

# Industrial Archeology of Columbus, Georgia

A Tour Guide for the  
8th Annual Conference of the  
Society for Industrial Archeology  
April, 1979

By John S. Lupold

Postcard boosterism, circa 1890.



## “THE LOWELL OF THE SOUTH”

(COLUMBUS, GEORGIA) Population, City and Suburbs, 40,000

14 Cotton and Woolen Mills; 2 large Clothing Manufacturing Establishments; 3 Cotton Compresses; 3 Cotton-seed Oil Mills; 4 Iron Foundries; 4 Ice Factories; 4 Hosiery Mills; 1 very extensive Wagon Factory; 1 Buggy Factory; 3 Candy Factories and Syrup Refineries; 7 very large Brick Plants; and numerous other minor industries incident to a manufacturing centre.

Total weekly pay roll of these industries is between \$60,000 and \$75,000. Total number of employees, 10,000.

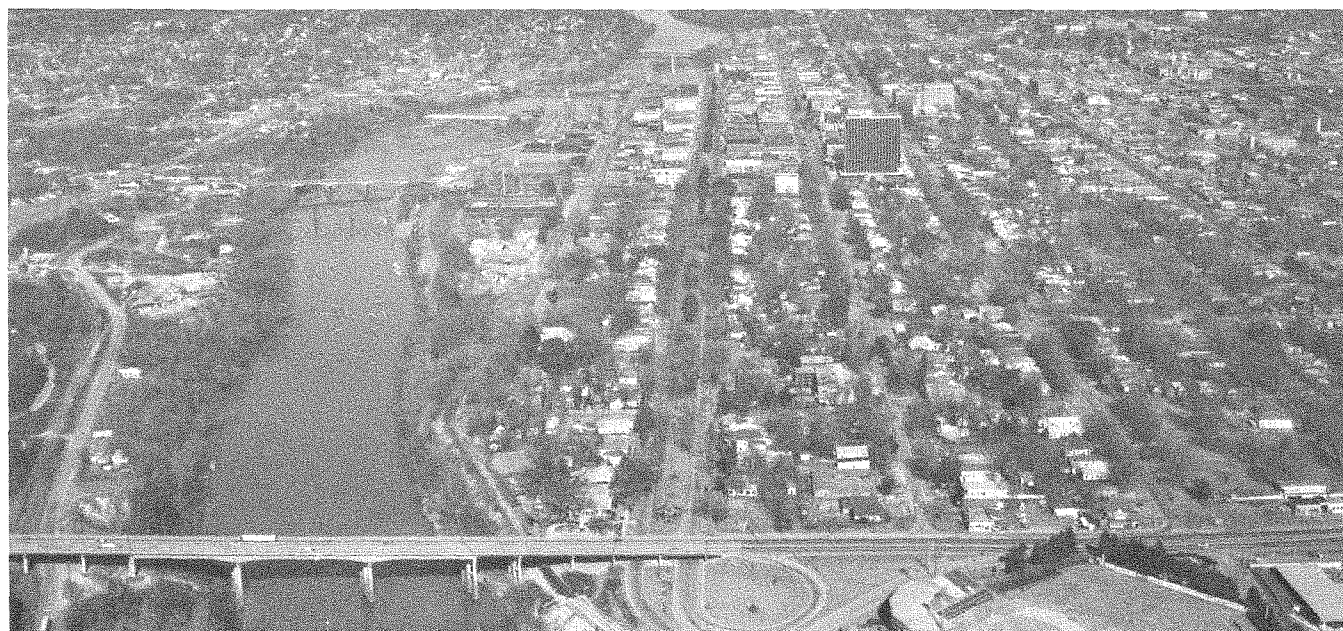
## PREFACE

This pamphlet was prepared to be used by the members of the Society for Industrial Archeology during its 8th Annual Conference in Columbus, Georgia, April 26-29, 1979. This work does not pretend to be a definitive inventory of the industrial and engineering heritage of Columbus, but only an introduction to the city's industrial development. Its aim is to give a little background about the city's major factories and to enable visitors to place the buildings and processes they will view within an historical context. The criteria (or crutch) of only including "historic" industries at least fifty years old has generally been followed, therefore the original names of the mills rather than their contemporary owners are used (i.e., Muscogee rather than Fieldcrest). The new enterprises created here during the last two decades (Dolly Madison, or the smaller TRW, Columbus Foundries, Union Carbide, Gombio [a Japanese-owned yarn mill], and others) have been ignored. Most of these firms, however, are located north and east of the city, not along the river and not within the tour area.

During the S.I.A. Conference, the primary tour will be of working industries. This guide could not enumerate all the equipment involved in all the processes. The depth of the accounts varies from site to site. Some of the material is drawn from oral tradition or "company legends" and should be read with this in mind. More accurate, perhaps, are the summaries of the five major enterprises surveyed by the Historic American Engineering Record (HAER) during the summer of 1977: Bibb, City, Muscogee, and Eagle & Phenix Mills, and the Columbus Iron Works. These were placed in the Columbus Historic Riverfront Industrial District which was declared a National Historic Landmark in the summer of 1978. The HAER historical reports also represent the most complete bibliography on Columbus industries. This pamphlet includes brief descriptions of other industrial and engineering sites passed in traveling from one "process" to another. A few additional entries not on the route, especially textile mills, have been added to give a more complete conception of Columbus industrial evolution in the period 1828 to 1930. During the tours, no two busses will follow the same route, so no attempt was made to arrange the sites to follow their tour order. Instead, the sites are numbered according to their geographical location.

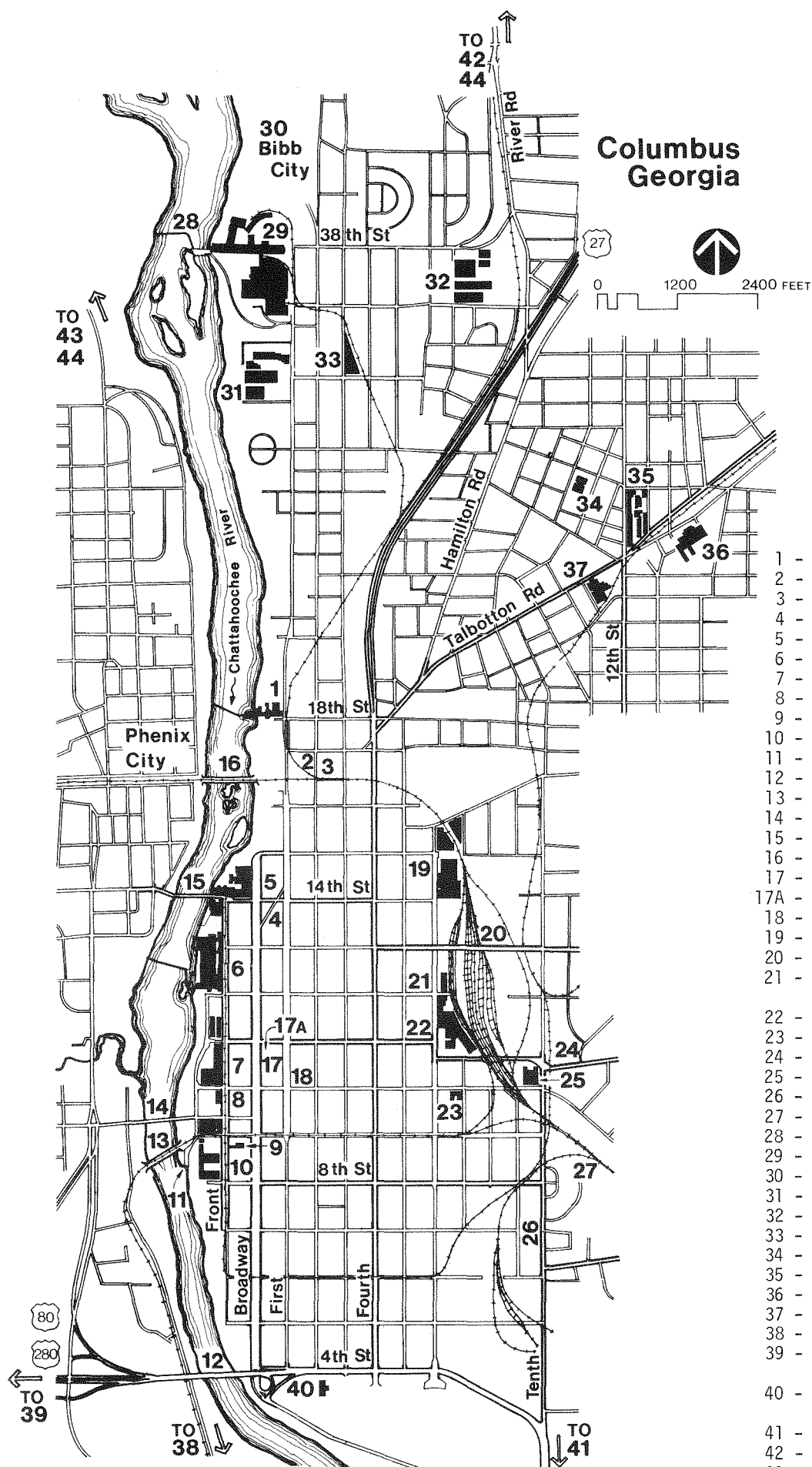
A great many people contributed to this pamphlet. All of the sites studied by HAER should be viewed as a joint research effort by Barbara Kimmelman, J. B. Karfunkle, and John S. Lupold. The HAER drawings of Daniel Wheeler, Robert W. Karow, and Donna R. Carrion were used. Don Stevenson, who served as supervising architect of the Columbus project, prepared the map for this particular work. The contributions of HAER photographers, David Sharpe and Jet Lowe, are obvious. The HAER inventory cards, especially those relating to dams and bridges, prepared by James Brittain of Georgia Tech, were also employed. The information on the National Infantry Museum and the Confederate Naval Museum was provided by their respective curators, Lt. Col. Dick Grube and Bob Holcombe. Walter Clement prepared the account of his antique machinery. William R. Mitchell, Jr., architectural historian and historic preservation consultant, offered valuable insights about the city's architecture. My colleagues at Columbus College also made important contributions: art work (on the poster and maps) by Sue Gilmore, photography by Bob Wilbanks (both in Media Services), a river profile by James J. Dwyer, proof-reading by Don Cope (both in history), research by Mrs. Virginia Lee (Archives) and, as usual, superb editing and typing by Irene Michelli. Finally, however, all the errors, of which I am sure this is replete, are my responsibility.

J. S. L.  
Department of History  
Columbus College  
April 4, 1979



Chattahoochee River, looking north. 1970s. (Ledger-Enquirer)





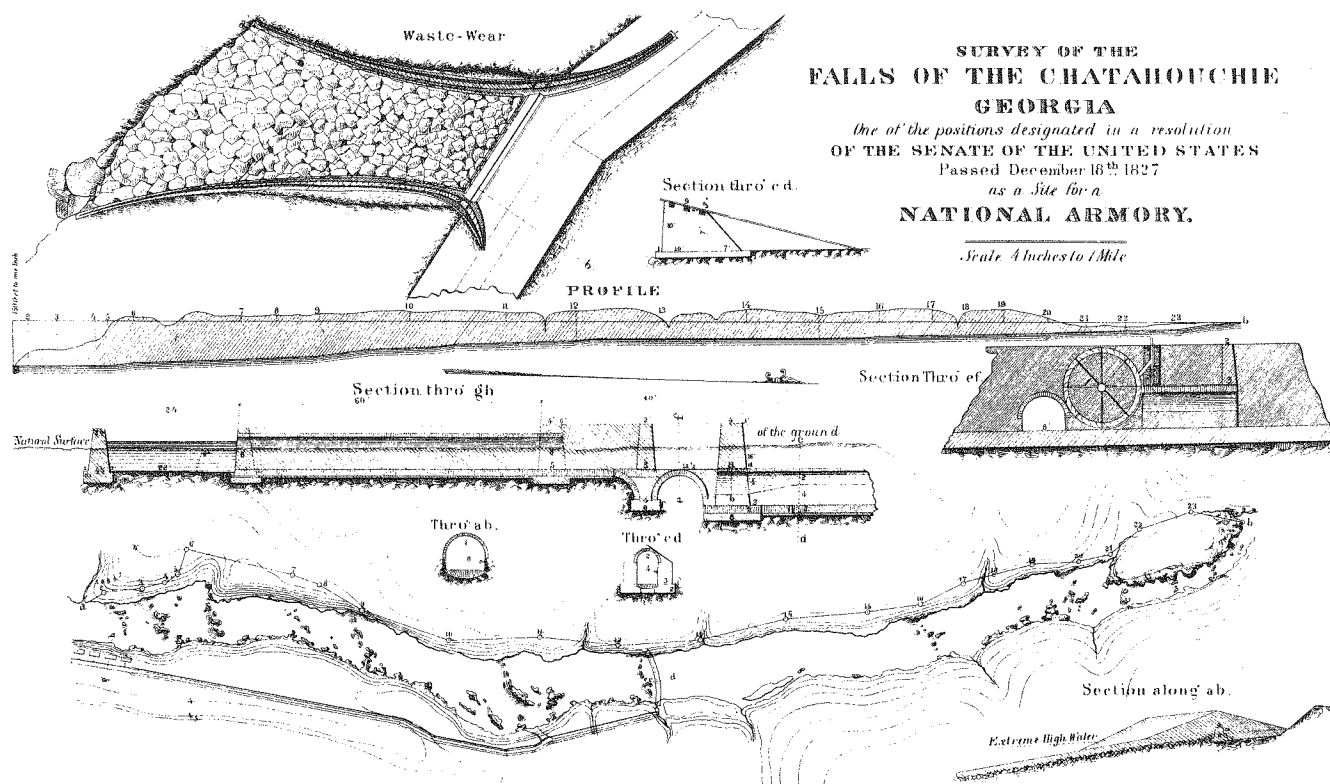
# LEGEND

- 1 - City Mills
- 2 - Street Car Barn
- 3 - Clegg's Mill
- 4 - Georgia Manufacturing Company
- 5 - Muscogee Mills
- 6 - Eagle and Phenix Mills
- 7 - W. C. Bradley Warehouses
- 8 - Seaboard Airline Railroad Terminal
- 9 - Empire Mills
- 10 - Columbus Iron Works
- 11 - U. S. Snagboat Montgomery
- 12 - Oglethorpe Bridge
- 13 - Lower Southern Railway Bridge
- 14 - Dillingham Street Bridge
- 15 - Fourteenth Street Bridge
- 16 - Upper Southern Railway Bridge
- 17 - Rankin Square
- 17A - Cast Iron Bank
- 18 - Springer Opera House
- 19 - Swift Manufacturing Company
- 20 - Thirteenth Street Viaduct
- 21 - Central of Georgia Railroad Terminals and Yards
- 22 - Goldens' Foundry & Machine Company
- 23 - Columbus Stockade
- 24 - Hamberger Mill
- 25 - Royal Crown Cola
- 26 - Tom Huston Peanut Company
- 27 - Lummus Industries, Inc.
- 28 - North Highlands Dam
- 29 - Columbus Plant of the Bibb Company
- 30 - Bibb City
- 31 - Columbus Manufacturing Company
- 32 - Meritas Mills
- 33 - Swift Spinning Mills
- 34 - Columbus Industrial High School
- 35 - Perkins & Topsy (later Jordan) Mills
- 36 - Shannon Hosiery Mill
- 37 - Archer Hosiery Mill
- 38 - Bickerstaff Clay Products, Plant #3
- 39 - Walter B. Clement's Collection of Mechanical Antiques
- 40 - James W. Woodruff, Jr., Confederate Naval Museum
- 41 - Fort Benning
- 42 - Oliver Dam
- 43 - Goat Rock Dam
- 44 - Bartletts Ferry Dam

(Adapted from a HAER drawing by Don Stevenson)

## THE INDUSTRIAL GROWTH OF COLUMBUS, 1828-1930

The lack of water power forced new mills, two smaller ones in the 1870s (Cleggs [3] & Cotton Steam Mill [4]), two larger ones in the 1880s (Swift [19] & Paragon [24]), and the first commercial electric company (a Brush franchise at Paragon) to locate away from the river and rely on steam power. In 1895, the Columbus Railroad Company established the city's first hydroelectric station at the City Mills dam.



