

Friends of Cast Iron Architecture presents

A Walking Tour of Cast-Iron Architecture in SoHo

by Margot Gayle and Robin Lynn with photographs by Edmund V. Gillon, Jr.

Made possible with funding from the New York State Council on the Arts

Cover: Decorative lower portion of cast-iron column at 142 Mercer Street, northeast corner of Prince and Mercer Streets. (Photo by Edmund V. Gillon, Jr.)

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Map by George Colbert

Produced by the Publishing Center for Cultural Resources, NYC Manufactured in the United States of America

New York's Famous SoHo

As an historic district, and as a center for artists' studios and art galleries, SoHo has a national, even world-wide, reputation. A twenty-six-square-block area in lower Manhattan that is bounded generally by Broadway and West Broadway, Canal Street on the south and Houston Street on the north, SoHo was named literally for its location—"South of Houston."

Farmland under Dutch rule and a residential neighborhood by the early nineteenth century, SoHo was, by the latter half of the nineteenth century, a significant commercial district, with large hotels, theatres, and fine stores along Broadway, a well-known red light district confined to nearby Mercer Street, and prestigious business headquarters on adjacent side streets. Time passed this section by as the city expanded northward. The area was able to survive architecturally as a post-Civil War commercial neighborhood embracing warehouses and factories of different styles and materials.

Especially noteworthy are the structures with castiron fronts built by Victorian businessmen between approximately 1850 and 1890 when iron architecture was at its peak of popularity. These buildings are found intermingled with significant stone and brick structures.

The architects who designed these iron buildings were among the best in the city and included Richard Morris Hunt, John B. Snook, Griffith Thomas, and Isaac Duckworth. They built more iron-front buildings in New York City than were constructed anywhere else in the world and the concentration of these buildings in SoHo led to the area's designation as the SoHo-Cast Iron Historic District by the New York City Landmarks Preservation Commission in 1973 and its listing as a National Historic Landmark by the United States Department of the Interior in 1978.

SoHo takes shape

The formal transformation of SoHo began in 1968 after studies ordered by Mayor Robert Wagner, Jr., and the City Planning Commission concluded that this area—with its half-empty old warehouses—was potentially a unique economic resource. By sheer luck the area had survived proposals to level it for such purposes as street widening, massive housing developments, even an industrial park, during the urban renewal-by-bulldozer period following World War II. The "South of Houston Report," coming at a crucial time, urged that it be retained, not destroyed.

After study, hearings, and a strong demand from the community, the SoHo Artists' Association, and the Friends of Cast Iron Architecture, the New York City Landmarks Preservation Commission designated the twenty-six-

square-block area an historic district. This designation endowed the area with stability and marked the turnaround for SoHo.

The arts come to SoHo

Artists in the 1960s were the pioneers in appreciating the values that this rundown manufacturing district had to offer. Spacious studios in the old warehouses could accommodate their oversize canvases and large sculptures and also provide space in which they and their families could live. Better still, the rents were low.

By the early 1960s a sizable number of artists were already living furtively in this area, which was legally zoned for manufacturing. The fire department inveighed against these residents, saying it would not know which buildings were occupied at night. But the intensive persuasion on the part of artists won them a zoning amendment from the city that permitted certified artists to occupy live-in, workin quarters in the old buildings. AIR plaques (Artist-in-Residence) attached to appropriate entrances alerted the fire department to people living above.

Art galleries followed the artists downtown to SoHo. Today major galleries occupy many ground-floor spaces and an occasional upper loft. Galleries are especially numerous along West Broadway and Prince and Greene Streets. Restaurants, bookstores, boutiques, and performing arts sites are interspersed among industrial activities.

The SoHo of long ago

SoHo was lovely and hilly farmland in the eighteenth century, divided from the lower island by a stream, later a canal (now covered by Canal Street), and by the marshy Lispenard Meadows (much of present-day Tribeca, which means "triangle below Canal"). As the waterways were drained and the hills cut down, Broadway was extended northward through SoHo. Prosperous New Yorkers moved further uptown and their red brick row houses along this once residential thoroughfare were soon converted to shops and offices or torn down for hotels and theatres. The richly furnished St. Nicholas Hotel, a favorite with foreign visitors, opened in 1854 at 517 Broadway. The big Metropolitan Hotel on Broadway at Prince Street embraced the famous Niblo's Gardens, a concert hall, and theatre with gardens. It was this almost luxurious middle-class neighborhood, known as the Eighth Ward, that was displaced by the restless expansion of commercial development pushing north of Canal Street just before and after the Civil War. Development began in the 1850s and was completed more or less as we see it today by shortly after 1900.

Iron architecture

With James Bogardus' first complete iron-front structure of 1848, this leading New York inventor created an innovative means for the rapid construction of buildings. In a city where good-looking, practical buildings were in short supply to house the wholesale firms dealing in imports, local manufacturing, and the goods brought in by coastal shipping, new railroads and the Erie Canal, Bogardus' iron technology served the growing commercial establishment well. Cheney (silks), Gunther (furs), E. V. Haughwout (china and glass) and other business leaders built iron warehouses as their corporate headquarters. Lord & Taylor, B. Altman & Co., and Stern Brothers built ornate iron-front retail stores.

The term warehouse had a slightly different meaning in the nineteenth century than it has today. At that time the ground floor with its broad windows would serve as the room where merchandise—woolen or silk or cotton fabrics,



This 1865 photograph shows a period of transition in SoHo. Residents of the area were beginning to move northward as commercial activity pushed its way into the neighborhood. They left behind numerous local churches and little Federal-style dormered houses, such as the one at the left of this picture. The Associate Presbyterian Church adjoining it at the southwest corner of Grand and Mercer Streets had already been converted into livery stables. It was replaced in 1867 by a commercial five-story building which stands on the site today. (New-York Historical Society)

fringes, tassels, embroideries, or mourning goods—was displayed in profusion and orders were taken. Paperwork and shipping orders were handled on the upper floors, as today, and merchandise was stored on the top floor. In E. V. Haughwout's, a retail establishment, hand painting of specialty china took place on the upper floors. Lord & Taylor sold ready-to-wear garments on its lower floors, while skilled dressmakers produced their famous custom-made garments upstairs.

Iron technology

As you walk by the former warehouses—some still housing small industry, others galleries, restaurants, and boutiques—notice that their interiors are ennobled by tall iron columns often elegantly fluted and with Corinthian capitals. Where the floor span is wider than about twenty-five feet, one generally finds many interior cast-iron columns, which together with the brick side walls support the entire building. Here we see one of the prime characteristics of iron as a building material: its strength in compression.

