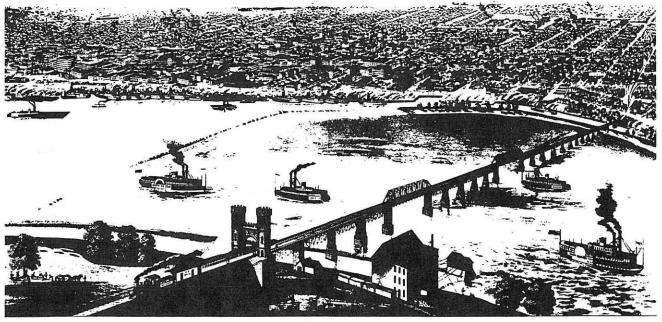
A Guide to Industrial Archeological Sites in Louisville & Vicinity



LUUJS YJLUS KENTUCKY, 1876.

SOCIETY for INDUSTRIAL ARCHEOLOGY 7th Annual Conference

Louisville/Cincinnati March 30-April 2, 1978

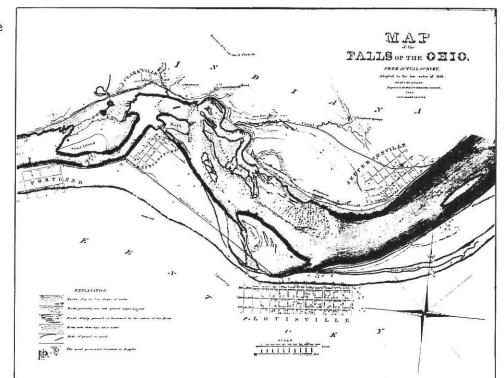
INTRODUCTION

This guide has been prepared for the 7th Annual Conference of the Society of Industrial Archeology, March 30-April 2, 1978. The conference, held in Louisville, Kentucky with continuation in Cincinnati, Ohio is the first SIA Annual Conference to be held west of the Appalachian Mountains. It is being sponsored by the SIA in conjunction with the Preservation Alliance of Louisville and Jefferson County, Inc. and the Miami Purchase Association for Historic Preservation.

The guide is intended for use in exploring industrial archeological sites in Louisville, Kentucky, New Albany and Jeffersonville, Indiana, and in Cincinnati, Ohio. It is designed to offer substantial information about the most significant sites and is in no way a complete inventory of all IA sites in these three areas.

Many persons have assisted in the publication of this booklet. In Louisville, John G. Albers of the Louisville Community Design Center, Janet Rupp and George H. Yater were responsible for site identification and selection; Elizabeth F. Jones, research director for the Historic Landmarks and Preservation Districts, wrote the synopsis of Louisville's history. Steven M. Crump, Stephen Hubbs of the Louisville Water Company, Charles Parrish from the Corps of Engineers, Brent W. Smith, C. W. Stoll, Frederick T. Wilson of the Kentucky Railway Museum and George H. Yater contributed research and manuscripts. Photographic work was performed by Dick Wilson and Dan Cunningham. Cathy Oldiges and Mary Turner of Preservation Alliance were responsible for typescript and proofreading.

The Cincinnati portion of the guide is the labor of love of Philip D. Spiess II, President of the Washington, D.C. Chapter of the SIA, and a devout Cincinnatian. He was assisted by Alison Highberger at the National Trust for Historic Preservation. Most photographic work was performed by Katherine Peterson of the Smithsonian Institution.



Wendy Nicholas, Editor Assistant Director Preservation Alliance March, 1978

LOUISVILLE'S HISTORY

Louisville's wealth is in its great number of nineteenth-century neighborhoods which remain intact. For the most part, the city is a Victorian metropolis, although it was founded in 1778 by George Rogers Clark. The Ohio River rapids, with its 25-foot drop known as the Falls of the Ohio, is the reason Louisville exists. River life and steamboats filled the first half of the nineteenth century. The Portland Canal was completed in 1830 to accommodate the great amount of river traffic, and Louisville became a firmly-established, thriving river town.

In 1850, the Louisville and Nashville Railroad was chartered, and Louisville's prosperity grew with each length of track that was laid. By the time the Civil War broke out, the L & N track network covered the region. Thus, Louisville served as an important supply depot and was neutral. Louisville came through the War unscathed with the closest battle being fought at Perryville, Kentucky.

After the cessation of hostilities, Louisville continued to prosper. Its population increased, a bridge was built across the Ohio, the city experienced a great building boom, and in 1874, the first Kentucky Derby was run. The economic system was extremely diversified including ironworks, woolen mills, pork houses, tobacco warehouses, and distilleries.