The Corps of Engineers surveyed the Falls of the Chattahoochee in 1827 as a possible location for a "western" arsenal. While the water power was superabundant, the high transportation costs eliminated consideration of this site. This river profile extends from the present North Highlands Dam to the Dillingham Street Bridge. (AMERICAN STATE PAPERS, MILITARY AFFAIRS, IV, 480)

The commercial possibilities of electricity encouraged the large investments necessary to develop new dams north of the city. The Bibb Manufacturing Company, a Georgia-wide textile firm (with sizeable blocks of stock held by Columbusites), constructed the North Highland Dam (1899-1902) [28] and two powerhouses. One produced mechanical power for the new Bibb Mill [29], and the other generated electricity for the Columbus Power Company, a subsidiary of the Bibb Company. The availability of electricity created a flurry of textile expansion, including additions to existing mills. The Columbus Manufacturing Company (1901) [31] and Swift Spinning (1906) [33], built within a few blocks of the Bibb, utilized electricity from the North Highlands Dam. During the same period, to the east of the city the adjoining Perkins and Topsy (later combined as the Jordan) Mills [35] were established. All of these new operations were located just beyond the city limits. (Even so, the somewhat urban concentration of textile mills in Columbus differed from the typical Carolina mill which tended to be located in a more isolated, rural setting surrounded by its own village.)

By 1910, textile growth slowed, especially the creation of new mills, even though existing firms continued to expand. By that date the local mills experienced a serious shortage of skilled labor. The creation of additional electricity by the new Goat Rock Dam [43] (1910-1911) resulted in just one new factory, Meritas Mill (1911) [32]. Only two small hosiery mills (Archer, 1929 [37] & Shannon, 1939 [36]) began during the next two decades. By 1930, Marshall Morton, the city manager, wrote that Columbus needed no more textile mills until the entire industry could pay higher wages. "I feel like a woman with fifteen children," said Morton in discussing the city's mills: "I love those I have, but I wouldn't give a thin dime for another one." Unlike other southern mills that became part of larger regional or national chains, the Columbus mills remained locally owned until after World War II.

Other industries besides textiles did develop in Columbus, but the regional and national factors encouraging large-scale production and geographical specialization certainly influenced the industrial development of the city. By 1920, the city's economy was proportionately less diversified and had fewer small manufacturing firms than during the 1870s. Grist milling, especially of wheat, declined. Local breweries and cigar manufacturers disappeared. Industries like brick-making (i.e., Bickerstaff Brick Yards [38]) which served a local market continued to flourish. Two large foundries (Columbus Iron Works [10] and Golden's Foundry and Machine Shop [22]) replaced earlier, smaller operations and fulfilled local demands and also shipped speciality items, as did F. H. Lummus' Sons & Co. [27] with their cotton gins.

During the 1920s, the economy became more diversified--a trend which continued after World War II. A local bottling firm [25] began producing Chero-Cola in 1912, NEHI in 1924, and Royal Crown Cola in 1935. Tom Huston Peanut Company, now Tom's Foods [26], started in 1925. The major change in the 1920s was the transition of the temporary World War I camp into Fort Benning in 1922. It became the city's largest "industry." By 1930, the city's relationship with the river had changed. River navigation had virtually disappeared. The power of the river was being transmitted to other cities in the form of electricity. The hydroelectric dams north of the city (Goat Rock, 1910-1911, 16,000 kilowatts [43] & Bartlett's Ferry, 1924-1928, 30,000 kilowatts [44]) supplied power to new mills in West Point, Newnan, and La Grange and even to the city of Atlanta. In 1930, the local power companies, earlier consolidated by Stone and Webster of Boston, merged into Georgia Power Company. So, after 1930, the power of the Falls of the Chattahoochee served all of Georgia, and the river no longer represented Columbus' prime asset in attracting new industries.



Antebellum Eagle Mill. (Columbus College [CC] Archives)

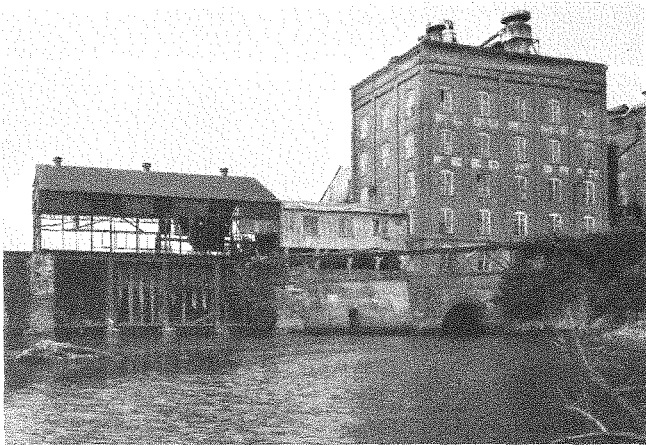


Clapp's Factory, circa 1905. Rebuilt in 1866, the mill went bankrupt in 1885 and burned in 1910. (Historic Columbus Foundation [HCF])

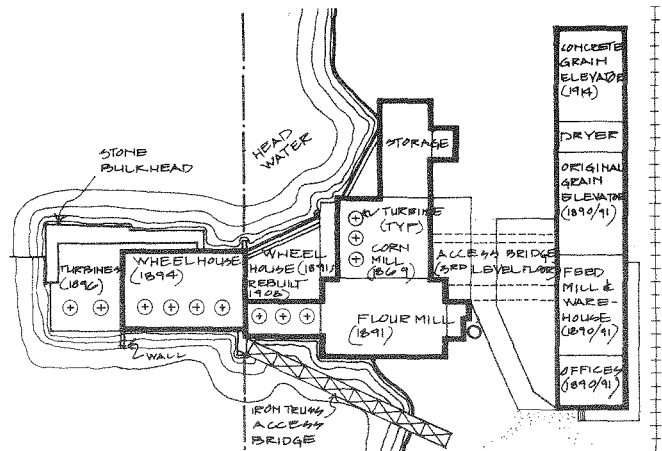
## \*1 CITY MILLS

1869, 1890, 1894, & 1914

In 1828, the year Columbus was established, the initial dam on the Chattahoochee River began powering City Mills (a grist mill) which still manufactures feed products today. The surviving structures at this site include the Corn Mill (1869); the Flour Mill (1890) with some of its original power transmission and grinding equipment installed from 1890 to 1908; the warehouse (1890 & 1914) and elevators (1890 & 1914) which contains the present feed mill; a 700 foot rubble masonry dam (1904-1907, 10 foot head); and the remains and turbines of the Columbus Railroad Company powerhouse (1894-1896), the city's first central-station hydroelectric plant. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*



City Mills. (David Sharpe, Historic American Engineering Record [HAER])



City Mills site plan. (Daniel H. Wheeler, HAER)

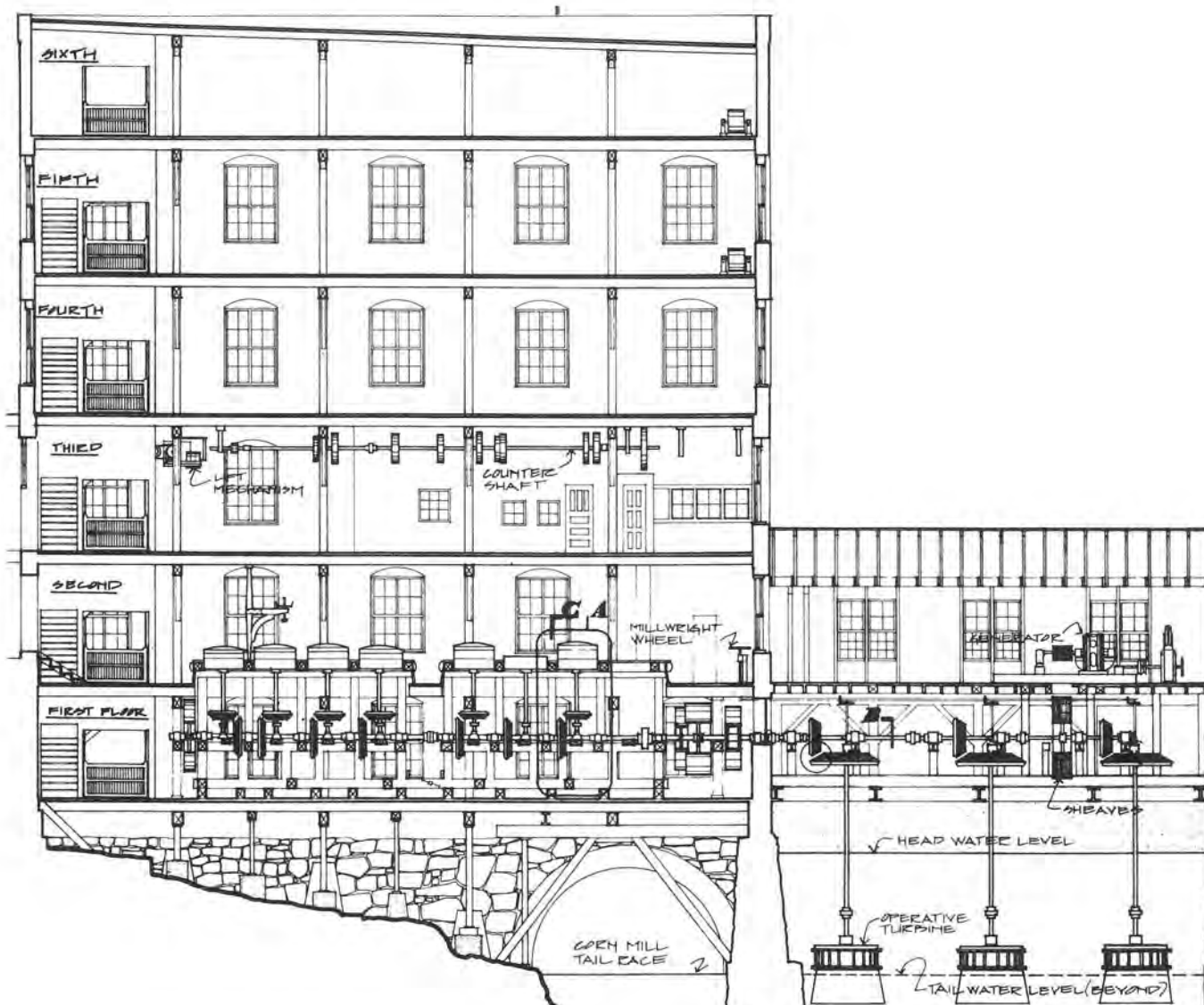
\* **CORN MILL (1869):** Built by Horace King, an ex-slave and noted covered bridge builder, this mill represents the only identifiable building erected by this important black craftsman. The company concreted the floor (1915), added a new roof, and sided it with corrugated tin (1940s). From 1869 until 1890, this structure served as the company's only mill and with five run of stones produced meal, flour, grits, shorts, and bran. After 1890, a rope drive supplied some of the 75 horsepower produced by its three turbines to the equipment in the wooden grain elevator directly to the east. (Part of the tensioner remains on the third floor of the Corn Mill.) In 1946, with profits earned during World War II, the company removed the rope drive and remaining stones and installed the existing three 45" Leffel Samson turbines and a 312 kva Westinghouse generator which operated until the late 1960s.

\* **FLOUR MILL (1890-1891):** The Richmond City Mill Works of Richmond, Indiana, erected this six-story brick structure, then the largest, most modern grist mill in Columbus. After building a concrete dam in 1908, the company revamped the power system in this mill. The firm never realized its anticipated market and never modernized this facility. Thus, much of the machinery remains where it was phased out of production starting in the 1940s: three 62 inch Leffel Samson turbines (replaced in 1929, the eastern one can still operate); the massive hurst frame (1908) which isolated the vibrations of the drive shaft from the rest of the structure; seven 48 inch grinding stones; an inoperable 175 kilowatt General Electric generator (1919); small flour roller mills (perhaps as early as 1891); Gruendler pulverizers (1929 and later); and, on the other floors, a system of drawers, batch mixers, sifters, and bagging equipment (some 1890).

\* **WAREHOUSE AND ELEVATORS (1890 & 1914):** In 1890, the company erected a wooden grain elevator (72,000 bushel capacity) and a two-story brick warehouse (two additional floors added in 1914). The 1914, 100,000 bushel concrete elevator now stands empty. Faced with unfavorable freight rates and unable to compete with larger Midwestern operations, the company gradually shifted from grinding wheat and corn to feed production for the local market. In 1934, it consolidated its feed mill in the warehouse and wooden elevators where it (with some later equipment) still produces scratch feeds, pellets, and mashes for animals.

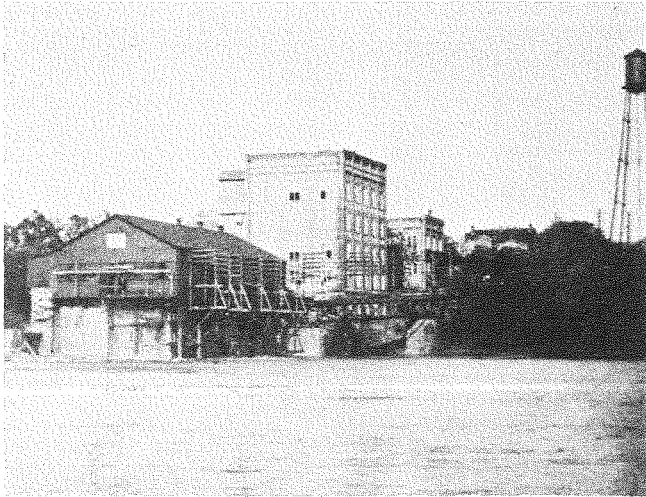
\* INDICATES THIS SITE WILL BE VISITED ON THE TOURS.



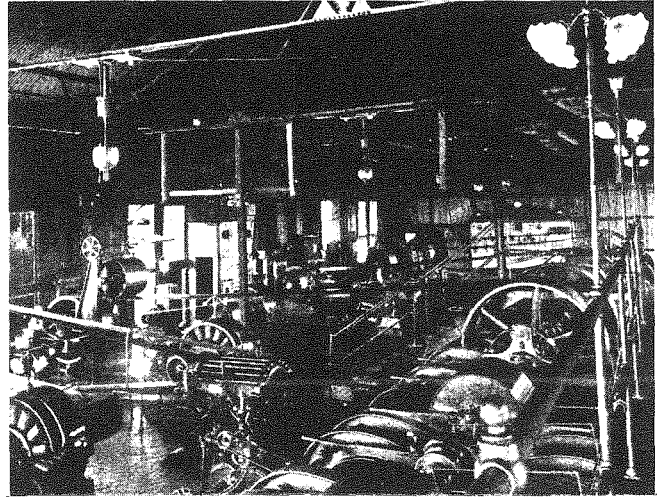


Flour mill at City Mills. (Daniel H. Wheeler & Richard K. Anderson, Jr., HAER)

\* COLUMBUS RAILROAD COMPANY POWERHOUSE (1894-1896): Leasing this site and limited water power from the City Mills Company, the Columbus Railroad Company installed four 68 inch vertical Samson Leffel turbines in 1894 and added two more in 1896. From 1896 until 1902, this station supplied all of the city's commercial transmitted-electricity. In 1897, its equipment included one 125-light Brush and three 50-light Thomson-Houston dynamos for arc lighting (initially operated by the Brush Light and Electric Company); three General Electric 1100-volt and two Westinghouse 2200-volt generators for incandescent lighting; and two General Electric 550-volt railway generators. After the development of the 1902 North Highland Dam (which by contrast had five 39 inch horizontal Holyoke Hercules turbines directly connected to five 1,080 Kilowatt Stanley generators), and the merger of all the power companies under Stone and Webster (1906), the Columbus Railroad station became a very minor producer of current, even though its machinery was gradually modernized. Georgia Power stopped leasing the site in 1950 and removed all the equipment except the turbines.