These iron columns, usually ornate, sometimes plain, are at once the workhorses and the pride of the cast-iron architecture system. Their production challenged the skill of the nineteenth-century iron founder because of the difficulties inherent in casting a twelve- or fourteen-foot hollow iron column that had to be ramrod straight to support the floors above it. The increasingly sophisticated systems of iron construction advanced the concept of prefabrication and of identical and interchangeable mass-produced building parts.

In these five- and six-story warehouses the interior cast-iron columns have heavy timber construction combined with side and rear walls of common brick. The side walls and columns carry the building load; the iron front stands there supporting itself. When a corner building has two iron facades, however, one of them will of necessity be carrying a portion of the floor load.

Occasionally an iron-front building may have a framing of cast-iron columns and wrought-iron beams, as did the John Wanamaker square-block store (now gone) north of SoHo on Broadway and 10th Street. Such buildings are the true pioneers of today's tallest skyscrapers where a metal cage supports the building load and the outer walls act as a skin.

How and where the iron fronts were produced

The individual elements of New York City's iron fronts were fashioned in large Manhattan foundries devoted mainly to making architectural ironwork. Among the most im-

portant in the second half of the nineteenth century were Badger's Architectural Iron Works of New York at East 14th Street, near today's Stuyvesant Town, the Jackson foundry on East 28th Street near today's Bellevue Hospital, and the Cornell foundry on West 26th Street, just north of today's London Terrace apartments. (Bogardus, the engineer and inventor, used independent contractors for his ironwork.) These foundries, of which scarcely a trace can be found today, were all located near either the East River or the Hudson River where they could easily receive coal and pig iron and occasionally ship out finished iron products.

The production of iron architectural elements involved genuine craftsmanship and was a hot, dirty, and often dangerous business. From full-scale drawings a patternmaker created a wooden pattern, much of it by hand carving. As the elite members of the business, the patternmakers brought artistry and design skill together with technical knowledge of how molten metal would flow into complex molds and how much it would shrink when cooled. The wooden pattern was rammed into damp green sand confined in a box called a flask, then removed to leave a crisp impression or mold into which the molten iron was poured. On cooling, the iron assumed the shape of the mold, and the sand was shaken away. The final metal shape was then smoothed by machine and had its ends accurately sheared for alignment.

When the various columns, panels, arches, and other cast-iron parts were ready, they were laid out on a floor at the foundry to insure that all parts were on hand. Each part was given a primer coat to guard against rust, and small units were preassembled. Then each section was numbered, packed in straw, and loaded onto a horse-drawn dray. Thus protected, the parts were trundled through the city streets to the construction site, where they could be raised and bolted into place as the building became ready to receive them. As the iron front rose, plate-glass windows were installed and polished, filling the wide apertures that are characteristic of iron architecture. Top coats of paint, most often a gentle light earthen color, were added to the iron—and another handsome iron-front building had been added to the streetscape.

A Walking Tour of SoHo

This walking tour will take you to fifty significant sites in SoHo to view iron-front buildings and details of their facades, including columns, urns, and garlands. It will reveal the distinctive use of cast iron in lampposts, vault light covers, and window enframements. A limited number of noniron buildings are also included to demonstrate building styles and technology in the pre- and post-cast-iron era. The tour will bring you to the oldest standing iron-front building in the city, the 1856 Haughwout store, and the last iron-front building erected in 1901 at 550 Broadway. It will help you recognize iron buildings and their architectural styles and will explain how they were manufactured and erected.

During the latter half of the nineteenth century, several architectural styles were popular in the SoHo area. The early vernacular Federal and Greek Revival houses and churches were supplanted first by rows of commercial buildings that were Italianate in feeling. The Haughwout store at 488 Broadway and the cast-iron structure at 453-55 Broome Street exemplify this Italianate style. The French Second Empire style later became prevalent and can be seen at 28-30 Greene Street and, most clearly, complete with mansard roof and simulated center pavilion, at 72 Greene Street. The crisp Neo-Grec style dominant in the 1870s and 1880s is seen at 112 Prince Street and most particularly at 480 Broadway in the extraordinary fully designed iron facade by Richard Morris Hunt, America's finest French-trained architect.

The walk starts at 383 West Broadway, between Spring and Broome Streets, although the tour can be joined at any point. Directions are included after pertinent entries to help participants follow the roughly circular path. The first twenty-seven entries cover the southern portion of the landmark district in the area between Broome and Canal Streets and Broadway and West Broadway. This area still retains much of its industrial character, and delivery trucks and workmen are more common here than along the northern part of the tour, between Spring and Prince Streets, where art galleries, boutiques, and restaurants (often housed in younger iron buildings from the 1880s) reflect the look of "new" SoHo.

To recognize iron architecture, look for telltale streaks and areas of rust that are sure indicators. The tap of a coin on an iron structure may produce a metallic ring. Best of all, a tiny pocket magnet will adhere to any ferrous metal even through thick layers of paint.

1 383 West Broadway, 1868, John B. Snook, architect

In the second half of the nineteenth century, the family firm of P. & G. Lorillard commissioned John Snook to build four structures between Spring and Broome Streets as warehouses for its successful snuff and tobacco business. Snook designed conservative brick structures with cast-iron ground floors, minimally decorated with diamond shapes on their columns (the earliest, at 381 West Broadway, was completed in 1867; 383 followed in 1868; 375 in 1876; and 393 in 1890). The principal entrance to them was at 69 Wooster Street. However, the similar appearance of these narrow brick five- and six-story warehouses with stone sills and lintels gives the east side of the West Broadway block a pleasing uniformity.

The large interior space was used for receiving and storing Virginia and West Virginia tobacco. After 1870 the tobacco was fed to factories in Brooklyn and Jersey City where it was converted to chewing tobacco. The venerable Lorillard firm, now a division of Loews Corporation, had its origins in the mid-eighteenth century when the first Peter Lorillard emi-

grated from France to Virginia.

Notice the number 159 cast in iron on the pilasters near the entrance to the O. K. Harris Gallery. West Broadway was known as South Fifth Avenue between 1870 and 1899, and 159 is one of the series of building numbers that then ran south from Washington Square.

Directions: Walk south on West Broadway.

2 500 Broome Street (northeast corner of West Broadway and Broome Street), 1874, Charles Mettam, architect

The building at the northeast corner of Broome Street and West Broadway was erected in 1874 in less than five months. Such rapid construction accounted, in part, for the popularity of cast-iron construction. After multiple cast-iron pieces were prefabricated at a local foundry from reuseable patterns, and transported by horse-drawn vehicle to the building site, they were readily bolted together to form the front, and sometimes the sides, of the structure.

Notice the waist-high platforms along Broome Street. Here are the original horse-loading bays through which drivers loaded and unloaded goods. Today many loading docks have damaged cast-iron parts because heavy trucks have backed into them—shearing off vulnerable iron pieces.