During this same period, many of our existing neighborhoods were built up, although some, such as Portland and Butchertown, had been founded earlier. Germantown, Limerick, Old Louisville, Western Louisville, and many other neighborhoods came into their own in the past half of the nineteenth century.

The 1880s saw this great prosperity and building cluminate in the Great Southern Exposition which had all types of exhibits. This industrial fair was held to illustrate Louisville's importance as a commercial and manufacturing center. The temporary, wooden structure was lit by incandescent light bulbs, and Thomas Edison, who lived in Louisville in the 1860s, returned to help open the Exposition along with President Chester A. Arthur.

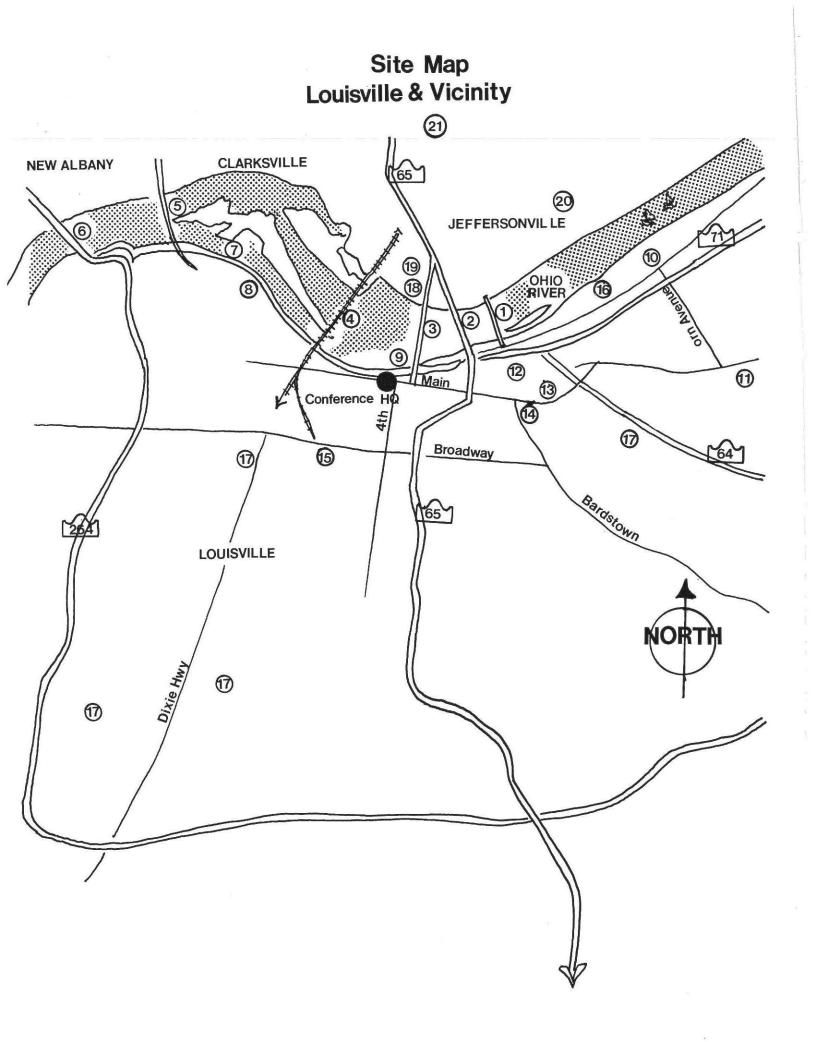
After the close of the exhibition, the site was prime real estate, and St. James Court and Belgravia Court came into existence, followed by further development in the Old Louisville area.

As Louisville approached the turn-of-the-century, it was a firmly-established commercial and manufacturing center with numerous cultural advantages.

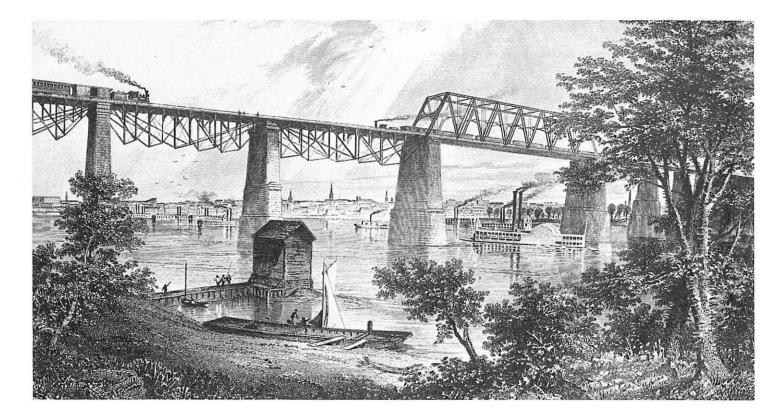
The twentieth century brought World War I and with it, Camp Taylor and the establishment of Fort Knox. The third decade brought prohibition and bootlegging, which was followed by the Great Depression. In 1937, the Ohio River overflowed its banks and inundated the city with the worst flood in its history. With World War II came war-time industry and enlarged airports.