Columbus Railroad Company powerhouse, exterior, circa 1900. (HAER)



Original horizontal generators, Columbus Railroad Company powerhouse, looking east. (ELECTRICAL WORLD, 1897)

## 2 STREET CAR BARN

1913 & Later Additions

West side of 1600 block of 2nd Ave.

The Columbus Railroad Company built this structure in 1913 to house and service its street cars. A tunnel supposedly connected this facility with the generating plant at the City Mills dam. By the 1930s, the garage had shifted from maintaining street cars to buses. The city, which eventually assumed control of the bus line, owned the building until the late 1960s when it became a tractor sales and service center. Five, steel "I" beams (including one in the front facade) support the second-floor office space and span the distance necessary for the wide doors. The gabled roof behind the two-story section is carried by both steel and wooden trusses. The corrugated metal portion along the northern side was added at a later date.

## 3 CLEGG'S MILL

1872 & Later Modifications

East side of 1600 block of 2nd Ave.

A. Clegg, an Englishman, migrated to Columbus during the antebellum period and began working for the Eagle & Phenix Mills. He started this small, steam-powered factory (1872) which wove a blue-checked cloth. This mill with its single product was typical of many southern companies launched during the 1870s and 1880s. Clegg died in 1894 or 1895 and the mill stopped operating by 1898. Burnham Van Lines (a national company with headquarters in Columbus) now utilizes the building as a warehouse and added the modern metal facade which obscures the old mill. The building's interior remains basically unchanged and contains a mixture of hand-hewn beams and sawn, slow-burn style posts and beams found in other Columbus mills of that period.



Street Car Barn. (John S. Lupold)



Clegg's Mill. (Bob Wilbanks)



Georgia Manufacturing Company. (Bob Wilbanks)



#### 4 GEORGIA MANUFACTURING COMPANY

1870s, 1896

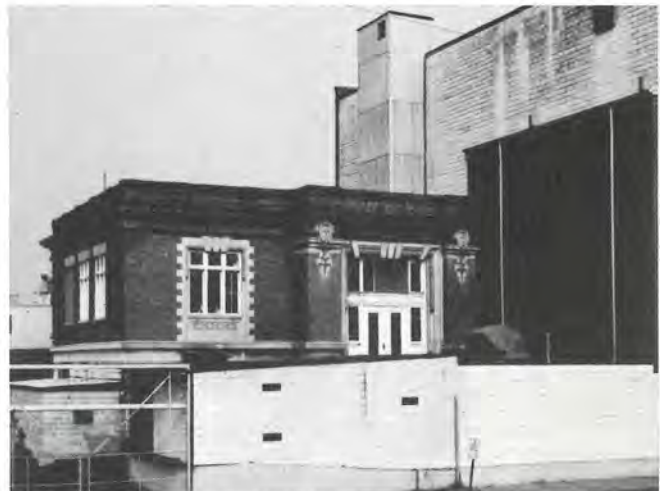
Warren Street

During the 1870s, two cotton factors, Greenwood and Grey, who first ventured into manufacturing during the Civil War, established the small Steam Cotton Mill, a spinning operation, on this site. In 1896, the Georgia Manufacturing Company expanded the facility (the present facade) and began a hosiery knitting operation. It initially received electricity from the Columbus Railroad Company powerhouse at the City Mills Dam, probably the first industrial application of transmitted electricity within the city. The service was so unreliable, however, that Georgia Manufacturing subsequently installed its own steam-powered generator. The firm continued until 1950.

During the 1870s and 1880s over 50% of the block surrounding this factory was occupied by female boarding houses for mill workers. BROAD STREET METHODIST CHURCH (1873), a small, two-story, Greek-revival building on the west side of Broadway, primarily served operatives in this area.



Broad Street Methodist Church, 1873, primarily served operatives who lived in this area. (HCF)



Columbus Public Library (Carnegie, 1907), now a machine shop at Muscogee Mills. (David Sharpe, HAER)

#### 5 MUSCOGEE MILLS

1868, 1880, 1887, 1904, 1918, 1928, & 1950

Front Ave. & Broadway at 14th St.

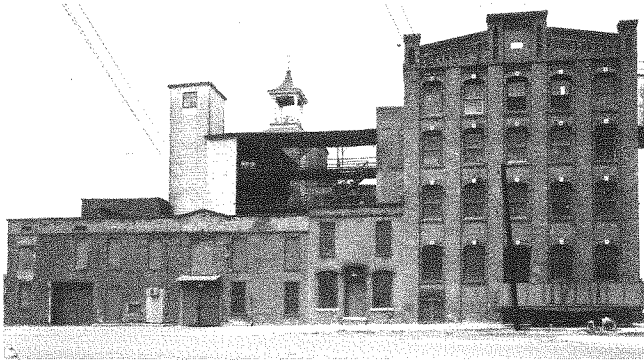
This firm began on water lot #1, the site of Coweta Falls Factory (1844), the city's first textile mill. In 1868, George Parker Swift, a New Englander who established mills in Upson County, Georgia, before the Civil War, began constructing Muscogee No. 1 (with a distinctive belvedere). In 1880, he built an almost rectangular Mill No. 2 (with window keystones spelling out the company's name) to fill the remaining space on this water lot. (These two structures were demolished in 1978.) Future expansion occurred north of 14th Street, where the company lacked riparian rights. Steam-powered Mill No. 3 (1887), and electricity from the Columbus Railroad Company powerhouse at City Mills drove No. 4 (1904). Later additions included Mill No. 5 (1918), No. 6 (1928), and No. 7 (1950). In the process the complex incorporated the Mott House (a three-story, 1840s mansion) as offices and the city's 1908 Carnegie Library as a machine shop. Fieldcrest purchased this company from its local owners in 1963. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*



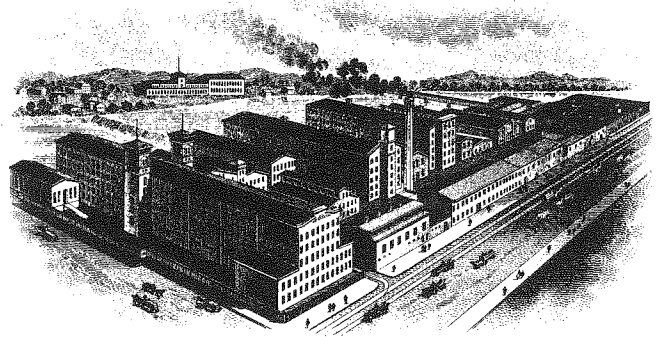
Mott House (1840s), now offices for Muscogee Mills. (Jet Lowe, HAER)



Muscogee Mills produces towels and is the only operation in Columbus to use Jacquard looms. (David Sharpe, HAER)



Muscogee Mills No. 1 (1868) & 2 (1880), demolished in 1979. (David Sharpe, HAER)



Eagle & Phenix Mills, circa 1910. (CC Archives)

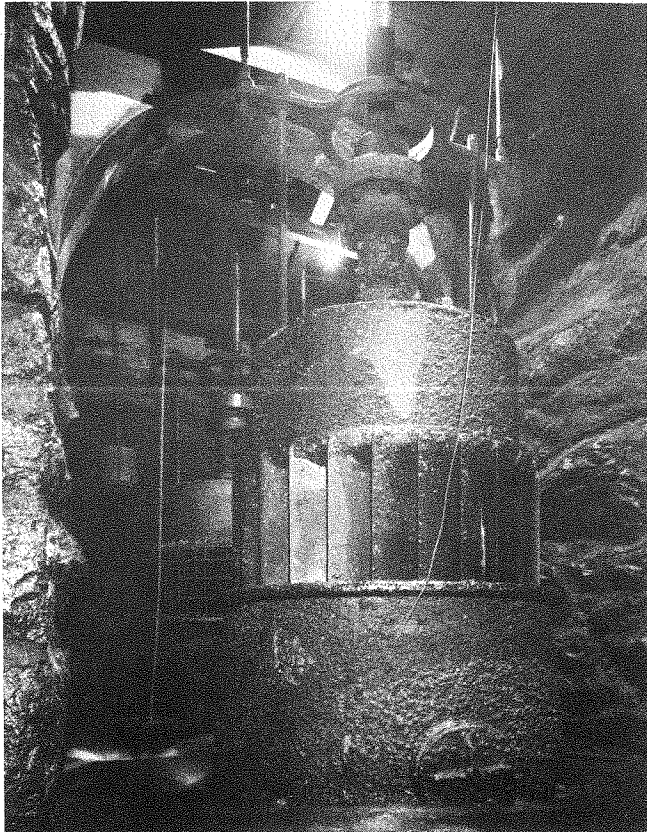
## \* 6 EAGLE AND PHENIX MILLS

1867, 1872, & 1878

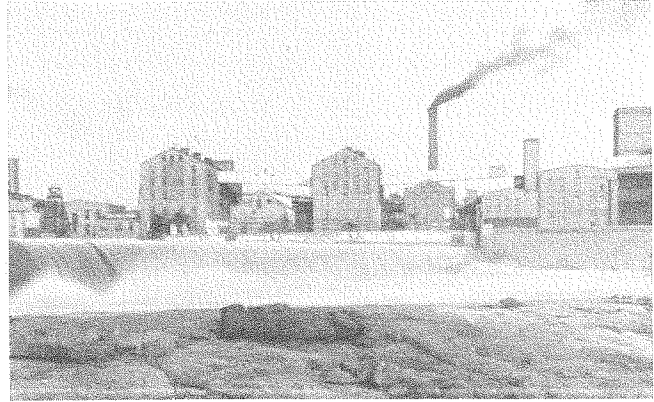
1229 Front Avenue

William H. Young, a commission merchant originally from New York, established the Eagle Mill in 1851. For the next fifty years it represented the most important factor in the town's industrial development. In 1860, it absorbed the Howard Factory (1847) and became the second largest mill in the state. Union troops burned it in April of 1865. Mill No. 1 (10,000 spindles and 135 looms) of the reorganized Eagle and Phenix Manufacturing Company began operating in 1868. During the 1870s the company expanded more rapidly than any other southern textile firm, adding Mill No. 2 (15,000 spindles and 350 looms) in 1871 and Mill No. 3 (20,000 spindles and 800 looms) in 1878. During the winter of 1880-1881, the company engineer, John Hill, installed Brush arc lights in Mill No. 3. By 1880, the Eagle and Phenix led the South in the value of its textile product (\$1,500,000). Visitors to Columbus, especially during the 1881 Atlanta Exposition, marveled at the company's size and diversified products (144 different styles of cotton and woolen goods). Its growth leveled off in the 1880s, stagnated in the early 1890s, and entered receivership in 1896. Somewhat revitalized by the second decade of the 20th century, it became a more typical southern mill and remained locally owned until 1945, when Reeves Brothers purchased it. The only major expansions occurred during the 1940s and 1960s, filling the spaces between the older structures. In 1978, Fieldcrest bought the property and demolished the old dyehouse and cotton warehouses to build a new finishing plant.

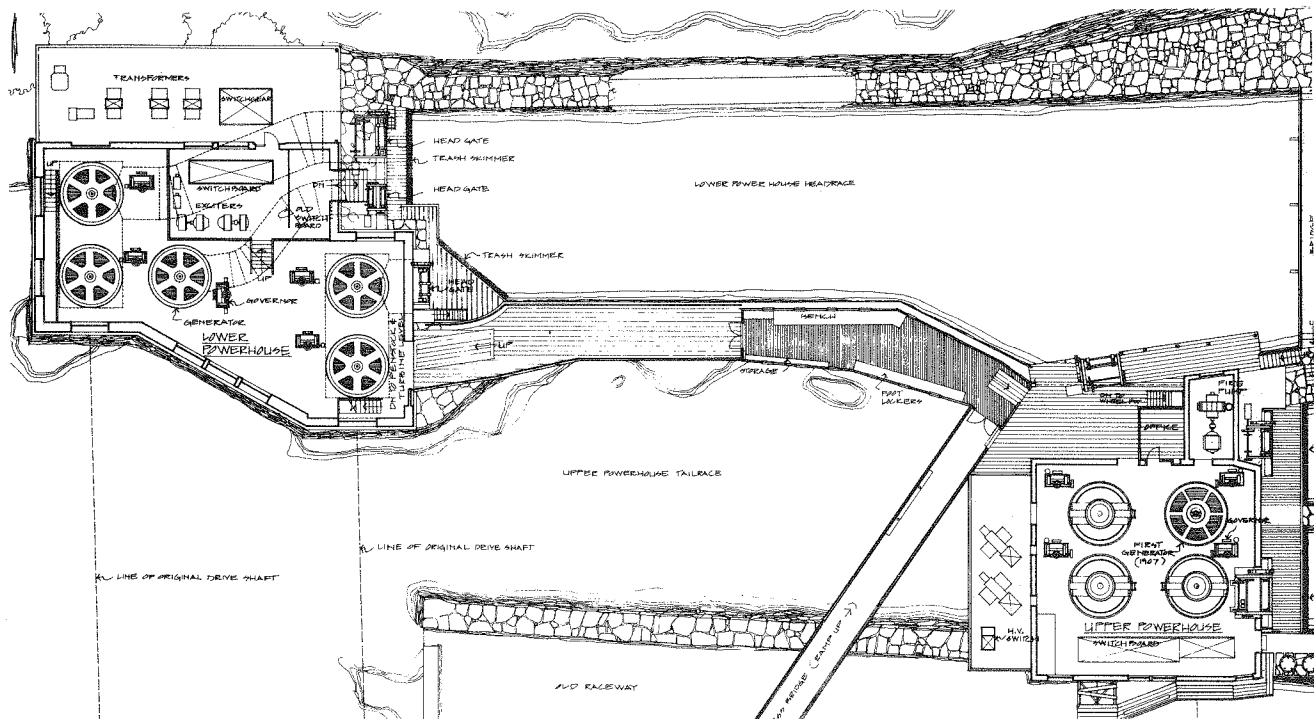
\* EAGLE AND PHENIX DAM & POWERHOUSES (1882, 1899, 1914, & 1919): The power system of the antebellum industrial riverfront lots consisted of a dam (1844; at the present 14th Street bridge), a head race extending southward along the eastern side, and flumes that carried water across the tail race initially to water wheels and later to turbines. (Portions of this dam and the western wall of the head race are still visible during periods of low water. The eastern wall of the head race, though refurbished many times, is still in service.) During the late 1850s, the Eagle Mill built (and rebuilt in 1866 & 1869) a wooden rafter dam farther down the river. In the summer of 1882, the company engineer, John Hill, designed and supervised construction of the present rubble masonry (8,100 cubic yards), gravity dam. Flumes continued to supply water to the rear of each mill. In 1899-1900, the two existing wheelhouses were erected. In the lower powerhouse two 45 inch and two 48 inch Holyoke Hercules turbines (mounted in twelve foot flumes) drove two shafts which spanned the tail race and operated Mill No. 3. (The fifth or middle turbine (48 inch) was added later.) In the upper powerhouse, two shafts from four 54 inch Holyoke Hercules turbines (in open wheel pits) turned two rope drives along the eastern wall of the tail race. The interior one powered Mills No. 1 and 2. The outer one, rigged over a tower, served the dyehouse and the northern end of the plant. Its inefficiency led the company to shift to electric motors in those areas and install a 500 Kw., vertical generator over the No. 1 turbine (northwest). In 1914, a brick story was added to the upper powerhouse and three more generators (580 Kw.) were placed over the remaining turbines. In 1920-1921, similar conversions in the lower powerhouse resulted in the installation of five generators: two 500 Kw. (NW & SE) and three 400 Kw. (Center, NE & SW). All of these turbines and generators still function today and under ideal conditions can produce 80% of the mill's power needs. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*



Two 54 inch Holyoke Hercules turbines (1899-1900), Eagle & Phenix upper powerhouse. (David Sharpe, HAER)