3 363 West Broadway (Kenn's Broome Street Bar), completed c. 1825

Before the tall five- and six-story commercial buildings were constructed in SoHo in the second half of the nineteenth century, the streets were lined with small Federal-style residences and shops, such as this three-story building, which retains its original roof and dormer.

Ironically, most of the existing Federal buildings serve commercial purposes today, while many of the nineteenthcentury iron warehouses, stores, and offices have been transformed into residences.

Directions: Proceed east on Broome Street.

4 484 Broome Street, 1890, Alfred Zucker, architect

The form of this beautiful 1890 Romanesque Revival building shows a shift in architectural styles at the close of the nineteenth-century. The gifted architect Alfred Zucker simplified the shape of this facade by grouping its windows and entrances within massive two-story arches. The rusticated stone blocks and richly carved gargoyles near the corner windows of this brick and sandstone building give it an imposing fortresslike appearance unlike cast-iron structures, which seem lighter and more transparent because of the liberal use of glass.

The Kitchen, a dynamic ten-year-old avant-garde organization presenting video, music, performance, and dance to the

public, occupies the second floor.

5 476 Broome Street, 1872-73, Griffith Thomas, architect

A compelling reason for the popularity of cast-iron architecture was that builders could imitate the decorative features of stone without the expense. To do this, patternmakers carved wooden patterns which were rammed into moist sand inside a flask, or box. Molten iron, poured into the crisp impression left in the sand by the pattern, assumed the shape of the mold. When the metal cooled it was removed from the mold, sand shaken from it, and its part machine smoothed. Unlike stone parts which had to be individually carved, this system vastly reduced hand labor.

As in all cast-iron buildings, the elements of this iron front were mass-produced from molds. The three-quarter-round first-floor columns have Corinthian capitals with precisely cast iron leaves made from skillfully carved patterns. The large end blocks, or quoins, were cast from the same mold, as were the identical Moorish urns gingerly placed on either end of the roofline. If this building were differently painted, it might easily be mistaken for stone.

6 477 Broome Street, 1872-73, Elisha Sniffen, architect

Even before the Civil War, the area which encompassed present-day SoHo and Tribeca was the center of the dry-goods trade in America. New York had an excellent port, and was ideally situated between cotton plantations in the South and New England cloth-manufacturing mills. The city was a natural focus for both domestic and international trading.

Cheney Brothers was the largest silk manufacturer in the United States in the post-Civil War era. Its headquarters was in Hartford, Connecticut and it employed more than one thousand people in its nearby mill in the manufacture of "sewing silks, foulards, pongee handkerchiefs, ribbons, Irish poplins, gross grains, satins, figured silks and other dress silks, tram and organzine, patent spun silk, etc.," according to an 1869 business directory which claims that "the dress silks are fully



5 This 1877 photograph was taken just four years after the cast-iron commercial palace at 476 Broome Street was built. The handsome striped awnings, shading large flat-arched windows, gas lamppost at the edge of the sidewalk, and horse and cart standing on Belgian block pavement are familiar aspects of nineteenth-century city life.

The new six-story building with distinctive Moorish-looking urns adorning roof and balcony, dwarfed its neighbors to the west. The adjoining two-story building housing John Vosteen's shop and a restaurant serving lager "bier" was replaced in 1885 by the six-story building still standing at 480 Broome Street. (New-York Historical Society)

equal to those made in the best manufactories in Lyons."

When the firm moved its corporate headquarters to New York in 1873, it had this impressive cast-iron building constructed, maintaining offices downstairs and warehousing stock on upper floors. The firm could build an elaborate headquarters more quickly and cheaply from cast-iron than stone—and could safeguard its silks in what was then considered a fire-resistant structure.

7 477 Broome Street, vault lights in front sidewalk

Look down! You are walking on a unique lighting system patented by Thaddeus Hyatt in 1845. Thick glass discs within iron grilles covered the sidewalk area so natural light could pass through the translucent circles and illumine the basement. In a pre-electric era, this made the workspace in the basement less vulnerable to fire and noxious fumes from gas lighting.

As you walk through SoHo, notice that some glass discs are now punched out of their frames, causing small holes in the pavement and allowing views into the basement. Because of leakage, many vault-light covers have been replaced by metal plates or concrete.

8 469 Broome Street, 1871-72, Griffith Thomas, architect Lest anyone forget who was responsible for this striking structure, William H. Gunther, a leading furrier, had "Gunther Building" inscribed above its entrance. He probably had castiron statues installed on the now-empty pedestals at either side of his name.



One of the handsomest structures in the district, the Gunther building has an unusual curved entrance which distinguishes its facade from flatter, more conventional cast-iron buildings. Its surface is painted a soothing off-white shade, an authentic nineteenth-century color for a building which appeared to be made of stone. By applying a magnet to its front, one can prove its true iron nature.

In 1972 this warehouse was the first building on Broome Street to be converted into residential lofts. (Some warehouses along West Broadway had already changed from industrial to residential status.) At that time the two twenty-five-hundred-square-foot lofts on each floor sold for fifteen thousand dollars each. In 1983 they were worth three hundred thousand dollars.

9 464 Broome Street, 1860, architect unknown

The Broome Street Reformed Protestant Dutch Church, a pretty wooden Greek Revival building surrounded by a picket fence, occupied this corner until 1860 when the streets west of Broadway began losing their residential character. That year this stone structure with its iron cornice, tall fluted iron columns, and iron storefront, was built by merchant Aaron Arnold (later of Arnold, Constable & Company) as stores and lofts.

The architect Arnold commissioned to design this large five-story building is anonymous. In all likelihood, however, he also designed 19 Mercer Street (between Canal and Grand Streets), whose facade—with its two-story panelled pilasters—is identical to the outer two sections of 464 Broome Street.

10 453-55 Broome Street, 1872-73, Griffith Thomas, architect

This building at the southwest corner of Broome and Mercer Streets is the former headquarters of Welcome Hitchcock & Co., a venerable dry-goods firm that began operations in 1818. The firm was the source of an endless variety of mourning goods, including ribbons, shawls, crapes, arm bands, black bonnets, and black crocheted mourning mitts, according to the 1892 King's Handbook of New York City.

Number 453-55 is a typical Griffith Thomas cast-iron creation on a street dominated by his designs. Like an Italian palazzo, the handsome building has strong cornices separating each floor and ornate window decoration with balustrades. Stand on the northwest corner of Broome and Mercer Streets to see three Griffith Thomas iron buildings—453-55, 457, and 469—at once.

Directions: Return one block west to Greene Street; walk south toward Grand Street.

8 Gunther was a leader in the fur business when it moved into this impressive showroom and warehouse on Broome Street in 1872. Its architect, Griffith Thomas, an Englishman with taste and experience, regarded cast iron as a practical and elegant building material.