Since World War II, numerous large industries, including General Electric, International Harvester, and Ford, have located in Louisville.

After years of suburbanization and Urban Renewal, Louisville's neighborhoods are re-emerging, and downtown is being revitalized as the city enters its third century.



Louisville's First bridge over the Ohio



BRIDGES Ohio River at Louisville

Six bridges cross the Ohio between Louisville and Indiana, most of them erected in the 1920s and 1960s. The structures, three highway bridges, two railroad and one combination rail and highway, are as follows from east to west.

BIG FOUR RAILROAD BRIDGE (1929) was built by the Louisville & Jeffersonville Bridge Co. on the piers of the original span completed in 1895. The central spans are 547' long, showing that the science of long-span steel structures had come of age when work began in 1889. The science of construction lagged, however, for in 1893 a violent windstorm hit the uncompleted central span and it fell, killing 21. Incredibly, a completed span also fell the same day. The Big Four was abandoned following the merger that formed the Penn Central. In 1977 a Louisvillian purchased the bridge from the railroad company and is planning new development on it.

2 JOHN F. KENNEDY MEMORIAL BRIDGE (1964), designed by Hazelet & Erdal of Louisville, was nearing completion at the time of Kennedy's assassination in 1963. Debate over the name was suddenly settled and it became the first of many memorials to the slain president. It carries Interstate 65.

GEORGE ROGERS CLARK MEMORIAL BRIDGE (ca. 1929) replaced the steam ferries between Jeffersonville and Louisville and is named for Louisville's founder.

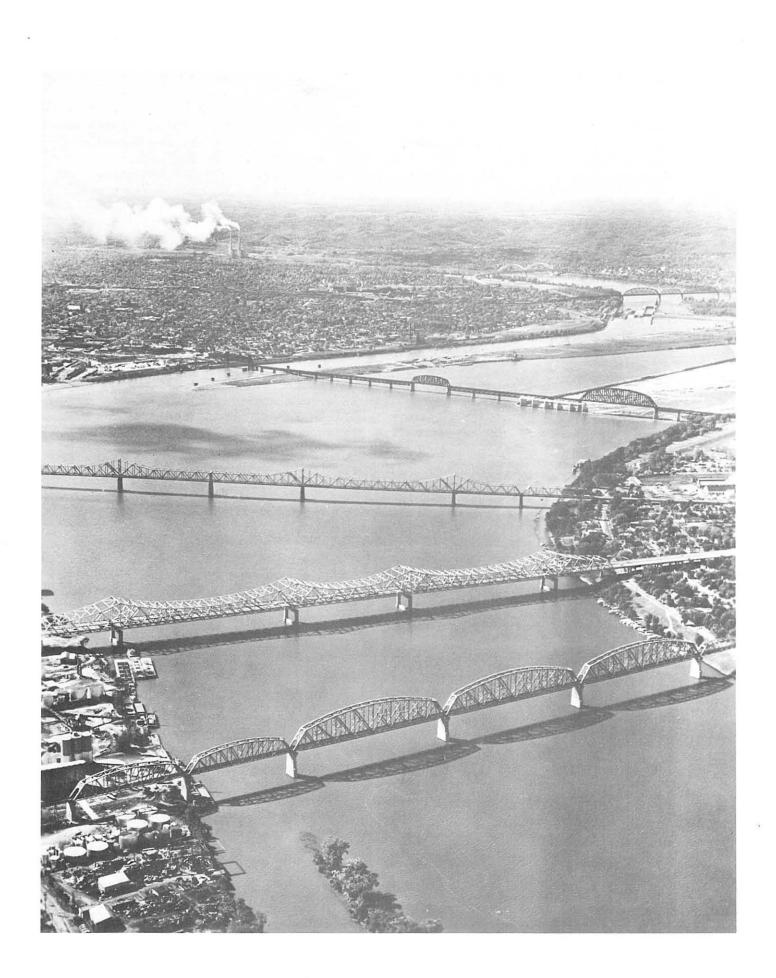
4 PENNSYLVANIA RAILROAD BRIDGE (1920) was completed on the site of the first bridge to span the Ohio at Louisville. The original, planned before the Civil War but delayed by that conflict, was completed in 1870. Designed by Albert Fink, it was the first connection between southern and northern railroads, except for a route south from Washington to Richmond.