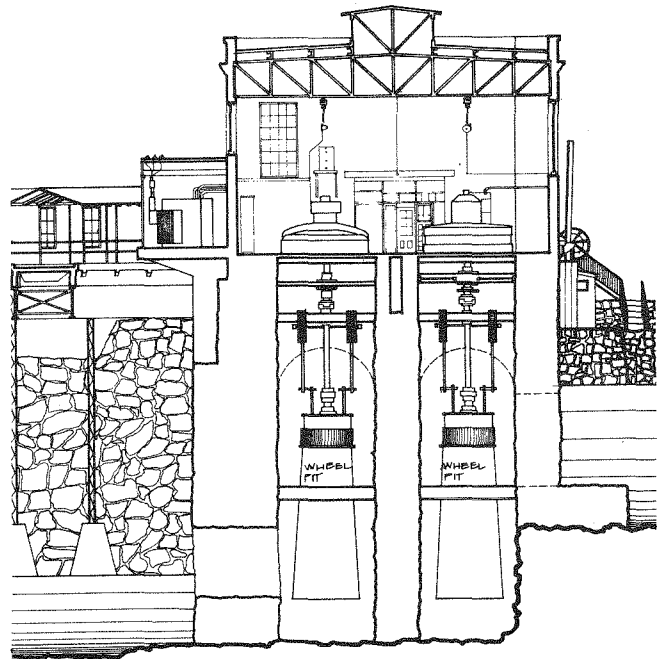
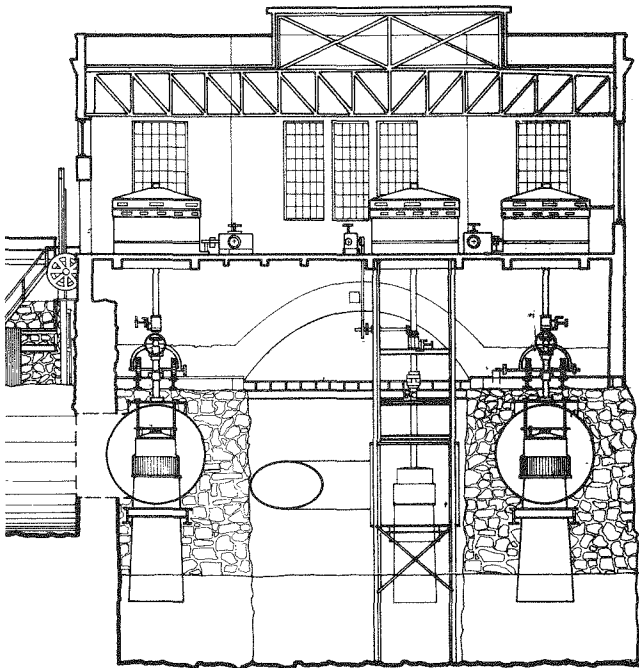


Rope drive, Eagle & Phenix, 1900-1908. (Eagle & Phenix Company records)



Eagle & Phenix powerhouses, generator level. (D. H. Wheeler, HAER)





Eagle & Phenix powerhouse sections: lower (left), looking east; upper (right), looking west. (D. R. Carrion, HAER)

## 7 W. C. BRADLEY WAREHOUSES

Late 1860s & Later Additions

Front Ave. (west side) between 10th and 12th Sts.

Union troops destroyed the original cotton warehouses in these two blocks on April 17, 1865, as the fire consumed between 50,000 and 100,000 bales of cotton. Rebuilt in the late 1860s, they were expanded and modified for the next forty years. The W. C. Bradley Company, which began in a section of one in 1883, now owns the entire two blocks. They continue to function as cotton warehouses, even though the company has converted some interior spaces into modern offices. The structures retain their late 19th century facades along Front Avenue and their turn-of-the-century graphics (company ads) on the rear or Bay Avenue side.

## 8 SEABOARD AIRLINE RAILROAD TERMINAL

1902

Front Ave. & Dillingham St.

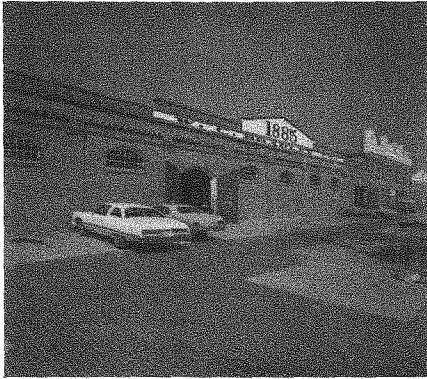
In 1902, the Seaboard Airline Railroad leased the tracks that serviced the warehouses and mills on Front Avenue and built this small freight depot. It served in that capacity until 1971 when it became a warehouse. It burned on August 10, 1977. Its owners, the W. C. Bradley Company, plan to restore this structure with its distinctive row of arches and adapt it to a usage compatible with the convention and trade center complex. The steps of this building form an integral part of "kinfolk's corner." Here and across the street, workers without cars who live outside of town (primarily to the south) socialize as they wait for rides from their "kinfolks" or neighbors with cars or trucks. *Historic American Engineering Record.*

## 9 EMPIRE MILLS

ca. 1875, ca. 1885, ca. 1904

Front Ave. & 9th St.

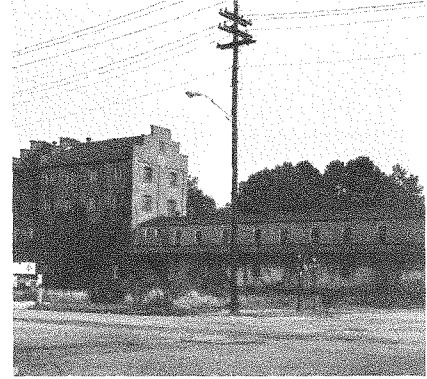
Established in 1854, this steam-powered grist mill was the city's largest from 1875 to 1890 under the proprietorship of George Waldo Woodruff. The company's proximity to the riverboat landing allowed it to supply flour, meal, and other products for the river trade to the agricultural areas south of the city. The grist mill closed in 1931, but the Empire Company continued to sell brick, ice, and coal there. The northern buildings of the complex (including the antebellum grist mill) were demolished by the early 1970s. During the summer of 1977, Historic American Engineering Record (HAER) planners studied the remaining structures (western section, ca. 1875; tower, ca. 1904; and eastern end, ca. 1885) and suggested possible adaptive uses. Current plans show a 275 room hotel to support the trade and convention center immediately south of Empire Mills. The former grist mill will be converted into a restaurant, lounge, and shops and connected to the hotel by a glass-roofed arcade. The brick mill with its post-and-beam timber framing will make the hotel more compatible with the Iron Works. *Historic American Engineering Record.*



W. C. Bradley warehouses. (Jet Lowe, HAER)



Seaboard Airline Terminal. (David Sharpe, HAER)



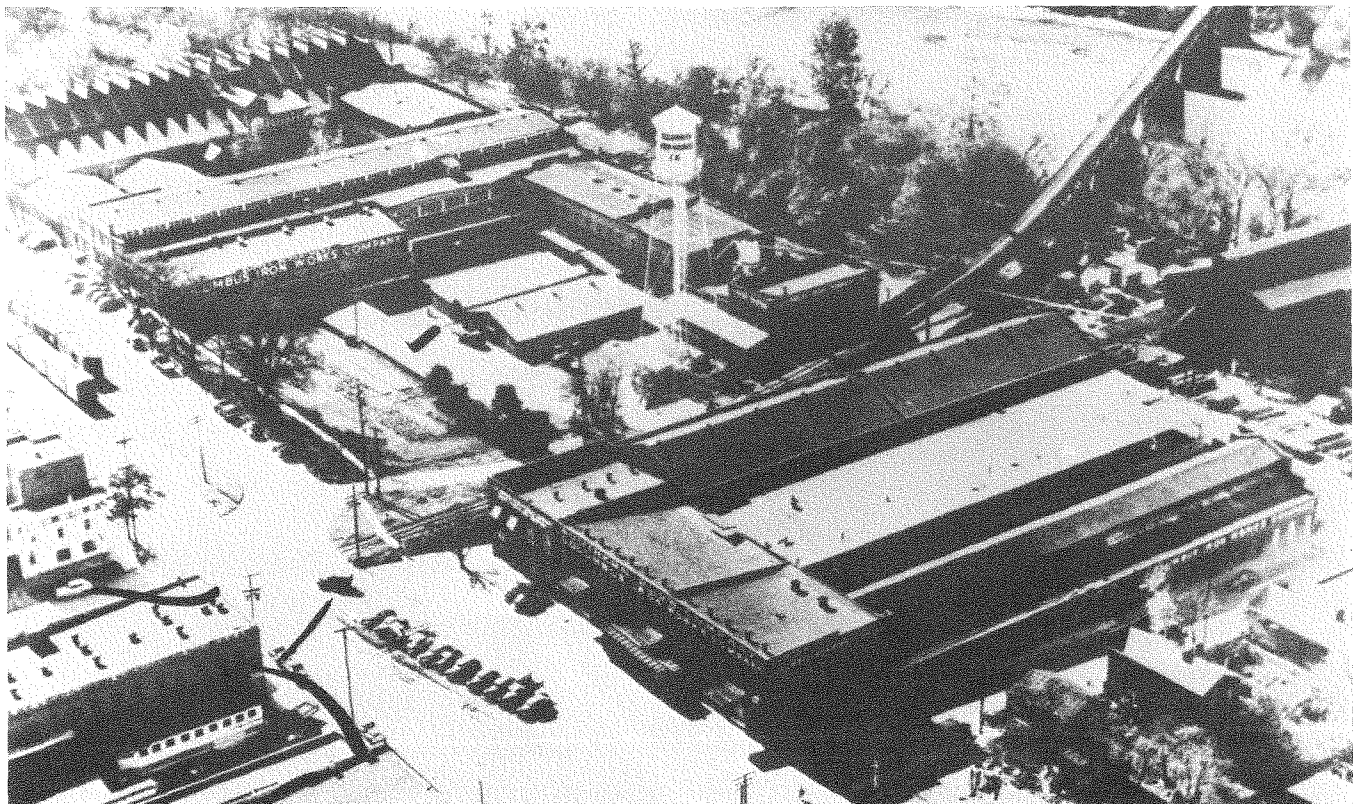
Empire Mills. (David Sharpe, HAER)

#### \*10 COLUMBUS IRON WORKS

1902-1907

800 & 900 blocks (west side) of Front Ave.

Established in 1853, this company for over a century manufactured a wide range of agricultural implements (Southern Plow Company), stoves and heaters, power transmission equipment and other industrial products, steam engines, and ice machines. In 1862, the Confederacy leased this relatively small foundry. Under the guidance of Chief Engineer James H. Warner, formerly with the U.S. Navy Yard at Gosport, Virginia, it produced at least fourteen steam engines for ironclads and gunboats of various classes. The war experience expanded the scale and scope of the Iron Works, and the technology developed during the war enabled the company to fabricate its most distinctive product, ammonia-absorption ice machines. By the 1880s, three American companies had developed such machines, and, according to refrigeration historian Oscar E. Anderson, the Columbus Iron Works produced "one of the most successful of these." Until 1930, the company sold these in the United States, primarily south of the natural ice line, and throughout Latin America. The plant burned in 1902, and all of the existing structures were rebuilt by 1907. In 1963, its owners, the W. C. Bradley Company, dissolved the Columbus Iron Works and



Columbus Iron Works, circa 1950. The foundry roof was modified before the city acquired the property. (Georgia Department of Archives & History)



relocated to a more mechanized operation in an industrial park north of the city. In 1975, the city bought the southern portion of the plant and is converting it into a trade and convention center at a cost of \$7 million--\$4 million less than a new facility with the same space. The cupola furnace, overhead cranes, and line shafting have been left in place. In the power house, once driven by a Corliss steam engine, are an inoperative 320 horsepower synchronous engine (1930) which replaced the steam engine, an air compressor (1930) belted to a 75 horsepower motor (1960), and a D.C. generator (perhaps 1907) directly connected by a shaft to a 50 horsepower A.C. motor (1960). These industrial artifacts along with the extensive brickwork and massive wooden beams, steam cleaned to accent the grain, create a unique atmosphere that no new building could match. The W. C. Bradley Company still owns the vacant northern section of the facility and plans eventually to adapt it to a function that will support the trade and convention center. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*



Columbus Iron Works: machine shop, looking west (circa 1920), cupola furnace and foundry (circa 1960). (All HAER photocopies)

#### \*11 U. S. SNAGBOAT MONTGOMERY

1926

##### Old Columbus Steamboat Landing

The Mobile District of the U. S. Army Corps of Engineers utilizes the U. S. Snagboat Montgomery, to snag and remove debris and to maintain the navigable channel (9 feet deep) in the Chattahoochee-Flint-Apalachicola river system. Built in 1926 by the Charleston Drydock and Machine Company of Charleston, South Carolina, this 178-foot boat (with a 34 foot 3 inch beam and 4 foot draft) is powered by two steam engines (high pressure joy valve, 14 inch diameter, 72 inch stroke) which drives a stern wheel (20 feet long and 18 feet in diameter).

RIVER NAVIGATION played a crucial role in the city's initial commercial development. For a quarter-century (1828 to the 1850s), cotton from an area fifty miles both to the east and west and one hundred miles to the north was brought to Columbus for shipment down the river to world markets. Two factors hindered river commerce. A sandbar across the mouth of the harbor at Apalachicola, Florida, prevented ocean-going vessels from using that port. Also, the thirty miles of rapids above Columbus limited navigation, even though some pole boats operated there in the early decades. The arrival of railroads in the area in the 1850s and the growth of Atlanta as a rail center diminished the commercial importance of both Columbus and the Chattahoochee River. Subsequent river trade involved boats bringing cotton north to Columbus for rail connections and carrying other products back to the agricultural areas. By the 1940s, trucks had eliminated such commerce. Even so, in the 1950s and 1960s, the Corps of Engineers built three locks and dams in order to maintain a nine foot channel: Walter F. George Lock & Dam (82 by 450 feet, 88 foot lift, 1963) at Fort Gaines, Georgia; George W. Andrews (or Columbia) Lock and Dam (82 by 450 feet, 25 foot lift, 1963) near Columbia, Alabama; and Jim Woodruff Lock and Dam (82 by 450 feet, 33 foot lift, 1957) at the Florida border near Chattahoochee. Barge traffic remains limited, partially because environmentalists and the oyster industry have blocked the dredging of the harbor at Apalachicola.





U.S. Snagboat Montgomery. (U.S. Corps of Engineers, Mobile District)



Locks and dams on the Chattahoochee-Flint-Apalachicola. (Sue Gilmore)

## 12 OGLETHORPE BRIDGE

1961-1962

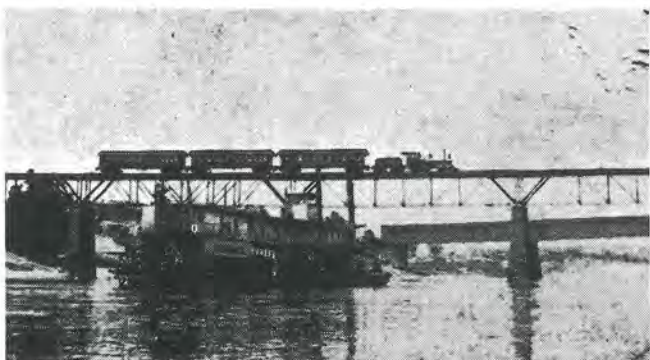
This bridge is the southernmost span across the river within the city and is the most modern. The 1294 foot composition construction (concrete on steel stringers) structure rests on twelve concrete piers and crosses a road and a railroad on both the Alabama and Georgia side. The river is spanned by a 543 foot continuous beam supported by four piers which rise 84 feet above the river at low water. (See picture on preface page.)

## 13 LOWER SOUTHERN RAILWAY BRIDGE

1904

Beginning at 9th St. and Front Ave.