Thomas replaced customary round columns with paneled square pillars and put balustrades atop the first floor. His trademark is here too—the use of double-hung windows to flood the interiors with natural light. The dominant ornamental feature is the rounded corner at Broome and Greene Streets, extending from street to roofline, with windows of skillfully curved sheets of glass. (Edmund V. Gillon, Jr.)

80 Grand Street (33 Greene Street), 1873,B. W. Warner, architect

Dry-goods firms played a prominent role in transforming SoHo from a residential to a commercial area. The largest cast-iron buildings in the district were generally occupied by prestigious dry-goods firms. C. A. Auffmordt and Co., "importers and commission merchants established in 1840, maintaining buyers in Paris and London," occupied this building when it was constructed in 1873.

This unusually large corner building has two iron sides that support a portion of the floor load.

12 85 Grand Street, 1872, William Hume, architect

This edifice was six bays wide on Grand Street when it was constructed in 1872—the date placed in the curved pediment above its facade. When owner James Fisher enlarged the building in 1883, he repeated the same design for a new three-bay section along the western edge of the Grand Street side—with relative ease since the patterns for cast-iron elements could be re-used. The now off-center pediment remains visible proof of this addition.

The Lindsay, Graff, and Megquier foundry cast both sections. Its plaque can still be seen along Grand Street, slightly below eye level on the westernmost building element. Such plaques provided the firm with prominent free advertising.

13 91 and 93 Grand Street, 1869, John B. Snook, architect

This pair of modest working-class houses with iron-and-glass storefronts on the ground level, and three upper floors of living quarters, are quite different from any others in SoHo. The upper floors are of common brick covered by smooth, flat, castiron plates. The plates were cast with iron prongs projecting from their backs which were driven into the facade of common porous brick. Thus they constitute no more than a veneer of smooth metal; the grooves give the plates the appearance of being blocks of cut stone.

The Jackson foundry patented this veneered look which actually had been introduced in 1830 by the renowned Philadelphia architect John Haviland and used by him in Pottsville, Pa., to cover a bank with plate painted to look like marble.

Directions: Return a few steps west to the southwest corner of Grand and Greene Streets. Walk south toward Canal Street.

14 28-30 Greene Street, 1872-73, Isaac F. Duckworth, architect

There are elaborate buildings on this narrow street, full of the intricate detailing that can be quickly and economically executed in cast iron. Number 28-30, designed by the architect whose work dominates the block (32 and 23-25 Greene Street), has an especially exuberant facade composed of a projecting central bay, broken pediment above it, intricate brackets, and a bulbous mansard roof with elaborate framing around the windows—a lively interpretation of the French Second Empire style, built as an impressive business headquarters.

15 23 Greene Street, 1872-73, Isaac F. Duckworth, architect

29 Greene Street, 1877-78, J. Webb & Son, architect

In the years since they were built, no two cast-iron buildings have received equal treatment. Number 23 Greene Street remains attractive even though a stoop and ornate fire escape have been added to its front. Just down the block to the north, Number 29 has passed the point of no return. Its four stories have been brutally reduced to two floors and its remaining ironwork is only in fair condition.

16 10 Greene Street, 1869, John B. Snook, architect16 Greene Street, 1882-83,Samuel A. Warner architect

It is hard to appreciate the facades of these two cast-iron buildings because their fronts are hidden by fire escapes.

Following the 1911 Triangle Shirtwaist Company fire in New York in which 146 people died—mostly seamstresses trapped behind locked doors in a factory on the east side of Washington Square Park—a stricter fire code was enacted. The 1915 law required that factory buildings erected prior to October 1, 1913, add exterior fire escapes. Only buildings with two interior stairwells were exempt.

The loft spaces in SoHo serving as offices, warehouses, and factories were, of course, affected. Narrow buildings with only one interior stairwell, such as these on Greene Street, added the metal fire escapes to comply with the new law.

Directions: Walk south on Greene Street toward Canal Street. Walk east on Canal Street.

17 313-15, 317, 319, 321, 323, 325, and 327 Canal Street, 1821

Today, the tiny brick buildings on the north side of Canal Street are almost lost behind signs, banners, fire escapes, antennas, air conditioners, merchandise, and traffic. But when this row of seven buildings was built in 1821—two years after the canal in the middle of the boulevard was covered to eliminate unsanitary conditions—the Federal-style brick houses became part of a new residential area. Painter and inventor Samuel F. B. Morse lived at 321 Canal Street in 1828.

The buildings numbered 313 through 327 were all originally three-story structures with attics and dormers. When they were adapted for commercial use in the mid-nineteenth century, an additional floor and an iron cornice were added to some of them.

Directions: Walk east on Canal Street to Mercer Street. Walk north on Mercer Street.

18 309 Canal Street (northeast corner of Canal and Mercer Streets), 1856-57, architect unknown

Arnold, Constable & Company, a venerable department store providing "elegant clothing from cradleside to graveside" opened in 1827. Founded by Englishman Aaron Arnold who was joined by his son-in-law James M. Constable, this fine

store at the northeast corner of Canal and Mercer Streets boasted a limestone facade along its prominent Canal Street

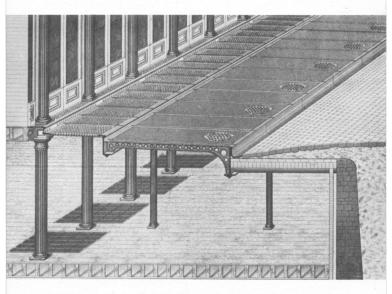
front and an early iron-front ground floor.

Despite its grandeur, the firm stayed here for only twelve years before following the shifting city population northward to its new store at Broadway and 19th Street in 1869. In 1914, Arnold Constable (as it was then known) moved to its final location at the southeast corner of Fifth Avenue and 40th Street, where it remained until closing its doors in 1975. The Fifth Avenue building has been converted to the Mid-Manhattan Branch of the New York Public Library.

19 11 Mercer Street, 1870-71, F. E. Graef, architect

By turning north onto Mercer from Canal Street, one escapes commercial and traffic congestion and enters an industrial block as yet unaffected by the spread of SoHo restaurants and boutiques. Almost all the buildings were constructed before 1870 and have iron storefronts below stone facades.

Number 11, built by the India Rubber Company, is the exception. Its pleasing iron facade contains exceptionally wide



A sophisticated drawing from Badger's 1865 catalogue shows how a commercial building might have several basement levels-not only under the building, but beneath the sidewalk and often extending out under the roadway. Heavy fluted iron columns supported the main iron facade at the sidewalk's edge. Glass paving blocks, or vault lights, embedded in a wide area of the sidewalk, allowed light to filter into the basement. Lesser columns, extending almost to the middle of the thoroughfare, supported the paved street above. The open iron grilles, seen here as dark squares on the floor of the first basement, indicated the existence of a sub-basement. Natural light filtered through these grilles to the second basement level. This system gave the building owner a lot of useful hidden space under the city's sidewalks-and even under its streets-for wrapping, storing, and preparing merchandise for shipping, as well as for coal storage. (Illustrations of Iron Architecture, 1865)

windows and an unaltered ground floor with Dutch doors that were originally part of the system of protective iron shutters. A portion of the building has a new life today as the Museum of Holography, which presents exhibits and programs of threedimensional photography. Its dignified facade has been marred by the gaudy repainting of the museum entrance.