KENTUCKY & INDIANA TERMINAL RAILROAD BRIDGE (1912) is a combination highway/rail bridge that replaced an 1886 structure. To accommodate automobile traffic roadways were cantilevered from each side. The truss span closest to the Indiana side is a swing span, no longer operable, but built to allow passage of river boats through the Falls during high water.

SHERMAN MINTON BRIDGE (1961) is a steel-arch, double-deck span designed by Hazelet & Erdal. Reminiscent of Hell Gate and Sydney Harbour bridges, minus masonry portals, it was named the most beautiful long-span bridge of 1961 by the American Institute of Steel Construction.



1&2



LOUISVILLE & PORTLAND CANAL (McALPINE LOCKS) Ohio River near 27th Street

The Falls of the Ohio at Louisville, caused by a rock reef forming rapids about three miles long, is the only obstruction to navigation along the 981-mile Ohio River. At low water, the river drops 26 feet through the falls, and navigation was impossible except at high water stages. Louisville thrived at the Falls, feeding off of trade from travelers who had to stop and portage.

The opening of the Louisville & Portland Canal in 1830 was the culmination of struggles which began in the late 1790s. Cincinnati merchants who had to bear transshipment costs were the biggest supporters of the canal; Falls area businessmen who benefitted from the trade, the biggest obstacle.

Originally the canal was 1.9 miles long, 64' wide and had at its lower end a three-flight lock with a 26' lift. Within a quarter century, the canal was obselete. The canal was enlarged and altered periodically. In 1914, since few boats could use the small locks they were covered.

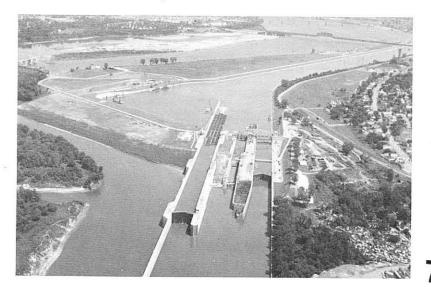
In 1862-1865 a new set of stone locks was constructed, and in 1911-1912 another set was built next to it. The Louisville & Portland Canal became Locks & Dam No. 41. Today, the most frequently used lock is one built 1958-1961, 110' x 1200' with a 37' lift and an eight-minute filling and emptying time.

COUISVILLE FLOOD PROTECTION PROJECT Riverside

1947-1956

In 1937 the Ohio River flooded, causing \$54 million damage in the City of Louisville, The U. S. Army Corps of Engineers undertook a major Flood Protection project in 1947. It consisted of 12.8 miles of earth levee and 4.5 miles of concrete wall along the banks of the Ohio at Louisville, 3 feet higher than 1937 flood elevation.

Thirteen pumping plants were erected. The last and largest plant built on this project was the Beargrass Creek Pumping Plant, which cost \$5,030,000. This plant handles the drainage of 54 square miles of industrial, residential and park areas of Louisville. This Beargrass plant is the second largest pumping plant of its kind in the world having a total pumping capacity of 2,290,000 gallons per minute.



9<u>BELLE OF LOUISVILLE STEAMBOAT</u> Ohio River at Fourth Street

The steamboat BELLE OF LOUISVILLE is the oldest operating steamboat on the Mississippi River system. The BELLE, or IDLEWILD, her original name, was built in 1914 at Pittsburgh to serve in the ferry trade between Memphis, Tenn. and West Memphis, Ark. It was known that her life in that trade would be short-lived because of the imminent construction of approaches to a bridge connecting the two cities. Therefore, the IDLEWILD was built staunch enough to handle the rigors of vehicular traffic, but designed basically as an excursion boat so she cculd continue to operate after the completion of the bridge. Because of her versatility the IDLEWILD has participated in the four major functions assigned to the genus steamboat: ferry, packet, towboat and excursion boat.

After the bridge was completed, the IDLEWILD ran evening excursions and during the day circumnagivated President's Island below Memphis, serving the residents of the area. During other periods of her Memphis career she served as a "short trade" packet, operating in a trade to Pecan Point or to Wilson, Ark., where she could reach her destination by nightfall and return home the next day. She never had passenger staterooms and accommodated her crew on a makeshift basis.

Later, the IDLEWILD ran excursion trips in New Orleans and plied the Illinois, Missouri and Cumberland rivers, offering afternoon boat rides and evening dance cruises. With the advent of World War II the IDLEWILD began to "tramp," that is, to make one night stands, during the excursion seasons. She has traveled nearly every waterway a boat of her size can go.