In 1904, the American Bridge Company of New York erected the existing bridge at this site which contains one through-plate-girder span across Bay Avenue (there, a dirt road), one deck-plate-girder span on the Georgia side, and then, crossing the river, six steel Pratt deck trusses resting on brick piers with ashlar bases. These foundations were built in 1859 before the Civil War halted the first attempt to bring the Mobile and Girard Railroad into Columbus. This railroad (chartered in 1847 and operating 38 miles by 1857), although envisioned as a major rail route, just linked Alabama plantations with Girard, an Alabama suburb of Columbus. In September, 1866, Horace King, the noted black bridge-builder, and Asa Bates, a railroad contractor, completed the first bridge consisting of wooden Town Lattice deck trusses supported by wooden piers rising from the stone foundations. Presumably, this structure lasted until 1904, when it was replaced by the present steel bridge. The Mobile & Girard was absorbed by the Central of Georgia which is now part of the Southern Railway System.



Lower Southern Railway Bridge, circa 1904 & 1979. (CC Archives & Mary Lou Seddon)



#### 14 DILLINGHAM STREET BRIDGE

1910-1912

This reinforced concrete bridge with Melan arches consists of five equal 128 foot clear spans. The pier footings rest on bed rock with a dimension of 62 by 23 feet tapered to 17 by 17 feet. The Concrete Steel Engineering Company of New York designed this structure with B. H. Hardaway of Columbus serving as the contractor. This was the site of the initial Chattahoochee River bridge in the Columbus area. The city council financed the construction in 1832 of a covered Town Lattice bridge, erected by John Godwin and his slave, Horace King. The Confederates burned this span in a futile attempt to defend the city. In 1866, King (his master having died in the 1850s) replaced the original structure with a similar one which served until 1910.

#### 15 FOURTEENTH STREET BRIDGE

1922

Three different types of bridges have crossed the river at this point. The initial covered bridge, erected in 1856 by John Godwin and Horace King, was funded by the factory owners and primarily served to carry workers from their Alabama homes to the mills. King built a similar replacement after the Civil War. In 1901, the city constructed a new structure with five 140 foot through-pratt, pin-connected trusses with a wooden floor resting on four concrete piers. This modern bridge was designed to carry the trolley cars to Phenix City. In 1922, the present concrete structure was poured underneath the steel trusses with only minimal interruption of traffic. Four new piers and the four existing piers were converted to filled spandrel arches (seven spans of 17 feet 9 inches and two end spans of 59 feet 9 inches). (Garret & Stack of Atlanta, architects; Hardaway Construction Company, Columbus, builder.)

#### 16 UPPER SOUTHERN RAILWAY BRIDGE

1910

In 1910, The American Bridge Company of New York built this deck plate-girder structure with 11 spans resting on ten concrete piers. (The eight which span the river have ashlar foundations.) The first railroad bridge (1855) into Columbus crossed at this point and carried the Columbus & Western Railroad (later controlled by the Central of Georgia) which ran to Opelika, Alabama (adjacent to Auburn). There the line connected with the main route from Atlanta to Montgomery, Alabama. The wooden bridge, rebuilt after the Civil War, was apparently a wooden deck truss structure.



Lower railroad and Dillingham Street bridges.



Eagle & Phenix dam, 14th Street & upper railroad bridges, and City Mills dam. (Both Ledger-Enquirer)



14th Street Bridge, 1901-1922, & 1922-present. (CC Archives & David Sharpe, HAER)



## 17 RANKIN SQUARE

Mid-1800s through early 1900s

Between Broadway, 1st Ave., 10th, & 11th Streets

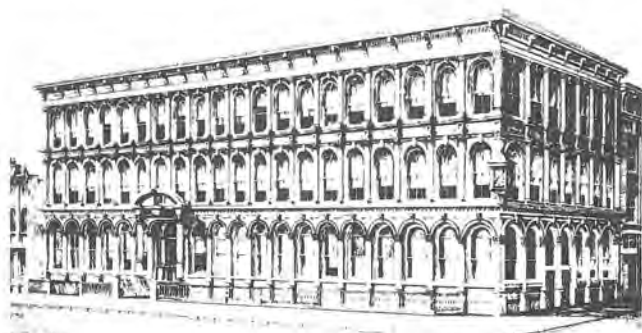
In 1976, Harry Kamensky, a local businessman, began the revitalization of Rankin Square, an entire downtown commercial block. The two- and three-story buildings (mostly constructed between the 1850s and 1915) include the large Rankin Hotel (on the southwest corner) with its cast iron porch and wide double-bracketed cornice; the smaller Central Hotel facing Broadway; old Muscogee Number Three fire station on 1st Avenue; the elaborate victorian 1889 structure on 11th St.; the Cast Iron Bank (see 17A); and a variety of other commercial enterprises. Kamensky, initially interested primarily in the Rankin Hotel, realized, after talking to preservation architects in cities with similar, successful projects, that the project needed to encompass the entire block. Scheduled to take five years and \$3.5 million to complete, the restoration of Rankin Square began on First Avenue, across the street from the Springer Opera House. Kamensky and his group of investors acquired the property (formerly porno shops, peep shows, pool halls, and beer joints), remodeled the interiors, removed the overhanging signs, restored the brick facades, buried the power lines, and replaced the conventional street lamps with period lighting. The new occupants include law firms, insurance offices, and a restaurant. A similar facelifting then occurred along Tenth Street. In less than three years, fourteen new tenants have moved into the block. Future plans call for reconditioning the upper floors of the old hotel and developing two large courtyards and an old livery stable in the interior of the block. *National Register*.

### 17A CAST IRON BANK

1867

Broadway & 11th St.

The iron facade of this building might have been cast in Philadelphia and was shipped to Columbus prior to 1861. Hidden during the Civil War to prevent it from being melted-down, it was erected in 1867. Three stories of modified Corinthian columns support a series of arches of an Italian Renaissance style along the western and northern sides (seven bays by twenty bays). Originally the Georgia Home Insurance Building, it then served as the First National Bank. In 1979, it became part of Rankin Square Properties and will be redeveloped in keeping with the remainder of the block. (Another one-story front wide, three-story iron front building stands across the street on the west side of the 1000 block of Broadway.) *National Register*.



Cast Iron Bank. (Rick Spitzmiller, First National)



Springer Opera House. (HCF)

### 18 SPRINGER OPERA HOUSE

1871

103 10th Street

In 1871, Francis Springer, an Alsatian immigrant, built this structure which included his wholesale grocery firm, other businesses, a hotel, and one of the "New South's" first opera houses. This Victorian building illustrates how rapidly Columbus and its industries rebuilt after the Civil War. The Springer theater hosted most of the leading actors and actresses during the late 19th and early 20th centuries, politicians from William Jennings Bryan through F. D. Roosevelt to Jimmy Carter, and at least one "radical" labor leader. In February, 1896, Eugene V. Debs, already a socialist and prominent because of the Pullman Strike of 1894, spoke at the Springer. The Columbus Enquirer commented: The "supreme conservatism of [Debs'] remarks comprised the surprise, and absence of any display of oratorical ability was the disappointment." (The next month, weavers at the Eagle and Phenix struck because of a wage cut and formed the first southern local of the National Union of Textile Workers. The mill's president blamed the strike on Debs who was totally uninvolved.) With the demise of traveling theatrical companies, the Springer became a movie house in the 1930s and then closed in 1954. In 1963 and 1964, a group of young, idealistic theater buffs convinced the community (and raised the money) to "save" the theater. It re-opened in October of 1965. Its successful restoration began historic preservation in Columbus. In 1971, Governor Carter named it the State Theater of Georgia. *National Historic Landmark*.

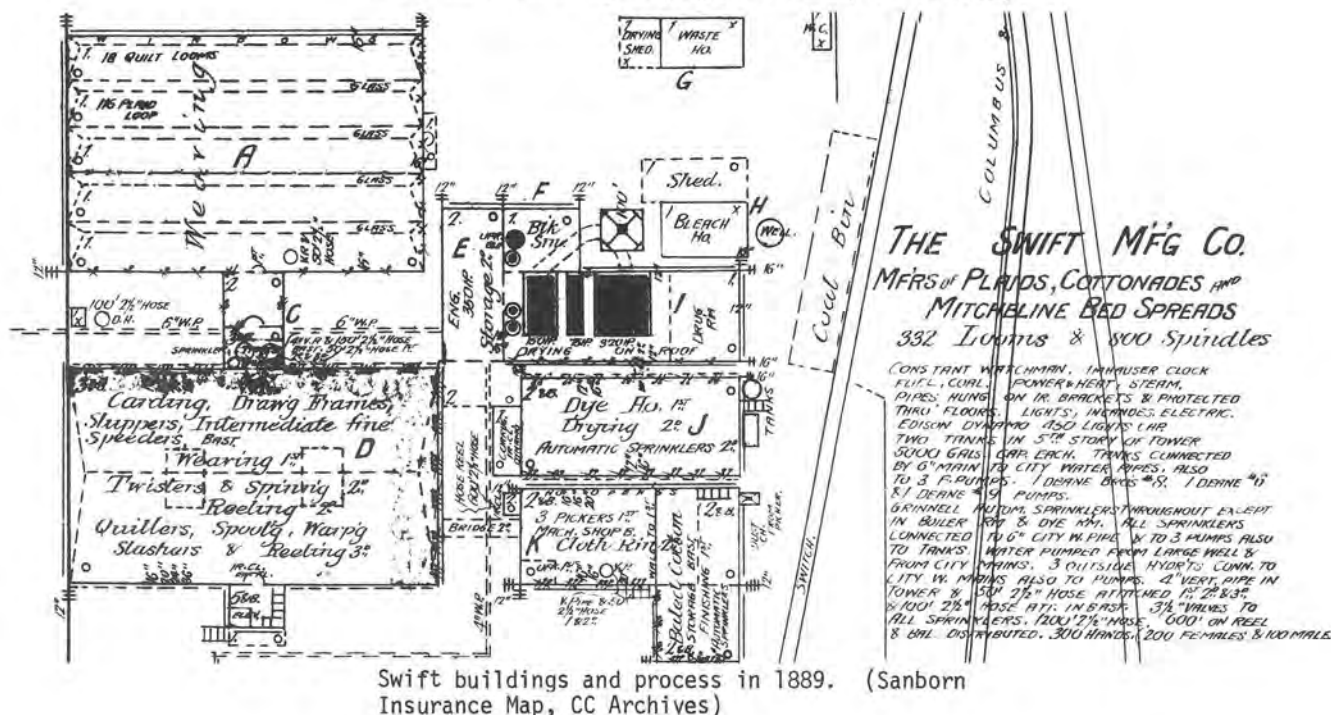


1410 6th Ave.

Organized in 1883 by William A. Swift and G. Mote Williams, the Swift Manufacturing Company erected the first large-scale steam-driven textile factory in Columbus. This mill was the last major textile operation started within the town, as later industrialists built just beyond the city limits to avoid taxation. The original (1883) structure is now (with the demolition of Muscogee No. 1 & No. 2) the second oldest textile complex still in operation within the city. The western facade of the 1883 mill (with the elaborate corbeling in the parquet and the use of darker bricks to form designs) represents the individuality of exterior design characteristic of many southern mills in the 1880s. In later decades, uniformity would be the rule. Swift Manufacturing made major additions in 1896, 1917-1918, 1925-1928 and continued to build new warehouses and to expand and modernize its facilities in every decade through the 1970s. In 1962, the local investors sold the mill to outsiders, and since that time it has functioned under at least five different parent organizations. The firm has had a successful but changing product line: bed spreads, open mesh materials, automobile seat covers, and industrial products. In the early 1970s, Swift established a separate Phenix City plant to manufacture these industrial fabrics. This facility is now under separate ownership. The Columbus plant presently produces only denim from raw cotton through spinning, dyeing, and weaving. The company employs both ring spinning and open-end spinning, a procedure (developed in Czechoslovakia in the 1960s) which produces more yarn in a shorter period of time and eliminates the roving process. Also, both shuttleless and shuttle looms are utilized. It furnishes material to most major "blue jean" manufacturers including Levi's & J.C. Penny. Swift Textiles, Inc., is now part of Dominion Textile Limited, based in Montreal.



Swift Manufacturing Company, 1890s. (CC Archives)







Swift Textiles. (Swift Textiles, Inc., 1970s)

## 20 THIRTEENTH STREET VIADUCT

1924-1925

The Central of Georgia Railroad financed and the Davis Construction Company of Atlanta built this 1,888 foot reinforced concrete viaduct in 1924-1925. Columbus boosters at the time claimed it was the longest structure of its type in the South. Its construction signified the growth of the automobile, and the easy access it afforded over the rail yard spurred the growth of suburbs to the east of the city.

## 21 CENTRAL OF GEORGIA RAILROAD TERMINALS & YARDS

1881, 1890s

1200 6th Ave.

The original city plan contained a four-block wide commons or "green-space" along the northern, eastern, and southern boundaries. The state retained control of this land after it sold the lots within the town. During the 1850s, when the railroads reached Columbus, the commons became the logical place for the tracks and rail yard. The Muscogee Railroad entered from the southwest and terminated in the east common. The Columbus and Western Railroad, coming from Opelika, Alabama, entered the city on the north common. Both of these lines became part of the Central of Georgia Railroad system. This company's small 1881 terminal (inside the rail yard, behind the 6th Ave. terminal), with decorative concrete window pediments, originally had a mansard tower which has been converted into a control tower for the yard. A larger passenger terminal was built on 6th Ave. in the 1890s. According to architectural historian William R. Mitchell, Jr., this structure combines some neo-classical features with those of the Chicago or prairie style. The last passenger train, the City of Miami, stopped in Columbus in 1971. The Southern Railway System now controls the Central of Georgia.



Central of Georgia Railroad terminals, 1881 & 1890s. (Bob Wilbanks & HCF)



\*22 GOLDENS' FOUNDRY & MACHINE COMPANY

1890-1905 & Later Additions

600 12th Ave.

This company is the oldest operating iron foundry in Columbus, Georgia. In 1882, two brothers, Theodore E. Golden and J. Poitevent Golden, who learned their skills at the Columbus Iron Works, opened a small foundry and machine shop at the corner of Sixth Avenue and Thirteenth Street. Initially, this firm typified the dozen or so small iron-working operations which began within the city in the two decades after the Civil War. While most of these floundered and eventually failed, Goldens' expanded until it rivaled its antecedent, the Columbus Iron Works. In 1889, the Golden brothers, joining with A. Illges, a local businessman, incorporated the company and moved to the present site one block to the south (on Sixth Avenue between Eleventh and Twelfth Streets). There, by 1890, they erected a multi-purpose building (offices, shipping, and storage) connected to a machine shop and a separate foundry (aligned east to west). Following a master plan, by 1905, they filled the intervening space with eight substantial buildings and smaller structures and attached another, larger foundry to the existing one. (The newer one extended southward at an angle which paralleled the railroad tracks.) A great deal of continuity has marked the company's product line. In the 19th century it manufactured goods for agriculture (cane mills, plow parts, cotton screws, gin gearing) and industry (pulleys, hangers, shafting, and couplings). Goldens' now produces a wide range of castings in gray, ductile, and alloy irons similar to some of the original products and still specializes in custom-made pulleys and sheaves used for power transmission. It still casts parts for Lummus and other local companies. An addition to the foundry area in 1969 houses the mechanized molding machines and pallet line. The company shifted from cupola melting to an electric furnace in 1974.



Goldens' Foundry, railroad terminals, 13th Street viaduct, and roundhouse (destroyed in the early 1970s). (Ledger-Enquirer)

23 COLUMBUS STOCKADE

Circa 1870s & 1880s

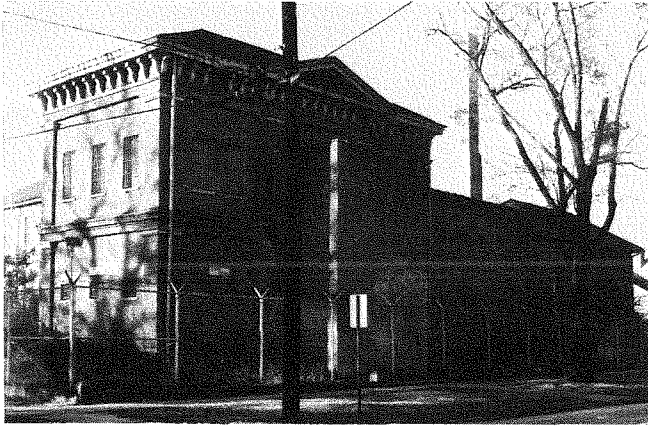
622 10th St.

