of the tour sites. Available from *Historic Columbus Foundation, Inc.*, 716 Broadway 31906. Pp. 140. \$4.00 ppd.

See also Prof Lupold's "Revitalizing Foundries, Hotels, & Grist Mills in Columbus," in *The Georgia Historical Quarterly*, Spring 1979, pp. 138-42. (Univ. of Ga., Athens 30601.)

## SIA AFFAIRS

**IA.** Michael W. Robbins, Editor of the Society's journal for the past two years, has resigned from the post (the 1979 issue—Vol. 4—will be the last from his able hand. It is due in early Sept.). The Board has appointed Dianne Newell, 1977-78 President and presently Chairman of the Publications Comm., to the post.

**LATROBE CHAPTER.** The Society's 6th local chapter has been formed and sanctified. Its sphere of influence is the Greater Baltimore area. (This may well lead to vicious confrontations with the Meigs Chapter, as the two groups vie to establish where Greater Washington ends and Greater Baltimore begins, and vice-versa. We visualize *Car Wars*, in which hit teams from the rival chapters rush at each other headon in automobiles along the Baltimore-Washington Pkwy.) The new chapter name memorializes Benj. H. Latrobe, Jr., celebrated chief engineer of the Baltimore & Ohio RR, many of whose works stand, including the route alignment of the B&O from Harpers Ferry to Wheeling. Chapter President: Mark R. Edwards, 36 Maryland Ave., Annapolis, MD 21401. (301) 263-3741.