In 1962 the boat was purchased by Jefferson Co. in Kentucky. Immediately a program of refurbishing was begun. She has her original tandem highpressure reciprocating engines with cylinders 16" in diameter with a $6\frac{1}{2}$ ' stroke. She has had several sets of boilers in her lifetime and now carries three Western River type boilers, 54" in diameter with a length of 28'. She is allowed 200 poinds of steam. Her hull has been replaced gradually and 10' have been added to the length. The BELLE can accurately be described as an authentic, traditional sternwheel Mississippi River steamboat. NATIONAL REGISTER



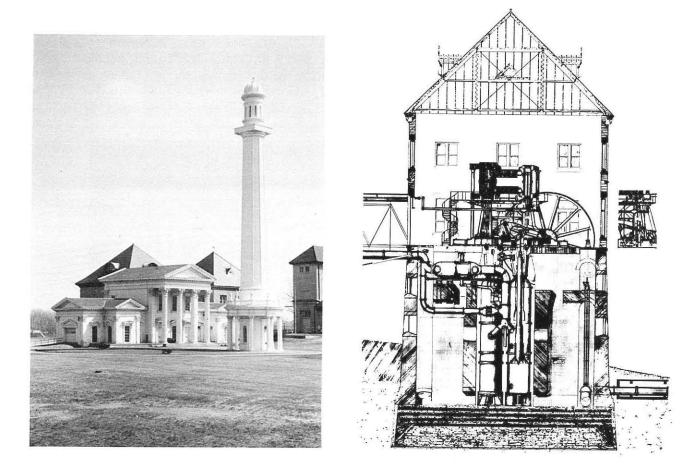
OLOUISVILLE WATER CO. PUMPING STATIONS Zorn Avenue and River Road

Theodore R. Scowden, chief engineer for the Louisville Water Co., designed this Classic Revival pumping station in 1856. The complex included an engine room and boiler house in the form of a two-story temple, three bays wide with a tetrastyle portico and dual one-story wings. The windows, sills and column bases are of cast iron; the capitals of terra cotta. A 169' high standpipe tower with a Corinthian peristyle around the base and statues atop the columns was designed in imitation of a triumphal Roman Doric column. The tower was constructed of brick to the top of the colonnade and of riveted plates of steel and sheet metal above this point.

The engine room houses two batteries of three Cornish boilers each, two sets of duplex steam pumps and two Cornish beam engines. Pumping station No. 1 initially had a capacity of 100,000 gallons of water a day.

In 1890 a tornado swept Louisville. The water tower was reduced to a 30' stump. The city quickly rebuilt the standpipe tower and returned nine of the ten original statues to their posts around the colonnade. These statues are characters from classical mythology. The tenth statue was replaced by an American Indian with his dog. NATIONAL HISTORIC LANDMARK.

Pumping Station No. 2 to the far west of the Water Company's River Road complex was erected in 1892. It housed the famed Hermany-Leavitt double-expansion pumping engine built by the I. P. Morris Company of Philadelphia. Three Belpaire locomotive style boilers fed by a Worthington duplex pump fed the engine. The engine, famous for its efficiency, which was attributed to its enormity, was scrapped in 1961.



Pumping Station No. 3 was completed in 1919. On display inside is Pump No. 5, a triple-expansion steam engine designed after the Hermany-Leavitt. It represents the last of several similar pumps which operated at the Water Co. from 1893 to 1972.

Pump No. 5 operated on the expansion of steam displacing a series of three pistons in chambers. The high pressure chamber received steam directly from the boilers and exhausts into the intermediate chamber. After the steam expands in the intermediate chamber, it is exhausted into the low pressure chamber. Final expansion of the steam in the low pressure chamber is exhausted to a condensor. The diameter of each piston is designed to deliver the same thrust as the other pistons. Because the pressure is reduced as it proceeds through the engine, the piston receiving the lowest pressure has the largest diameter, while the piston receiving the highest pressure has the smallest diameter.

1 LOUISVILLE WATER CO. CRESCENT HILL RESERVOIR & PURIFICATION PLANT Reservoir and Frankfort avenues

The Louisville Water Co. first began providing water to its customers in 1860. The only treatment provided was a settling basin which provided pressure to the distribution system. In 1877, under the supervision of Charles Hermany, chief engineer for the Water Co. after 1861, work began on a reservoir near Frankfort Avenue. A handsome stone gatehouse, so named because of the large gate valves it houses, was erected astride the basin. It is High Victorian Gothic in design and is one of few secular works of such style in the Falls region.

The need for pure water was recognized, although the technology for clarifying water as turbid as the Ohio did not exist. Through the efforts of George W. Fuller and Charles Hermany, research conducted in 1895 resulted in the development of "conventional" coagulation and filtration processes now used across the nation.

The construction of the Crescent Hill Purification Plant in the early 1900s represented the first large scale successful attempt to filter highly turbid river water. Four Allis-Chalmers vertical, triple-expansion steam pump engines operated there until 1974 when they were replaced by electric engines.