19 Mercer Street, 1860-61, architect unknown

Notice the sign in the window of the SoHo Repertory Theatre: "Danger! Hollow sidewalk. Vehicles will be towed away."

This warning can mean only one thing. The sidewalk is hollow because the basement of the building extends beneath it. Cast-iron columns support the sidewalk and vault lights initially illumined the interior.

47 Mercer Street, 1872-73, Joseph M. Dunn, architect This building is a straightforward example of the standard features of cast-iron construction. Standard brick walls support its sides while wooden floors and joists span the distance between them. Thin cast-iron columns support the weight of the facade (because cast iron has great strength in compression), allowing wide voids in the iron front to hold large sheets of plate glass-and presaging the glass curtain wall of modern skyscrapers.

Until the mid-nineteenth century, the cost of manufacturing large flat sheets of glass had been prohibitive. When mechanical methods of making flat glass were developed in Europe and then refined in America, affordable plate-glass windows made this type of architecture possible.

Directions: Return one-half block south to Grand Street. Walk west toward Broadway.

469 Broadway, parking lot at northwest corner of Broadway and Grand Street

The parking lot stretching from Broadway to Mercer Street along the north side of Grand Street was once the location of

the beautiful Lord & Taylor department store.

Established in 1826 by Samuel Lord and George Washington Taylor near the docks of the East River, the firm moved to the corner of Grand and Chrystie Streets in 1853, and then built this Broadway store in 1859. The New York Times described the extravagant iron building as "more like an Italian palace than a place for the sale of broadcloth."

This glamorous building was vacated by Lord & Taylor after a mere decade when the firm opened an ornate new castiron store in 1870 at 901 Broadway near Madison Square.

Directions: Turn south on Broadway. Walk to mid-block between Grand and Howard Streets.

452 and 444 Broadway, 1876-77, Schweizer & Gruwe, architects

These two narrow five-story cast-iron buildings on the east side of Broadway are identical but look markedly different because of the way they are painted. Although separated on Broadway, they are joined at the rear (along Crosby Street) to form a U-shaped structure.

The delicate cast-iron screenwork on each building is as graceful an essay on the possibilities of cast iron as one can find. The pierced, whirling shapes of the filigree work in the iron arches anticipate art nouveau forms.

Directions: Return to Broadway and Grand Street. Pro-

ceed north.

24 462 Broadway, 1879-80, John Correja, architect

The size of this cast-iron building and its prominent location on the northeast corner of Broadway and Grand Street signify its original importance as a commercial palace. It is an impressive six-story building, unusual in having three cast-iron facades. The great wholesale firm of Mills & Gibb, importers of fine laces, embroideries, hosiery, upholstery trimmings, and "kindred goods," occupied this building until World War I.

Begun in 1865, the firm maintained branch offices in major American cities and throughout the continent. Gibb, a Scotsman, lived in America overseeing distribution, while Mills, an American, lived in Nottingham, England, handling purchases abroad. The firm employed three hundred people, including fifty traveling salesmen, and sold exclusively to the trade.

The ground floor along Broadway has been "modernized," eliminating all traces of its nineteenth-century cast-iron grandeur. Only the facade on Grand Street retains its original cast-

iron design.

25 480 Broadway, 1873-74, Richard M. Hunt, architect

Richard Morris Hunt, the prominent New York architect who designed the Fifth Avenue section of the Metropolitan Museum of Art and the base for the Statue of Liberty, also designed a few cast-iron buildings in New York. Fortunately, 480 Broadway remains, although his Moorish-style building that stood beside it has long since disappeared.

Recognizing the qualities of iron, Hunt exploited the material to the fullest. He used the slenderest of colonnettes to allow for large expanses of glass, and designed curved pierced screenwork between the pilasters at the top of the fourth-floor windows to display the strength and grace of iron. From architectural periodicals, we learn that Hunt originally painted the building at least six different colors. Perhaps he reasoned that since painting cast iron was an intrinsic part of maintaining it, he would, in fact, celebrate its nature.

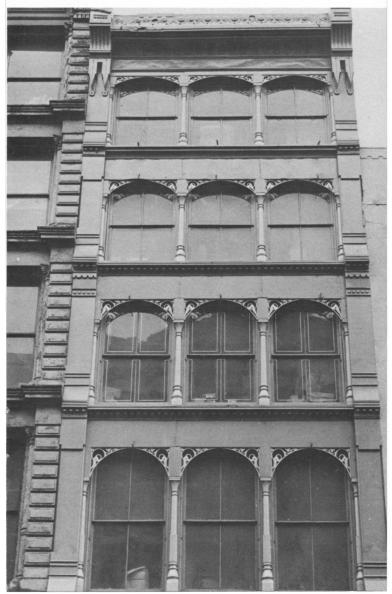
²³ One of the most appealing aspects of this five-story, three-bay, cast-iron facade at 444 Broadway is its delightful filigree arches. The perforated leaf-and-vine motifs, which overlay the tops of its square-headed windows, show the delicacy of iron decoration.

The building is on the former site of Wood's minstrel theatre, the most popular New York theatre of the 1860s. (Edmund V. Gillon, Jr.)

451 Broome Street (southwest corner of 26 Broadway and Broome Street), 1895-96, John T. Williams, architect

At the close of the nineteenth century, the advent of steel-cage construction together with the elevator made possible the erection of buildings of unprecedented height. Unlike masonry construction, together with the elevator, made possible the base to support a tall structure, the steel cage required no such compromise.

This elaborate twelve-story building, with exquisite terra cotta decoration on its upper three floors, was typical of many tall buildings of its era. A few blocks north, on the east side of Broadway, between Prince and Houston Streets, a row of twelve-story buildings from the 1890s dramatically shows how steel-frame construction began to supplant iron to alter the skyline.



The Haughwout Store is the oldest and the most famous castiron building in the Historic District, built as a department store in 1856 for E. V. Haughwout, an importer of silver and glass and a manufacturer of fine chandeliers and hand-painted china. Mary Todd Lincoln visited the store on May 16, 1861, and purchased a complete set of Haughwout's china for the White House.

The store's design is similar to Sansovino's Library of St. Mark in Venice. Originally painted a sandy, putty color which the Victorians called "Turkish drab," it must have looked in-

deed like a fine Venetian stone building.