Perhaps the most widely known building in town, it was immortalized by the lines of the "Columbus Stockade Blues":

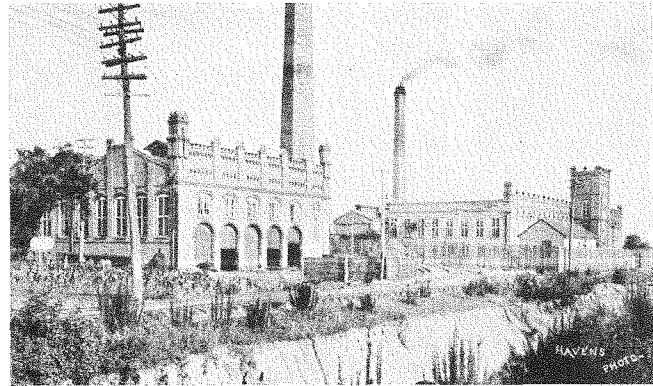
'Way down in Columbus, Georgia,  
Wanna be back in Tennessee  
'Way down in the Columbus Stockade  
Friends have turned their back on me . . .

Columbusite Thomas Paul Darby, a country music singer and guitarist, wrote the song. His inspiration, supposedly, came from his brother who, while doing time in this institution, pined for his girl who left

Columbus and returned to Tennessee. Darby and his partner, Johnny J. Tarlton of Phenix City, recorded the song in 1927 with "Birmingham Jail" on the flip side. Although the Columbus Stockade Blues has been re-recorded by all types of singers and groups, Darby claimed to have only made \$75 from the song. The structure itself was originally three separate buildings, perhaps built in the 1870s or 1880s, which were combined in the first decade of the 20th century. The Columbus Police Department used the facility until 1972.



Columbus Stockade. (HCF)



Hamberger Mills and Brush Electric and Light Company, circa 1890. The facades of the buildings have been greatly altered. (GA Dept. of Natural Resources)

## 24 HAMBERGER MILL

Circa 1888

Northeast corner of 10th Ave. & Wynnton Rd.

Originally known as Paragon (1888-1894), this factory operated as Hamburger Mill from 1894 to 1923 and as Bradley Manufacturing Company from 1923 until 1945. The original gothic style structures represent the best example of decorative "New South" industrial architecture in Columbus. While these buildings remain, their facades have been modified and additions have obscured their details. From about 1888 until 1896, in a small plant adjacent to the textile mill, the Brush Light and Electric Company operated a small steam generated facility which supplied the city with all its commercial electricity. Royal Crown Cola is now using these buildings as warehouses.

## 25 ROYAL CROWN COLA

1920s-1950s

100 10th Ave.

In 1907, Claud Hatcher, a pharmacist, added the Union Bottling Works to his family's wholesale grocery business at the corner of 10th Street and 9th Avenue. As the new enterprise boomed, the grocery firm closed. Hatcher organized the Chero-Cola Company in 1912 and began franchising bottlers in other cities. In 1924, the company began marketing NEHI drinks and in 1934 introduced Royal Crown Cola. The company occupies more than two city blocks in this vicinity with the most visible building the two-story veil-block style structure from the late 1950s. In 1977, the company's headquarters moved to Atlanta but it retains a large canning plant at this location.

COCA-COLA also had its roots in Columbus. John S. Pemberton, the pharmacist who developed the formula for Coca-Cola lived in Columbus from the 1850s until 1880. He operated an extensive chemical laboratory in Columbus after the war. It produced patent medicines, hair restorers, perfumes, paints, photographic chemicals, and a variety of sparkling soda waters. One of these might have been "French Wine of Cocoa," originally a remedy for hangovers, which evolved into Coca-Cola after Pemberton moved to Atlanta. In 1919, Ernest Woodruff, a former Columbusite, organized a pool of investors which included W. C. Bradley, a prominent Columbus industrialist, which bought the Coca-Cola Company from the Candler family. The new owners made it an international concern.





Nehi ad, 1928. (CC Archives)

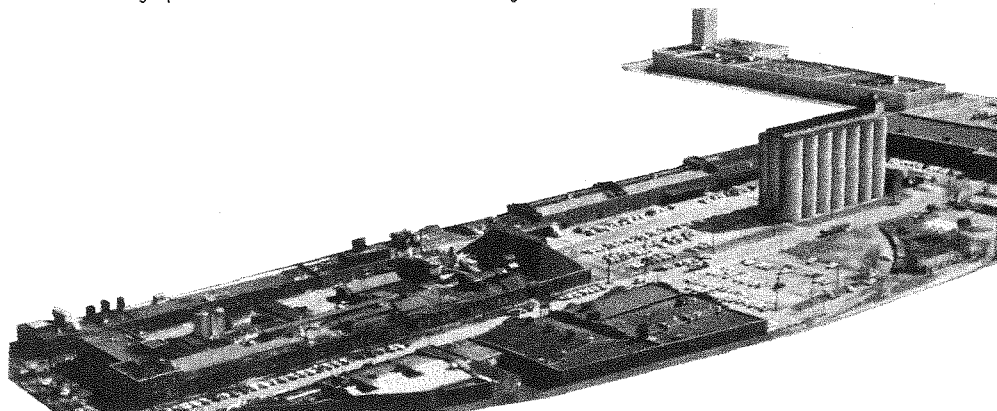


Near Opelika, Alabama, 1928. The 64 foot bottle contained a dining room on the second floor. Unfortunately, this structure was destroyed. (CC Archives)

## 26 TOM HUSTON PEANUT COMPANY

1927, 1929 & Later Additions

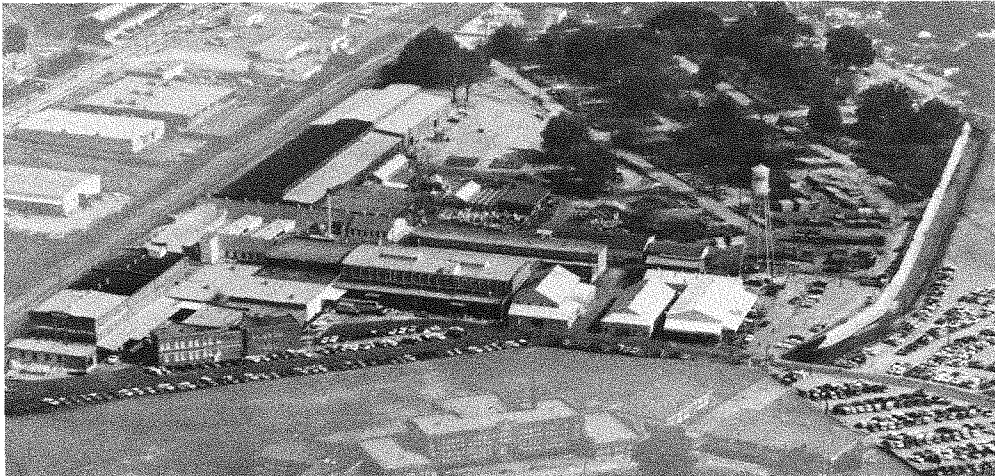
Tom Huston Peanut Company began as a three-man operation in 1925 (on 32nd Street). Primarily an inventor, Huston built the equipment needed to preserve and market peanuts on a large scale. He developed a sheller and methods of roasting and patented his narrow cellophane bag. Immediately successful, the company constructed the first plant at its present location in 1927 and a second structure in 1929. At about that time, Huston invested heavily in a very early attempt to freeze and ship peaches. The failure of this venture forced Huston to sell his interest in the firm. (He later made another fortune developing and marketing pet supplies.) The company retained his name until 1970 when General Mills, Inc. purchased it and converted it into Tom's Foods. The operation has continually expanded and now occupies 23 acres. Its 140 foot silos hold 27 million pounds of peanuts. In addition to peanuts and peanut products, it manufactures an assortment of crackers, snack foods, candies, and potato chips. The company conducts daily public tours of the facility.



Tom's. (Tom's Foods)

710 10th Ave.

The roots of this firm extend back into the antebellum period. Israel Brown, a northerner who came to Georgia in the 1820s, worked with Daniel Pratt in Milledgeville and Alabama before becoming the mechanical genius of W. G. Clemons, Brown, and Company (1850s) which manufactured cotton gins in Columbus. In 1858, Brown returned to Connecticut but kept his southern holdings. In 1869, according to "company legend," he exchanged his Columbus interests for those of F.M. Lummus in Connecticut. Lummus began producing gins in Columbus in 1869 and then moved the enterprise, in 1871, to a water power site at Juniper, Georgia, about 20 miles east of Columbus. In 1899, the company returned to Columbus, increased its capitalization (with A. Illeges becoming a major investor), and began construction at its present site. Starting with the first addition in 1904, the firm has expanded its facility in every decade except the 1930s. Lummus is now one of only two American manufacturers of cotton gins. (Its competitor in Prattville, Alabama, traces its origins back to Daniel Pratt.) Lummus introduced the first successful nozzle for an air blast gin where a stream of air replaces the doffing brush. In addition to gins, Lummus produces a variety of equipment to process, clean, pack, and move both natural and synthetic fibers as a staple or in a bale. The company supplies the synthetic fiber industry with tow-cutters which sever the continuous strands of man-made fibers into lengths so they can be blended with cotton or other fibers. They also make specialty items such as pile-cutters which can shear through a reinforced concrete pile and even operate underwater. With such an assortment of products, Lummus does not have an assembly-line process. Rather, it resembles a large "job-order shop." The company fabricates nearly every component it requires. Its equipment ranges from a small blacksmith shop, wood kilns, and woodworking operation through tape-programmed lathes and sheet metal punches.



Lummus. (Lummus Industries, Inc.)

This curved, boulder concrete structure (728 foot rollway), with a cut stone spillway surface, forms the western side of a funnel which diverts water into the forebay of the powerhouse on the eastern side of the river. Called the first large-scale dam (effective head of 40 feet) built in the South, its construction began in 1899 and remained incomplete when it partially collapsed under high water in 1901. (William S. Lee served as chief engineer during the reconstruction, and he later became the driving force along with James B. Duke behind the organization of Duke Power Company.) Initially this facility employed two powerhouses. The western one generated commercial electricity for the Columbus Power Company (owned by the the Bibb Company). The eastern one powered the Bibb Mill on the bluff above through an American (continuous) rope drive (6,000 feet of 1½ inch manila rope in 32 wraps). A 50 foot shaft drove another rope drive (in the western-most bay of the mill) that operated line-shafting on four floors. This system motivated some machinery in the original mill until 1954 when the driven sheave directly above the powerhouse sheared-off the shaft. Bibb abandoned the system and Georgia Power built one modern concrete powerhouse in 1959 with four units producing 29,600 kilowatts, but the dam remains unchanged. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*



## 29 COLUMBUS PLANT OF THE BIBB COMPANY

1900, 1916, 1920, & Later Additions

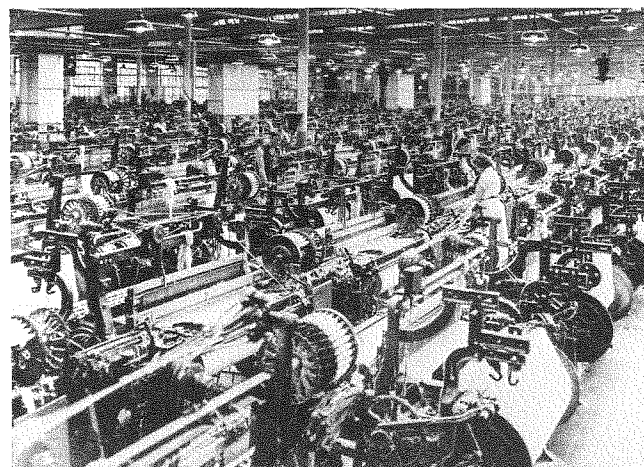
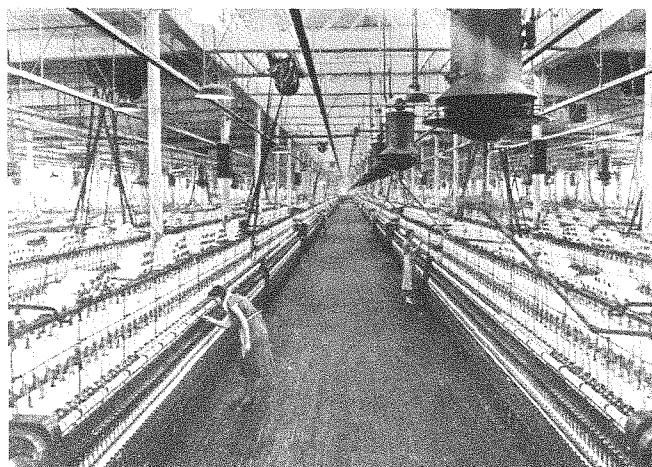
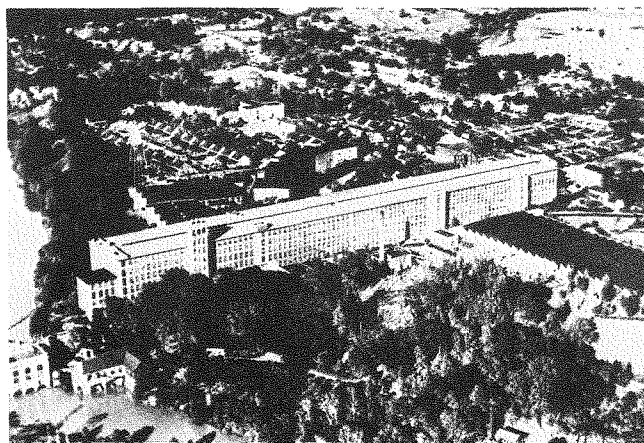
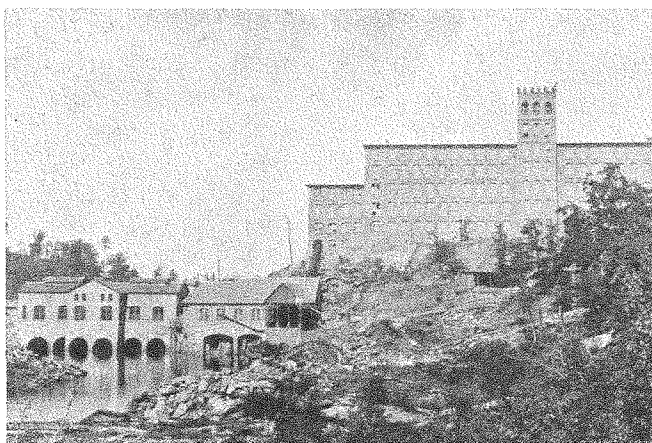
3715 1st Avenue

This mill of the Bibb Company (a Georgia-wide corporation with sizeable Columbus investors) started as a typical 300 foot southern textile mill. Then, a 200 foot extension (1915-1916) and a 500 foot addition (1920) made it, according to the company, the largest mill in the South "under one roof." Originally, this mill only spun threads and yarns. (It operated mule spinners until 1907, an atypical operation for a southern mill, illustrating the high skill level of Columbus workers.) In 1911, the company added a weave shed (and larger ones in 1924 and 1949) where it manufactured tire fabric and cord and then, in the 1940s, phased into the production of sheeting. *Historic American Engineering Record. Columbus Historic Riverfront Industrial District. National Historic Landmark.*

## 30 BIBB CITY

1903 & Later

Following the general trend of many Bibb mills in Georgia, the company, in 1903, established Bibb City, a well-planned village, with 101 houses (over 300 by 1930). The paternalistic company, seeking a stable, loyal work force, provided a variety of social, educational, and recreational activities: social clubs, bus trips, an auditorium, school, nursery, gymnasium, and swimming pool (but never a company store). Bibb City residents developed a sense of community that continued even after the company sold the houses in the 1960s, primarily to the residents. Although the rest of the county has consolidated into one government, this "city" still remains as a separate entity with its own mayor (from 1903 until 1939 also the mill superintendent), council, policemen, and lower rate of taxation.