12 BUTCHERTOWN

Butchertown, historically the center of Louisville's butchering trade, is the oldest, reasonably intact neighborhood in the city. Butchertown rivaled Cincinnati--"Porkopolis"--in pork-packing, an industry largely in the hands of German immigrants and their descendants.

Butchertown grew up along the main road (now Story Avenue) connecting the livestock-producing Bluegrass region with Louisville and that major transportation artery, the Ohio River. Here, beyong the city's eastern edge the first stockyard grew around Bourbon House, founded in 1834 as a drover's inn.

By the 1840s the butchering trade was well established. By the 1850s one local pork-packing house claimed it was the largest in the United States. In addition to the packing houses, "boss" butchers ran their own slaughtering operations to supply Louisville's tables with fresh meats. They did much of their work on the banks of Beargrass Creek, which runs through the area. It is said that the creek ran red with blood from their work.

Related industries also developed: leather tanning, glue manufacture, and soap and candle making. One local candle maker, Cornwall & Brother, was among the first in the U. S. to produce stearite candles that gave an even flame and drip-free burning. Remnants of these industries are still visible in Butchertown today.

In the years immediately following the Civil War Butchertown reached its zenith. A large woolen mill, a distillery, a furniture factory and several breweries added to the area's economic base.

Today the old pork houses are gone and only the Armour meat-packing plant and the Bourbon Stock Yards remain of the old economy. The opening of the vast cattle-grazing plains west of the Mississippi River meant doom for both Butchertown and Cincinnati's premiere positions in meat packing and mechanization of the industry caused the demise of small butcher operations.

In recent years Butchertown has experienced a rebirth, however. New residents are moving in as are businesses. Several of the obsolete industrial structures have been adapted for new uses. The furniture factory is now Bakery Square, a complex of specialty shops and restaurants. The 1873 firehouse holds a swish decorator's shop. Houses have been redeveloped for offices and stores. The famed Hadley Pottery Co. now operates in the old woolen mill building.

Residential rehabilitation has included creative reuse of the shotgun house, a type common in Louisville's older German neighborhoods. A long and narrow one-story cottage with one room leading into the next without a connecting hallway is the design characteristic of the shotgun house. Sometimes there is a two-story addition at the back allowing for an extra bedroom above. This type is termed a camelback shotgun.

These workers' cottages stand side by side with more imposing homes built by "boss" butchers, packers and tanners. Then, a social mix existed in the neighborhood and still remains today. NATIONAL REGISTER.

ca. 1855

This brick and stone 19th century building and others which formerly stood on the surrounding vacant land once housed a candle factory, then a rope and mop factory, and later the Louisville Saddle and Girth Mills. In 1944 George and Mary Alice Hadley moved from a carriage house in the Old Louisville Victorian neighborhood to this building. They established a permanent factory for production of their unique pottery.

The Hadley pottery produced here has a modified stoneware body of native clays. All the designs were created by Mary Alice Hadley and are painted free-hand on each piece by artists trained to copy precisely Mrs. Hadley's original designs.

The pieces are fired in gas-heated, direct-fire periodic kilns. The firing cycle comprises 36 hours for burning and 36 hours for cooling. NATIONAL REGISTER.

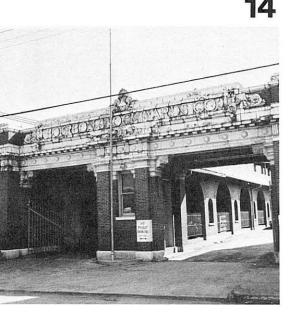
BOURBON STOCKYARDS 1048 East Main Street

> Bourbon Stockyards derives its name from the old Bourbon Hotel which once stood in the Butchertown neighborhood. Farmers bringing their livestock to the Louisville market stayed in the hotel and kept their animals penned up behind it. Neighborhood butchers purchased animals from the farmers staying at the hotel. In 1834 the Bourbon Stockyards was established. By 1870 meat packing was the largest industry in Louisville.

• The present exchange building was designed by D. X. Murphy in 1914; it has Baroque terra cotta details above the imposing entranceway.