The elaborate window design is repeated ninety-two times along Broadway and Broome Street. A keystone arch rests on free-standing colonnettes flanked on either side by tall, fluted Corinthian columns standing on paneled bases. Cast by Badger's Architectural Iron Works, the most famous foundry of its time, the building is as finely detailed as any cast-iron structure in the world. The spectacular exterior design was matched by revolutionary technology inside: the first practical passenger elevator was introduced here by Elisha Otis on March 23,

The Haughwout building has always generated excitement. In Ada Louise Huxtable's view, "the Haughwout store's iron elegance contained all the seeds of the future; its metal facade was to lead in turn to the metal frame; the elevator, combined with the metal frame, was to produce the skyscraper; and its repetitive Palladian rhythms were to become the basis of today's aesthetic of pre-fabricated, mass-produced structural units."

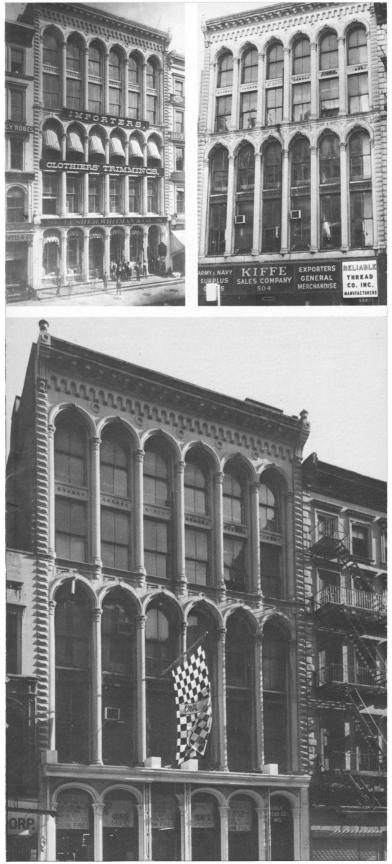
502 Broadway, 1860, Kellum & Son, architects 28

Cast-iron storefronts like this one were becoming increasingly popular by 1860, when this marble building was constructed. Shrewd businessmen realized the advantages of using castiron columns at ground level where large plate-glass windows permitted pedestrians to see a generous display of merchandise. (The term "window shopping" came into vogue along with cast iron.) The buildings on either side of this structure, erected shortly before 1860, had cast-iron storefronts which have since been altered.

The attractive building at 502 Broadway reveals how cast-iron storefronts can be restored to their original grandeur.

When Lesher, Whitman & Co. occupied the stone building in 1860, the large cast-iron ground floor was an appealing area to display merchandise. The firm specialized in selling tailors' trimmings-bindings, braids, fringes, and tassels-to the trade. An 1876 photograph (top left), perhaps showing clerks standing in front of the store, documents the original storefront and the distinctive two-story columns separating the six window bays on the upper floors.

By the early 1970s, the cast-iron storefront had been hidden behind sheet metal (top right photo) and the facade had become an unattractive jumble of metal grates. The Canal Jean Co., which subsequently took over the premises, applied to the New York City Landmarks Preservation Commission in 1979 to remove the existing sheet metal and restore the cast-iron storefront. The handsome ground floor we see today (bottom photo) is a tribute to this enlightened decision. (New-York Historical Society, Clover Vail, and Edmund V. Gillon, Jr.)



521 and 523 Broadway, 1854, John B. Snook, architect

How Broadway has changed! This stretch of roadway between Canal and Houston Streets was the prestigious midtown area of pre-Civil War New York, boasting the fanciest shops, hotels, and theatres.

Today this ordinary-looking stone building reveals little of its splendid past. It is the only remaining section of the famous block-long St. Nicholas Hotel, the grandest hotel of its time when its first section opened in 1854 with great gold-framed mirrors, elaborate china, glassware, and chandeliers from the fashionable Haughwout store across the street.

The St. Nicholas' fame was short-lived. As Manhattan moved uptown, the southern wing was replaced in 1878 by the cast-iron Loubat stores (at 503-511 Broadway) and the central portion was replace in 1884 by other stores and warehouses (at

515 Broadway).

30 537 Broadway, 1868-69, Charles Mettam, architect

Look above the altered ground floor to see this building's rhythm. The architect repeats the same design unit along most of its facade. Flattened arches cast in a single mold spring from identical three-quarter-round columns with composite capitals. Twenty-one circular medallions are added as ornament. Keep looking up: cast-iron urns, once a common terminal feature, still adorn the roofline.

This building has rhythm, but it also has problems. Rust, the most common enemy of cast iron, is apparent all over its facade. For the maintenance of cast-iron architecture, periodic repainting is required. If moisture seeps into its parts, hidden rust can weaken the structure. It can also be weakened by frequent freeze-and-thaw cycles. The northern half of this building appears more rusty than its southern counterpart, suggesting that this is actually two buildings whose common front is cared for by separate owners.

550 Broadway (altered to iron facade in 1901)

This was the last iron front erected in the SoHo-Cast Iron Historic District. The spare use of the metal supporting the glass facade shows a more sophisticated appreciation of the qualities of iron than is seen in the iron front of the beloved Haughwout Store built a few doors to the south nearly fifty years earlier.

Beginning in 1854, the jewelry firm Tiffany & Co. occupied a marble building on this site. Its graceful ground-floor display windows of glass and iron had been designed by R. G. Hatfield and cast in the Badger foundry. Over its entrance stood the muscular wooden figure supporting a clock which is still above Tiffany's door today. In 1870 the firm moved into a large new iron palazzo on Union Square. At the turn of the century the showy Victorian marble facade at 550 Broadway was removed and updated with the iron-and-glass front we see today.

555 Broadway, 1889-90, Alfred Zucker, architect 32

Charles "Broadway" Rouss' exuberant spirit is reflected in this ten-story building, the tallest structure using cast iron in SoHo. Rouss, who came north after the Civil War, placed a

sign at the construction site in 1889 reading: "He who builds, owns and will occupy this marvel of brick, iron and granite, thirteen years ago walked these streets penniless and \$50,000 in debt. Only to prove that the capitalists of today were poor men twenty years ago..." As a tribute to the street which helped him produce his fortune, he adopted Broadway as his middle name and emblazoned it in bold letters across the second story where it can be seen today.

Rouss was as proud of the large plate-glass display windows at street level (now altered), as he was of the steam heating system, the electric lights powered from a generator in the basement, and the conveyor-belt system by which merchan-

dise was transported through the store.

True to the Rouss spirit, the flamboyant Broadway facade is a bold design employing cast iron and granite, while the less important, less commercial Mercer Street facade uses conventional brick.