The Bibb Mill, 1900 & 1924; the "big alley," 1010 feet of spinning frames (circa 1930); weave room, (circa 1950). (All HAER photocopies)

### 31 COLUMBUS MANUFACTURING COMPANY

1901, 1910, & Later Additions

3201 1st Avenue

Constructed at the same time as the North Highlands Dam and Bibb Mill, this plant was designed to consume electricity produced by the Columbus Power Company. Originally, 5500 volts, a.c., served two General Electric synchronous motors (400 & 600 horsepower) which turned the drive shaft of an English rope drive system (individual strands). The ropes, within a 20-foot wide (north to south) beltway which transversely bisected the 300-foot mill, powered sheaves on all four floors. The company phased out the rope drive in the 1930s, but still ran some carding machines from line-shafting as late as 1977. Both local and northern capital (Wellington and Sears, selling agents) built this sheeting mill (25,000 spindles and 500 looms, probably all automatic Draper model "Es"). Additions included a 240-foot extension (1910) to the main structure, a one-story weave shed (ca. 1920), and later, small modifications. In 1946, West Point Pepperell bought the facility which now produces industrial sheeting. *Historic American Engineering Record.*

### 32 MERITAS MILLS

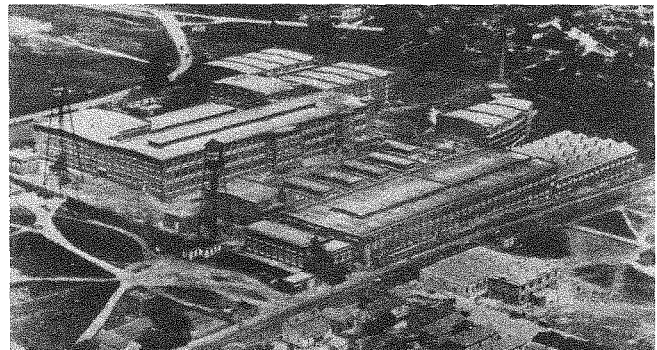
1911 & Later Additions

705 35th St.

Meritas Mills, financed by outside investors, began in 1911 with 9,900 spindles and 170 looms. By 1927, several expansions brought its capacity to 64,000 spindles and 1,360 looms. The company closed during the depression, and the Bibb Company purchased it in 1937 and renamed it the Anderson Plant. It continued to weave tire cord after such production had stopped at Columbus Plant of the Bibb. Now, the Anderson Plant receives dyed yarn from the Columbus Plant and weaves plaid shirt- and dress-weight material and is beginning to manufacture drapery material.



Columbus Manufacturing Company. (John A. Seddon)



Meritas Mills in 1927; the exterior has changed very little. (CC Archives)

### 33 SWIFT SPINNING MILLS

1906 & Later Additions

3224 2nd Ave.

In 1906, Edward W. Swift, A. Illges, and other local investors, organized this factory to take advantage of the electrical power coming from the North Highland Dam. This "sales-yarn" mill began production in 1908. Starting with 10,000 spindles, it operated 37,000 in 1937 and 76,000 in 1979. Its yarns include cotton, woolen, synthetic, and a variety of blends. The latest addition, made in 1965, was a combed yarn mill to manufacture 100% cotton for knitted goods (such as men's underwear). Some of its products supply other Columbus factories but most of them serve the national market. Fieldcrest purchased the mill during the 1960s.



Swift Spinning Mill. (Bob Wilbanks)



Columbus Industrial High School. (Bob Wilbanks)



112 29th St.

This institution might have been the first occupational high school in the nation to be incorporated into a public education system. Indicative of its uniqueness, the Columbus superintendent of education published descriptions of its curriculum in the journals of the National Education Association and the American Academy of Political and Social Sciences. The school's sessions ran from 8:00 A.M. to 4:00 P.M., eleven months a year, to allow students to finish more rapidly. Boys studied textiles, carpentry, pattern-making, machinist skills, and business, and girls learned dress-making, millinery, and secretarial skills. George Foster Peabody, a Columbus native, was an early advocate and financial supporter of this particular school. It was built, in part, because of the shortage of skilled labor created by the rapid expansion of local textile mills immediately after 1900 and the establishing of the North Highland Dam. The school board planned to fill this entire block with neo-classical buildings similar to the existing structure, but these never materialized. (The drawings of the expanded facility more closely resemble a liberal arts college than a technical school.) In 1939, Jordan High School, built by the Works Progress Administration (WPA), replaced this building which became a junior high and is now vacant.

## 35 PERKINS &amp; TOPSY (later JORDAN) MILLS

1905 &amp; Later Additions

1250 29th St.

This two-block long, two-story high complex began in 1905 as two hosiery knitting mills, both financed by local investors. The larger one on the southern end, Perkins, produced yarn and knitted, while the smaller Topsy bought yarn from its neighbor and only contained knitting machines. Perkins absorbed Topsy by 1912, and in 1938, the entire plant was reorganized as Jordan Mills. (That family had controlled the firm for at least a decade prior to the name change.) The knitting operation ceased about 1946, and the mill began manufacturing upholstery fabric (the entire process from carding to weaving). In 1968 it shifted to carding, twisting, spinning, and heat setting carpet yarns. Its product remains basically the same (a synthetic yarn spun from fibers with a seven inch staple), although it was sold in 1975 to Cartersville Spinning, a division of World Carpets, Inc. Even though this mill had its own village, Jordan City (which it sold in the early 1960s), and despite its apparent length, this plant remains relatively small when compared with the Bibb or Fieldcrest mills. Old Jordan Mills is still not air conditioned and only employs about 300 operatives.

## 36 SHANNON HOSEIERY MILL

1939 &amp; Later Adaptations

1338 Talbotton Road

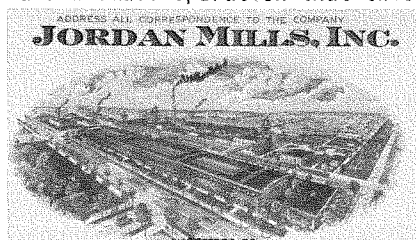
This plain brick, one-story structure housed Shannon Hosiery Mill from 1939 to 1957. The shift from seamed to seamless hose doomed this and other local knitting mills. The building was then adapted to several non-industrial uses. In 1958, the Columbus School Board wanted to create a junior college, and to qualify for state aid it had to be functioning by September of 1958. So, the board purchased the vacant mill and converted it into a small college. In the early 1960s, Columbus College moved to its own campus (where it is now a four-year college with Masters' degrees in business and education). The mill next served as a junior high school and now houses the headquarters for the Junior ROTC program in the public schools.

## 37 ARCHER HOSEIERY MILL

1929

118 Talbotton Road

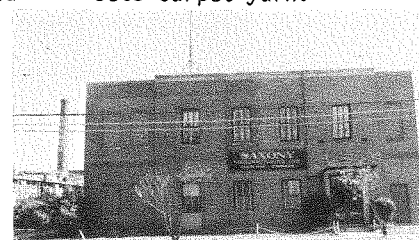
Archer Mills started on Front Avenue as one of three small hosiery-knitting operations which began in Columbus during the 1920s. (The other two apparently failed within a few years.) In 1929, Archer Mills moved to this modern two-story facility designed by Lockwood, Greene and Company. This locally-owned company stopped operating in 1971. Now, Saxon Manufacturing Company occupies the building and runs a small operation that twists (no carding, drawing, or spinning) and heat sets carpet yarn.



Perkins (or Jordan) Mills.  
(CC Archives)

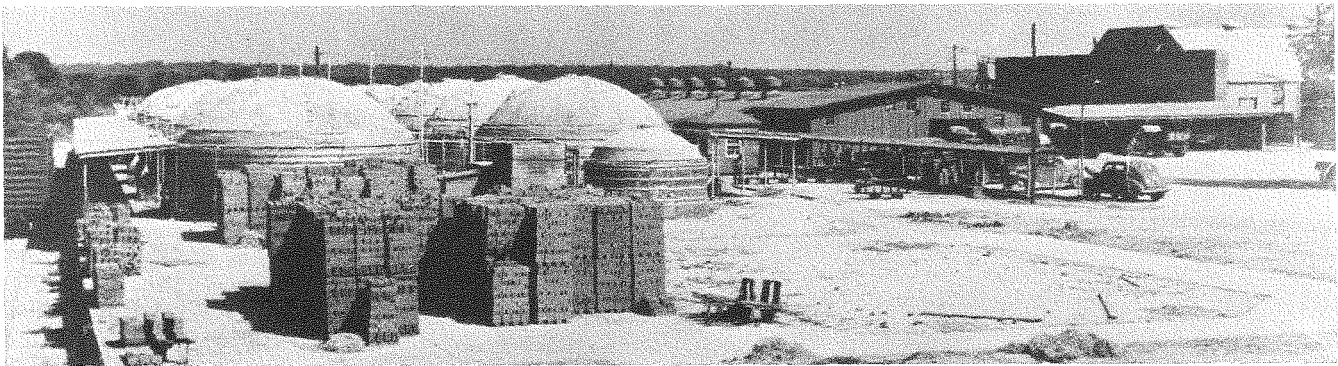


Shannon Hosiery Mills. (Bob Wilbanks)

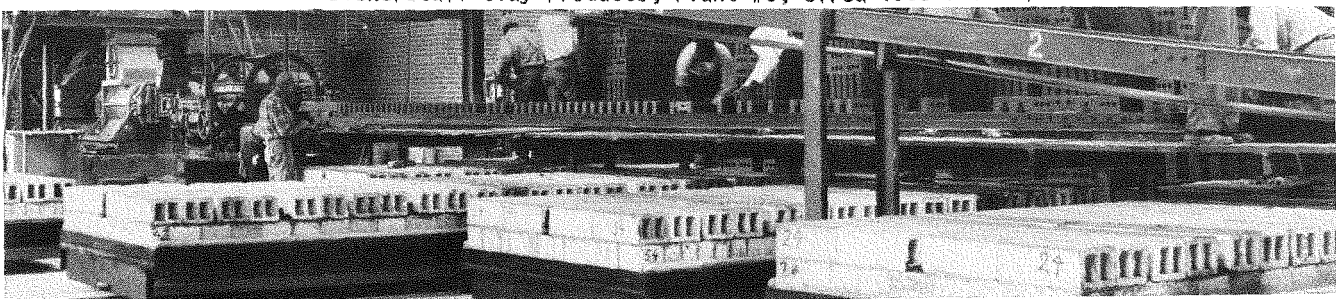


Archer Hosiery Mill. (Bob Wilbanks)

Because of the ideal clay deposits along the river bank, brickmaking began in this area south of Phenix City (then Girard) at least as early as the 1860s. The Bickerstaff family started producing clay products in 1886 at what is now Plant #4 (the southernmost of the four present plants). The beehive kilns at Bickerstaff Plant #3 (earlier known as Dixie Brick Co.) were built in 1919 and are no longer used. Originally, a wench pulled carts loaded with clay from the pits (now filled with water) east of the plant to the top of a three-story wooden building (replaced with the present brick structure in 1940). Gravity fed the clay to the pug mill and brickmaking machine below (portions of a later inoperative version with a reel-cutter remain). To the north are the drying tunnels which were heated by flumes from the kilns. The roof of these tunnels consists of two feet of clay (for insulation) sandwiched between a layer of brick and concrete. (These construction techniques are visible today.) Initially, twelve beehive or round kilns were used. Each held 65,000 bricks when hand-loaded. It took eight men an entire day to load them. Later, using pallets, the capacity shrank to 50,000 bricks. Initially, coal provided heat and then natural gas. The later rectangular kiln was basically experimental, and the large round one held 100,000 bricks. In the 1950s, the company installed two tunnel kilns which produce about 200,000 bricks per day, twice as many as the beehive kilns with half the number of laborers. One beehive kiln remains at Plant #1. That plant utilizes a molding machine which forms soft-clay bricks in wooden forms so they will resemble old bricks. Both Plants #1 and #4 have two tunnel kilns and Plant #2 produces concrete blocks.



Bickerstaff Clay Products, Plant #3, circa 1950 & 1960,



Pug mill, brick machine, and reel-cutter, Bickerstaff Plant #3, circa 1950.



**\*39 WALTER B. CLEMENT'S COLLECTION OF MECHANICAL ANTIQUES**

Route 2, Box 509, Notasulga, Alabama 36866

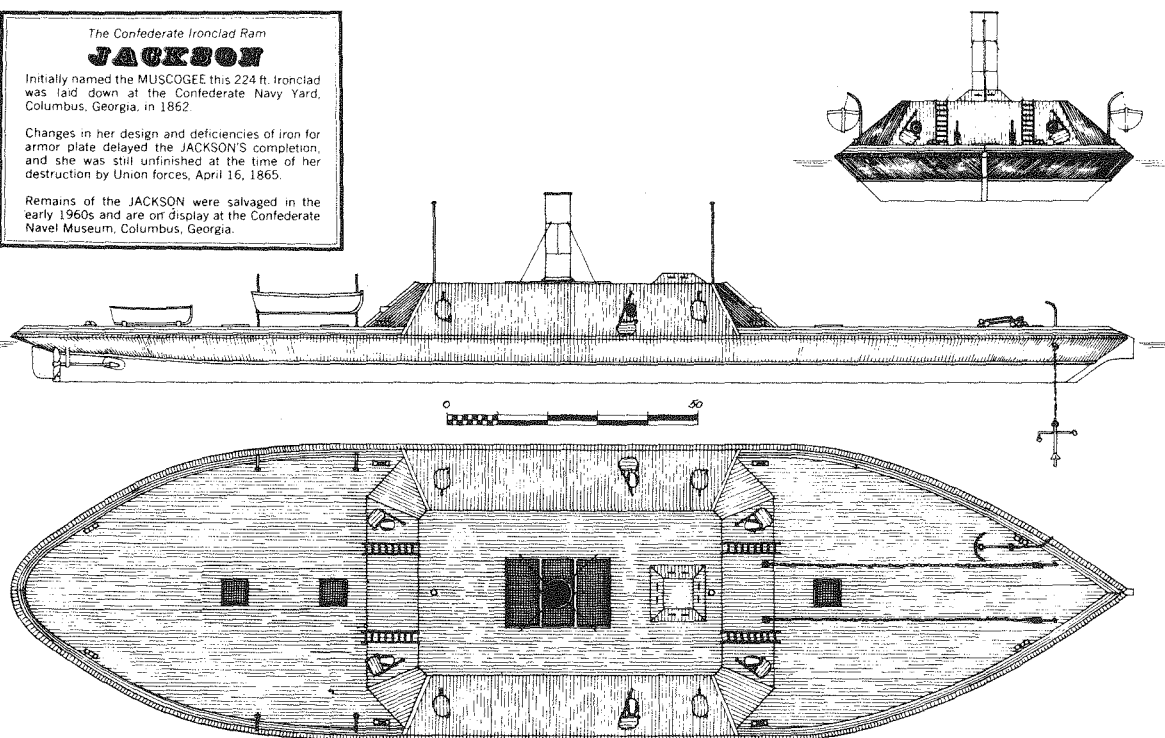
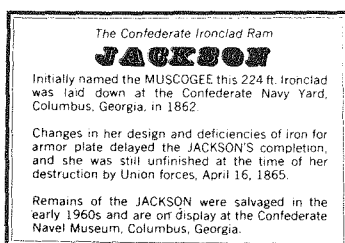
This is a private collection of mechanical antiques assembled by W. B. Clement, S.I.A. member and professor of engineering at Auburn University. Most of the collection is housed in two buildings located behind Professor Clement's residence, a house in the "rural Gothic" style, built to plans adapted from A. J. Davis's "Rural Residences."