13



Union Station in Louisville stands at the northern end of the original L & N line. It is an outstanding example of Richardsonian Romanesque railroad station architecture. Designed by English architect, F. W. Mowbry and completed in 1891, the station is an imposing limestone structure, three stories high with fourth story dormers set in a partial mansard roof. The north and south facades boast circular stained glass windows, 20' in diameter and leaded in a wheel formation. The interior of Union Station was badly damaged by fire in 1905; the entire timber structural system had to be replaced as well as numerous interior details. Most of it was rebuilt according to original specifications. Today, the station is being adapted for use by the Transit Authority of River City. NATIONAL REGISTER

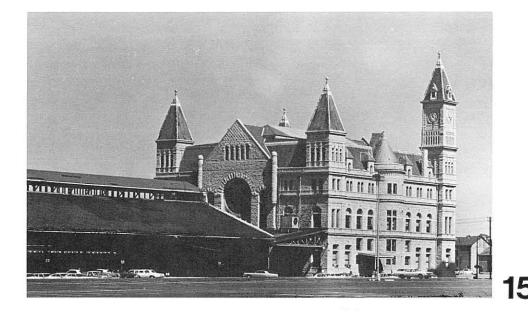
16LOUISVILLE & NASHVILLE STEAM LOCOMOTIVE #152 Kentucky Railway Museum

1905

Louisville & Nashville steam locomotive #152 is the oldest remaining class K-2A Pacific-type locomotive in the world. The #152 rolled out of the Rogers Locomotive Works at Patterson, N. J. in 1905. When she and her four sister locomotives arrived at the L&N yards they were believed so superior that the railroad requested an additional 40 of the same class.

Originally designed and constructed for high-speed passenger service, #152 was assigned to high-tonnage, mainline L&N arteries through Georgia, Alabama, Tennessee and Kentucky. In the 1920s she was replaced by heavier and larger passenger locomotives, reassigned to flatter terrain and later pulled only secondary trains and locals. It was in 1953 that #152, the last surviving 'K' class Pacific locomotive, was withdrawn from service.

The K-2A Pacific classification refers to the locomotive's wheel arrangement, which consists of four small wheels at the front, six large drivers and two small trailing wheels at the rear, which help support the weight of the firebox and cab. This versatile 4-6-2 wheel arrangement proved to be one of the railroad's most popular classes. NATIONAL REGISTER



17KENTUCKY BOURBON DISTILLERIES

To a Kentucky gentleman there is no spirit but bourbon. The product of abundant native corn and the soft, sweet, iron-free water that flows from the limestone bed underlying Kentucky terrain, bourbon has, over the decades, contributed to the Kentuckian's social pleasure and medical well-being and has served as currency for trading. To the strong-willed men who poured into Kentucky from Pennsylvania, Virginia and North Carolina, the distillation of whiskey was as important as the making of soap, the grinding of corn, or the tanning of hides.

Furthermore, the Kentucky farmer discovered that he could more easily transport his corn crop in the form of bourbon to east coast markets than he could the bushels of raw corn. The increasing importance of whiskey in Kentucky can be ascertained by the volume of its trade on the Ohio and Mississippi rivers. In 1800, tobacco and whiskey replaced flour as the principle export crops from the interior of Kentucky. In a three-and-a-half month period at the beginning of 1891 almost 50,000 gallons of whiskey, valued at about \$29,000, were entered for exportation at the Louisville Custom House.

Today there are 10 major distillers in the Louisville area. Many have diversified to compensate for the declining popularity of bourbon outside of Kentucky. Brown-Foreman now owns major vineyards in France; Jim Beam is producing a great variety of mixers and a vodka. Many of the city's small distillers went out of business during Prohibition, but their storehouses remain scattered throughout the city.

A local industry related to bourbon production is cooperage. Brown-Foreman Distillers Corp. owns Blue Grass Cooperage Co., a company which produces 475,00 to 500,000 barrels annually, or about 40% of the nation's cooperage-made barrels. Louisville Cooperage Co. is owned by Schenley Distillers, Inc., while Glenmore Distilleries Co. has a cooperage plant in Lebanon, Kentucky.

Barrel-making is said to be the art behind bourbon whiskey, with all the color and 40% of the flavor coming from the barrel. The barrels must be made of white oak, porous enough to allow the whiskey to breathe but not leak out. The wood is charred inside. It is the barrel that gives clear whiskey its rich, golden color as it ages. United States law prohibits distillers from using barrels more than once for bourbon. Most used barrels are sold to distillers in Canada, Europe, and Japan. Some are sold to barrel-furniture makers, a few for planters.

18 AMERICAN CAR & FOUNDRY CO. OHIO FALLS CAR & LOCOMOTIVE CO. Missouri Street at bridge ramp Jeffersonville, Indiana

The Ohio Falls Car & Locomotive Co. was formed in 1864 to produce freight and passenger cars. At one time it was claimed to be the largest company of its kind in the nation. Its location on the Ohio River, an artery for cheap transport of iron, coal, lumber and other supplies, and its proximity to Louisville and the southern network of railroads aided the company's success.