33 561 Broadway, 1903-04, Ernest Flagg, architect

The graceful L-shaped skyscraper at 561 Broadway, with its exquisite exterior ironwork and extensive terra cotta decoration, was built as a factory by the Singer Manufacturing Company for the production of sewing machines. It is often called the Little Singer Building because the Singer corporate headquarters were in a forty-one-story skyscraper that was 612 feet high, in the financial district at the northwest corner of Broadway and Liberty Street. Both buildings were designed by Ernest Flagg. The downtown building, whose tower was completed in 1908, briefly held the distinction of being the tallest building in the world.

The Little Singer Building-like Charles Scribner's Sons bookstore at 597 Fifth Avenue, also designed by Flagg-holds universal appeal because the imaginative use of iron almost gives the facades an appearance of gaiety. The beautiful wrought-iron balcony at 561 Broadway was formed by hammering and shaping each piece to create unique designs. The building is equally renowned for its early use of terra cotta. Like cast iron, terra cotta ("baked clay") could be endlessly

molded into decorative forms.

566 Broadway, 1883-84, Thomas Stent, architect 34

In the era of gas lighting, cast iron was often used for large window enframements that opened up the interior to light and air. This ornate brick building of the 1880s, with continuous glazed areas along its Broadway front, reflects this practice. (Cast iron continued to be used throughout the city for window enframements into the 1930s, even in such large buildings as Grand Central Terminal and B. Altman & Company.)

Along the less important Prince Street side, stone lintels and sills have been substituted for cast iron. Here the brick wall must support each opening, so the windows are narrower

and set further apart.

Directions: Walk one block west on Prince Street to Mercer Street. Proceed north on Mercer Street.

35 142 Mercer Street, 1881-82, Thomas Stent, architect

The twelve iron columns along Mercer Street, at the back of this substantial brick-and-stone building facing Broadway, brilliantly demonstrate how the metal can be fluidly shaped into decorative forms. Swirling bands of iron twist around the smooth columns in snakelike fashion to entwine the lower portion of the three-quarter-round shafts. At the cornice line above the storefront, more than one hundred tightly coiled bands of metal fit compactly into separate square compartments, as if ready to lurch forth from their confinement.

The land on which the building stands was part of the vast real estate holdings of John Jacob Astor (1763-1848). His home stood nearby at Broadway and Prince Street, and he could walk around the corner to his modest one-story brick office at 85 Prince Street.

148, 150, and 152 Mercer Street. 1860, architect unknown

The original folding iron shutters—offering both security and fire protection—still cover the lower level of these three buildings on Mercer Street which share a common Broadway facade. Most of the functional iron screens cast by G. R. Jackson and Co. are now rusted shut. (Note foundry label at 148 Mercer placed above eye level on the southernmost building element.) Only the iron doors at 148 Mercer still fold back in accordion fashion to allow access to the building.

37 150 Mercer Street, street light in front of building

Once a standard light fixture on the city streets, only three cast-iron lampposts still exist in SoHo. (The other lights stand before 62 Greene Street and 542 Broadway.) Thirty-two cast-

iron lampposts still remain in the entire city.

After 1903 this "Shepherd's Crook" design became a standard feature throughout the city when several different companies elected to use the single pedant light. Gooseneck electric lights supplanted gas street lamps and were themselves replaced by modern aluminum high-intensity lights in the early 1960s, when the city switched from incandescent to mercury vapor lighting.

Directions: Proceed south on Mercer Street.

111 Mercer Street, 1878-79, Henry Fernbach, architect 38

This no-nonsense iron-front warehouse with big windows and minimal decoration has been converted into residential lofts. Its iron elements were cast by the big Cornell iron foundry located alongside the Hudson River at West 26th Street. The Cornell family firm began producing iron safes and ornamental iron works-stairs, fences, gates, and even iron beds-at 141 Centre Street in 1828. It expanded to larger quarters along the river in 1859 to produce large castings for engineering and architectural purposes.

Noteworthy buildings produced by the Cornells include the former Stern Brothers department store at 32 West 23 Street, the beautiful lacy balconies of the Chelsea Hotel at 222 West 23 Street, and the A. T. Stewart store on Broadway at 10th Street (later Wanamakers, since demolished). In the post-Civil War era, the firm also built miles of elevated tracks for steam-powered railroads.

Today this versatile firm, still owned and operated by the Cornell family, produces rolling aluminum grilles and rolling steel doors at its metal fabricating and assembly plant in Mountain Top, Pennsylvania. The firm maintains sales offices and warehouses in Long Island City.

Directions: Walk south on Mercer Street to the northeast corner of Mercer and Spring Streets.



39 Since the fall of 1970, tour guides for the Friends of Cast Iron Architecture have shown visitors this much-admired glass-and-iron building at 101 Spring Street, surely a direct descendant of the Crystal Palace, the mammoth exhibition hall of glass, iron, and laminated wood erected in London in 1851. Artist Arthur Getz captured the front of this delightful structure on the October 13, 1980, New Yorker cover. (Copyright 1980 by The New Yorker Magazine, Inc.)

39 101 Spring Street, 1870-71, Nicholas Whyte, architect There are few structures in SoHo as pleasing as this building at the northeast corner of Mercer and Spring Streets. Its two great glassy facades give the building the appearance of a giant glass box. The transparent skin forecasts the glass wall skyscrapers of the twentieth century.

Its architect recognized the virtues and grace of cast-iron construction. A cluster of thin cast-iron columns at the corner of the building make a strong supporting pier. Delicate pediments hover above its window bays on the second and fourth floors. Robust ornament on the fifth floor includes inverted curved forms cut into the upper corners of the pilasters.

The unaltered ground floor features some of the original iron bars with three-pronged spikes protecting its windows along the Mercer Street side. Other large windows remain ex-

posed above geometrically designed grillwork.

The works of art inside the ground-floor space are always intriguing. A minimal number of wooden or metallic box-shaped forms, resting either on the floor or attached to the walls, are all that occupy the entire space. The building is owned by well-known sculptor Donald Judd, who lives and works here.

Directions: Proceed west on Spring Street.

40 113 and 115 Spring Street, 1878, Henry Fernbach, architect

That two buildings share a common facade doesn't mean they will share a common future. Number 115 Spring Street has been reborn as the offices of the SoHo Medical Group with a sophisticated interior restoration completed in early 1981 by Stephen Levine Architects. Inside the smartly remodeled interior, Levine has retained the century-old circular cast-iron radiators surrounding the iron columns. The Spring Street exterior has been left unaltered to blend sympathetically with its neighbors.

Number 113 Spring Street continues as the Last Wool Stock Corporation. The company collects textile waste materials—scraps of wools and synthetics—and sells them to mills or dealers to be regenerated into cloth. Such firms were fairly common in SoHo twenty to thirty years ago. Now only three or four are left in the area.

Directions: Proceed west toward Greene Street. Walk south on Greene Street to mid-block between Spring and Broome Streets.