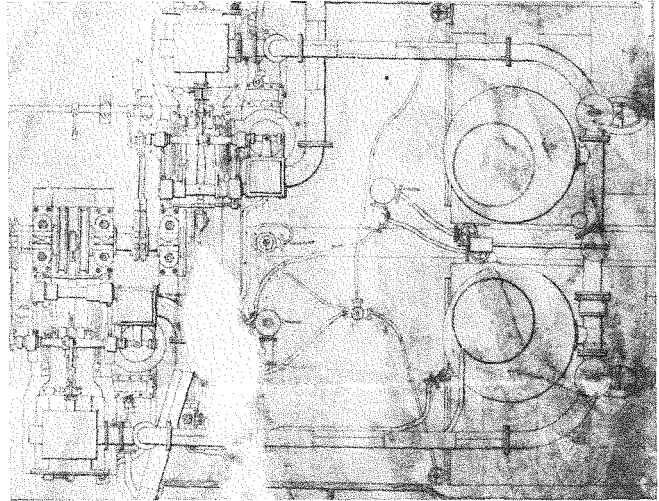
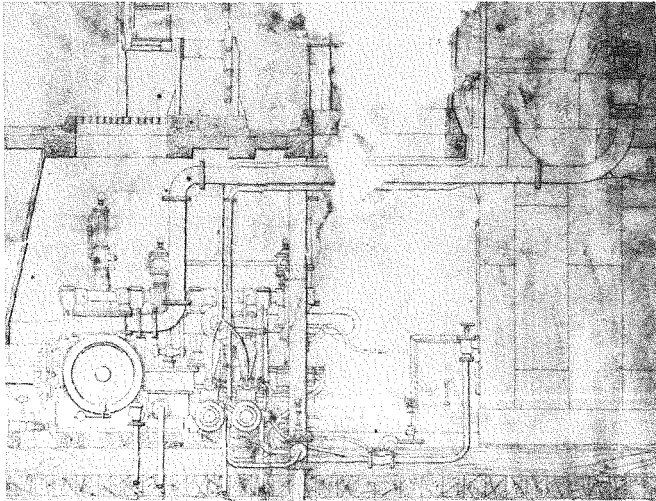
The collection includes items ranging from a "dog power" to a 1905 Corliss steam engine by the Watts Campbell company (which will be running). The Corliss is belted to a line shaft and eventually will drive an Edison bi-polar generator housed near the engine. Other items of interest in the power machinery include an early Rider-Ericsson hot air engine from Auburn University, an Aultman-Taylor portable engine and boiler of 1897 which will supply steam for the Corliss and a small vertical steam engine. Several other mechanical antiques of interest are set up in the brick building and include an overhead message carrier from a department store, some phonographs and crank organs, and a complete job printing shop of 1904 which is still functioning on a limited basis. A 1918 American LaFrance type 40 fire engine is normally kept in this building and, weather permitting, will be outside for the day. In the adjacent wooden building is a small machine shop, the nucleus of which came from a shop operated by Professor Clement's father. Items of note here include a Putnam metal planer circa 1870, a Pratt and Whitney mill of 1876 and several other more recent machine tools. Some of these are still pulled by a Meitz and Weiss oil engine. Stored but visible in the rear shed is the machinery from the J. A. Cullars woodworking shop, a millwork shop which operated in Auburn from 1887 until 1977. Although most of this machinery is comparatively recent there is a moulding machine of 1887. (Prepared by Walter B. Clement)

**\*40 JAMES W. WOODRUFF, JR., CONFEDERATE NAVAL MUSEUM**

Artifacts from the 1860s

This museum contains the remains of the Confederate ironclad MUSCOGEE and the gunboat CHATTAHOOCHEE. In 1862, the Columbus Confederate Naval Yard (not the Columbus Iron Works) began constructing a large ironclad ram which the officers in charge called the MUSCOGEE. Originally conceived as a center-mounted paddle wheeler, it was altered, because of its great draft, and its propulsion system became twin 7 foot diameter screws with engines and boilers manufactured by the C.S. Naval (Columbus) Iron Works. This craft, covered with two layers of two-inch rolled iron plate, was named the JACKSON by the Navy Department after its launching in December, 1864. A shortage of armor-plate delayed its completion. In April of 1865, federal troops captured it in Columbus and set it afire. It drifted about 30 miles down the river before it burned to the waterline. The wooden, 130-foot CHATTAHOOCHEE (originally a schooner and then a barkentine rig) was built in Saffold, Georgia (177 miles downstream) and had two low pressure steam engines and one boiler manufactured at the C.S. Naval (Columbus) Iron Works. Commissioned in January of 1863, her boiler exploded in May 1863. Returned to Columbus for repairs, she was scuttled some 15 miles south of Columbus to prevent her capture by Union forces. The Civil War centennial sparked an interest in recovering these vessels. With the efforts of many volunteers and state and local funds, the boats and some of their engines, guns, and other hardware were salvaged by early 1963. Cofferdams were built, then the unattached artifacts and mud were removed. In the case of the bow of the MUSCOGEE, pontoons were attached, the area was re-flooded and the old hull was floated back up-stream to Columbus. (From information supplied by Bob Holcombe, museum curator.)





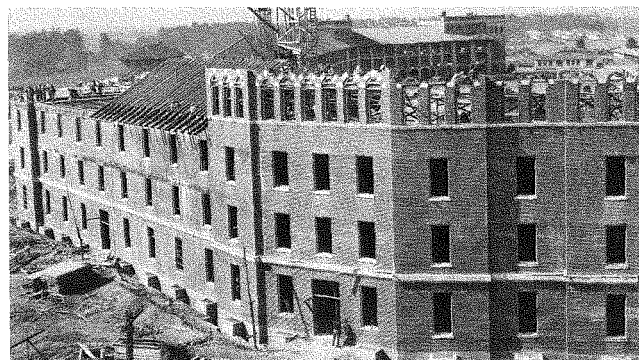
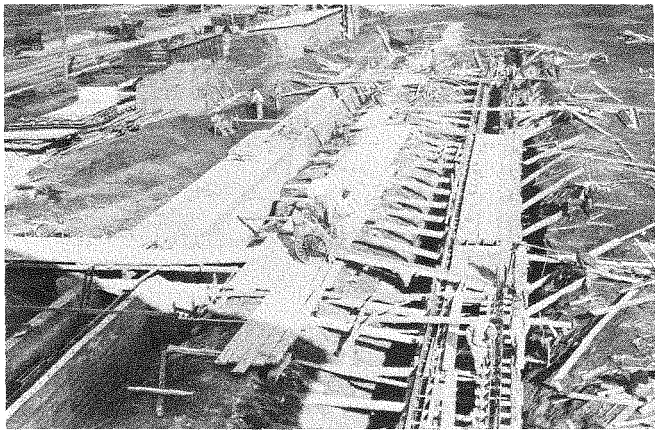
Side and top views of plans for the C.S. SAVANNAH's engines, manufactured at the C.S. Naval (Columbus) Iron Works and similar to the surviving pieces of the CHATTAHOOCHEE's engines. (Bob Holcombe)

**\*41 FORT BENNING ("Home of the Infantry")**

1918-1979

Nearly 200,000 acres south & east of Columbus in Georgia and Alabama

Established as Camp Benning in 1918 and made a permanent fort in 1922, it was named in honor of Henry L. Benning (1814-1875), a Columbus lawyer, state legislator, jurist, and Confederate Major General. The Arthur Bussey plantation (115,000 acres) formed the major portion of the original post. "Riverside" (1919, *National Register*), the large Bussey plantation house with double verandas, became the residence of the post commander. Most of the permanent buildings, erected in the 1920s and 1930s, reflect a Spanish or Mediterranean style of architecture.



The quartel barracks, built at Benning during the 1920s and 1930s, housed a complete regiment and were considered the most modern in the world. Construction details: (above) No. 1 barracks, 1926 & 1927; (below) No. 2 barracks, 1931. (National Infantry Museum)



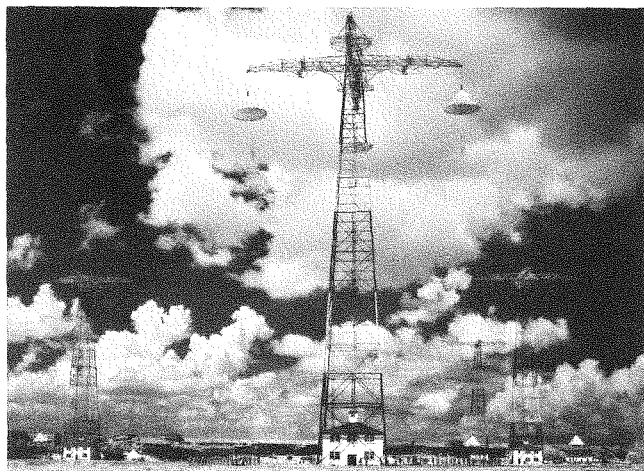
**JUMP TOWERS** (early 1940s): The Army's Airborne training began in 1940 at Benning with a volunteer unit (2 officers and 46 enlisted men) from the 29th Infantry. This test platoon made its first jump on August 13, 1940. After two years of experimenting, the permanent Airborne School was established in May 1942. Part of the early training was conducted at Hights Town, N.J., on two 125-foot towers similar to the popular "Parachute Jump" ride at the New York World's Fair. In the early 1940s, four jump towers (250 feet high, costing \$86,000 each) were purchased from the Safe Parachute Jump Co, and erected at Fort Benning. In 1954, a tornado destroyed one of the towers.

**NATIONAL INFANTRY MUSEUM:** Some of the fort's first permanent buildings were the hospital complex, consisting of twelve masonry buildings. The main building of this complex was recently designated the permanent home of the National Infantry Museum. The renovation and conversion of this sound, but out-dated building which has both historic interest and aesthetic qualities, is an excellent example of adaptive use. The conversion of the hospital building with its maze of small offices, examining and operating rooms and laboratories into large open galleries was accomplished at a cost of just under one million dollars (from private contributions). The 50,000 square foot building is fully air conditioned, features a one hundred seat auditorium, a high security arm vault where 2300 weapons are maintained, and provides about 25,000 square foot of display space which is open to the public. The museum is maintained and staffed by the U.S. Army.

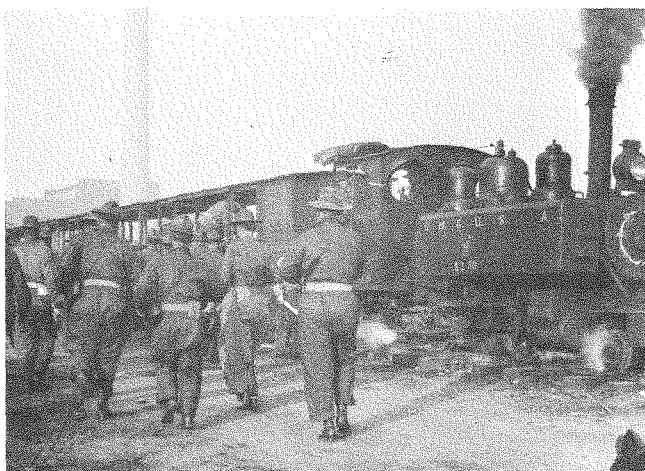
Industrial artifacts displayed in front of the museum include a World War I narrow gauge locomotive, an ammonia compressor for an ice machine, and a mule-drawn disinfector. The 2-6-2 type locomotive (18 tons, carried 700 pounds of coal and 500 gallons of water), manufactured by the Davenport Locomotive Works, was one of 305 produced for the American Expeditionary Forces in France. Only 191 ever reached Europe. Sixteen of these engines served on the 30 mile-long narrow gauge (60 cm) railroad system at Fort Benning, commonly called the Chattahoochee Choo Choo. It operated from 1920 to 1946, carrying troops to the ranges and other training areas. A locomotive, operated by a three-man crew, pulled eight coaches with 212 troops as passengers. On some steep grades, the riders had to help push, while the train could reach a top speed of 35 miles per hour going downhill.

The ammonia compressor with 9-foot diameter fly wheel was manufactured by Vilter Milwaukee and came to Benning as part of the post's ice-making machinery. Previously, it had been used at an army installation in Massachusetts.

The World War I disinfector was part of the equipment of a field hospital. Mounted on wheels and pulled by a team of mules, it consists of a fire box, steam generating boiler and a high pressure steam chamber. The equipment was used to sterilize or disinfect clothing and blankets. The American sterilizer Co. of Erie, Pennsylvania manufactured it some time after 1914. (From information supplied by Lt. Col. Dick Grube, museum curator).



Jump towers, 1944.



"Chattahoochee Choo Choo," 1930s. (Both, National Infantry Museum)

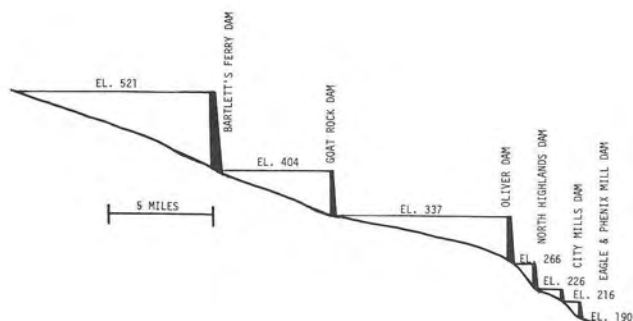
## 42 OLIVER DAM

3 miles north of the original city of Columbus

1957-1959

Oliver Dam (70 feet high and 2,021 feet long) impounds a 2,150 acre lake. The powerhouse contains three 18,000 kilowatt generators and one with a 6,000 kilowatt capacity which are remotely controlled from Bartlett's Ferry Dam, 14 miles upstream.

CLAPP'S FACTORY, the first local textile operation (1834-1838), began at this site. A small dam between an island and the eastern bank powered a yarn mill, a tannery, and a grist mill. Workers lived in the surrounding village. The company reorganized and rebuilt after the war, but went bankrupt in 1885. The abandoned, wooden structure, erected in 1866, burned in 1910. The dam now covers the old mill; however, the area south of the dam where operatives' houses once stood (and their cemetery) remains little changed. Can be reached only by GA 103 (River Road).



Profile of the river. (James J. Dwyer)



Oliver Dam. (John S. Lupold)

#### 43 GOAT ROCK DAM

1910-1912

13 miles north of Columbus

Stone and Webster, a Boston Engineering firm and holding company, controlled the Columbus Power Company (until 1930) and designed this facility. From 1910 to 1912, Hardaway Construction Company of Columbus built this 70-foot high concrete gravity structure with a 193-foot intake section, 973½-foot spillway, and 390 feet of non-overflow sections. A tunnel runs the entire length of the dam from the Alabama to the Georgia side. Goat Rock dam forms a 940 acre lake. The powerhouse utilizes six 53-inch S. Morgan Smith horizontal reaction turbines (4800 horsepower each). By 1920, those wheels turned four generators (two 3,000-kilowatt and two 5,000-kilowatt capacity). In 1955 and 1956, Georgia Power Company added two more 5,000-kilowatt generators. The construction of this dam marked the beginning of large-scale interconnection of the Columbus Power Company with Georgia and Alabama cities to the north. Can be reached either by GA 103 or by US 280 and ALA 87.



Goat Rock Dam. (Ledger-Enquirer)



20 miles north of Columbus

The 5,850-acre Lake Harding formed by the Bartletts Ferry Dam acts as a storage reservoir for the Goat Rock, Oliver, and North Highland generating plants. Stone and Webster designed and Hardaway Construction built the concrete gravity dam (120 feet high and 900 feet long). Penstocks (15 feet in diameter) fed S. Morgan Smith single-runner vertical Francis-type turbines. Between 1926 and 1928, three 15,000 kilowatt generators were installed and, in 1951, Georgia Power added a fourth 20,000 kilowatt unit. Can only be reached by US 280 and AL 87.



Bartletts Ferry Dam. (Ledger-Enquirer)

**PEARCE'S**  
NET 25 LBS.  
OLD STYLE ❖ WATER GROUND  
ENRICHED  
WHITE CORN



**MEAL**  
MANUFACTURED BY  
**CITY MILLS CO.**  
COLUMBUS, GA.  
**WATER GROUND**