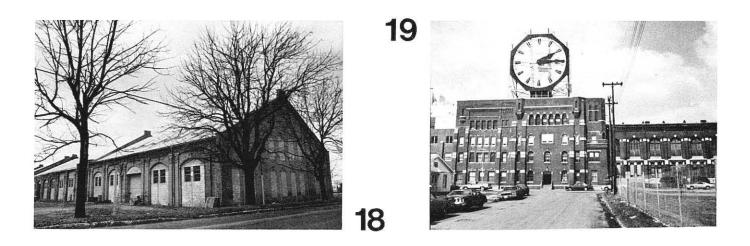
In 1872, fire destroyed the original plant. Rebuilding began immediately, but was halted by a long depression which began in 1873. Comprising long, single-story brick sheds with corbelled cornices and a four-story brick office building, the complex dates from the late 1870s.

In 1899, 13 car building companies, the Jeffersonville company included, merged to form the American Car and Foundry Co. The plant operated until the Depression. One of its last orders was for aluminum cars for the Indiana Railroad interurban lines. The plant reopened briefly during World War II to supply castings and shell forgings.

19 COLGATE-PALMOLIVE CO. Clark Blvd. at Woerner, Jeffersonville, Ind.

The Colgate-Palmolive Co. purchased the Indiana Reformatory in 1923 and located its soap factory inside. Soap kettles four stories high and 20' in diameter now occupy the north cell block. The clock was moved from Colgate-Palmolive's plant in Jersey City when a larger one was erected in its place. The two are said to be the largest outdoor clocks in the world.

The first Indiana State Prison was established in 1821 in Jeffersonville. It was built of logs and surrounded by a stockade. The present buildings, Victorian Gothic in design, are reminiscent of a medieval fortress. They were erected at various times in the 19th and early 20th centuries Colgate-Palmolive has added an Art Deco style complex to the west.



JEFFERSONVILLE QUARTERMASTER DEPOT

Highway 62, Jeffersonville, Indiana

During the Civil War the strategic location of the Falls of the Ohio at the midpoint between north, south, east and west was recognized. With a \$150,000 appropriation from the U.S. Congress, the Quartermaster Depot was begun in Jeffersonville, Ind. in 1864. The city of Jeffersonville donated the land on which the complex was erected. The construction of the Depot, covering four city blocks, meant the consolidation of various Quartermaster offices, storehouses and departments previously scattered throughout the town. It was first occupied in 1874.

This well-articulated complex of single-story brick buildings frames a central courtyard. Inside is the commanding officer's office, originally dominated by a 100' high tower. Brevet Major General Montgomery Meigs, then Quartermaster General of the U.S. Army, took charge of the Depot's design and supervised construction. Meigs was also responsible for the dome on the U.S. Capitol, the Pension Office in Washington, D.C. and the Washington Aqueduct.

The Depot was used actively during the World Wars and the Korean War as a manufacturing center and supply house. Today it houses an assortment of small businesses and industries.



BIRD'S-EYE VIEW OF THE QUARTERMASTER'S DEPOT.

1870s, 1880s

Clark County, Indiana, directly across the Ohio from Louisville, was once a major source of natural cement in the U. S., with an annual production capacity of over two million barrels by 1900. At that time the Clark County product was rated superior in tensile and compressive strength to that of Rosendale, N. Y. Both, however, fell below Portland, Buffalo and Akron cements.

The hydraulic cementation property of the limestone at the Falls of the Ohio and extending underground into Indiana was discovered in the late 1820s during the construction of the Louisville & Portland Canal. In fact, the local cement was used in much of the masonry work of the original 1830 canal. Soon two mills were operating in Louisville, quarrying limestone from the riverbed at low water, and a third was on the Indiana shore.

Eventually, it became difficult to quarry deeper into the riverbed, and immediately after the Civil War quarries and mills were established in Clark County. The two pioneers were Dexter Belknap and his Union Cement & Lime Co. and J. B. Speed and his Louisville Cement Co. Both commenced Indiana operations in 1866. Belknap's product was used for Procter & Gamble's Ivorydale complex in Cincinnati.

As early as 1818, however, limestone at Utica on the Ohio in Clark County had been used to make lime plaster. All plaster, mortar and cement used in the Louisville area in the latter 19th century was produced locally. Most of the mortar and cement still is.

The discovery of Portland cement brought about the demise of Clark County's natural cement industry. After 1900 the industry plummeted, and only the Louisville Cement Co. survived. It switched to Portland production about 1905 after the discovery of shale deposits. Some kilns of beautiful stone-work remain as the only reminders of the many mills in Clark County. A small kiln from the Ohio Valley Mill (capacity, 600 barrels daily), which opened in 1881 and closed in 1898, and a larger, magnificent structure of J. B. Speed's Queen City Mill (capacity, 600 barrels per day), which opened in 1870 and closed in 1893, remain.