41 71 Greene Street, vault lights

Here the circular glass discs, through which natural light can pass to illumine the basement, are embedded in the metal stairs in front of the windows and entrance of the Heller Gallery.

This light platform served a dual purpose. Shoppers could stand on the stairs, out of the way of pedestrian traffic, and look closely at the goods in the store. The basement below could be expanded into a working area under the sidewalk.

42 72 Greene Street, 1872-73, Isaac F. Duckworth, architect

This is probably one of the most attractive warehouses ever

built. Known as the "King of Greene Street," its lively threedimensional facade commands attention. An imposing central portico rises from a pedimented porch at the ground floor to a pedimented cornice at the roof. Freestanding columns support protruding cornices at each floor. A grand urn sits regally in the center of the broken pediment of the central porch.

Owner Gardner Colby, a dry-goods dealer, was sufficiently proud of his French Second Empire edifice to apply his initials in iron to the narrow panel between the doorways where they remain visible today. Colby was a self-made man, a native of Maine and the benefactor of Colby College in Waterville, Maine. At his funeral services in 1879, a minister paid him this tribute: "Repeated changes from a retail trade to an importing commision, to a wholesale dry-goods business and to the manufactures of woollens, only enlarged his fortune, and proved his business capacity. His name in the mercantile world was a synonym for insight and energy."

43 Greene Street between Spring and Broome Streets, Belgian blocks

Look down at the road surface. Do not mistake these granite blocks—visible under the deteriorating asphalt—for circular-shaped cobblestones. Belgian blocks, about the size of a loaf of bread, were first laid on the Bowery in 1853 and were generally used throughout the country on heavily traveled streets after 1860. Though more expensive than cobblestones, they withstood iron-rim wagon wheels and offered better footing for horses. The technique for quarrying the stones was developed in Belgium; the granite was cut primarily in New England.

Directions: Walk north on Greene Street a block and onehalf almost to the southeast corner of Greene and Prince Streets.

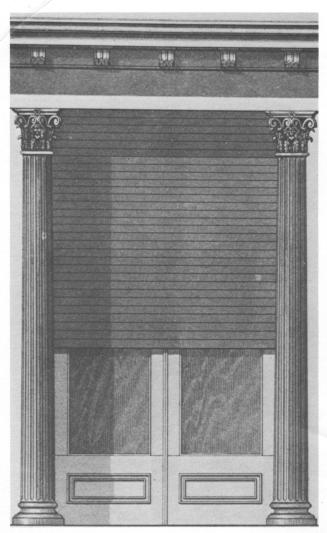
44 118 Greene Street (just north of The Exhibition Space at 112 Greene Street), 1881-82, Henry Fernbach, architect

It is easy to tell that this is an L-shaped building facing both Prince and Greene Streets because both facades have been revived with a fresh coat of white paint—the equivalent of a face-lift for an aging cast-iron structure. If left unpainted, iron deteriorates as rust spreads.

Notice the Dutch doors and the iron shutters above them below the northernmost fire escapes at the Greene Street entrance. (The grooves in the iron walls on either side of each door frame shows the tracks in which the shutters rode up and down.) On closing his shop, the store owner would pull the shutters down over the glass windows and padlock the small iron doors beneath them. (See illustration on following page.)

45 112 Prince Street, wall mural at southwest corner of Prince and Greene Streets

What could be more appropriate among the world's greatest concentration of cast-iron buildings than a painting of a cast-iron facade on the blank brick side wall of a building with a cast-iron front. Completed in 1974 by world-renowned SoHo



44 Flexible cast-iron shutters provided the necessary security to protect wide plate-glass display windows. The shutters rolled up and down in grooves within the fluted iron columns flanking windows and doorways of new ground-floor iron storefronts. Introduced by Daniel Badger in 1842, these shutters are the prototype for the endless variety of modern metal grates which guard storefronts today. (Illustrations of Iron Architecture , 1865)

artist Richard Haas, the side wall repeats the same neo-Grec facade that graces its front. Sponsored by City Walls, Inc., and executed by sign painters under Haas' direction, the large painting fits naturally and unobtrusively into the neighborhood.

Haas' famous trompe l'oeil works also cover exterior walls in Galveston, Boston, Milwaukee, and Munich. In New York he has painted a Con Ed substation in the South Street Seaport area and re-created the original 1903 Times Building on the bare towers of the old Crossroads Building at 42nd Street.

Directions: Walk a few steps west on Prince Street.

46 112 Prince Street, 1889-90, Richard Berger, architect Be sure to admire the distinctive features of this iron building. It demonstrates how original designs were being executed in cast iron in the 1890s.

The unusual sunburst motif in the fanlike crown at its roofline is not found elsewhere in SoHo. Its neo-Grec design features graceful, curved shapes etched directly into the iron. Slender fluted colonnettes topped by neo-Grec capitals separate the great square-headed windows. The strong horizontal line of each floor is accentuated by protruding cornices, anchored at both ends by a decorative block supported by paired consoles.

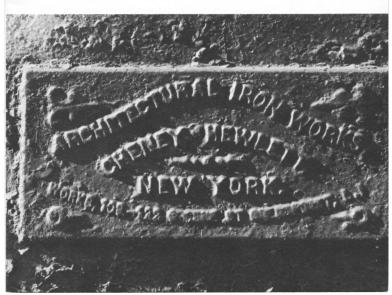
Directions: Return a few steps east to Greene Street. Proceed north.

47 109 Prince Street (northwest corner of Prince and Greene Streets), 1882-83, Jarvis Morgan Slade, architect

This large iron building dominates its corner site, as does the Gunther building at the southwest corner of Broome and Greene Streets. Unlike the Gunther building, where toys and novelties were made until the factory was converted into residences in 1972, this nameless building is still devoted to manufacture. The Industrial Electronic Hardware Co., producers of connectors, has occupied its premises since 1943.

47 A foundry label, generally located on the base of a column, identifies the firm which cast a building's iron parts. These rectangular iron plaques are similar to an artist's signature. When affixed to buildings they provided the foundry with prominent free advertising.

The foundry label "Architectural Iron Works, Cheney Hewlett" can still be seen on the Greene Street side of the 1883 cast-iron building at the northwest corner of Prince and Greene Streets. Cheney and Hewlett had its foundry in Brooklyn's Greenpoint neighborhood; the firm was the successor to Daniel D. Badger's Architectural Iron Works, one of the largest manufacturers of iron buildings in the country. (Edmund V. Gillon, Jr.)



Although only five stories, the building appears taller because each story is smaller than the one beneath. Called foreshortening, this effect creates the illusion of greater height according to the rules of perspective, where lines recede as they become further away. This phenomenon can be observed in many cast-iron buildings.

129 Greene Street, 1880-81, Detlef Lienau, architect 48 Cast-iron facades are composed of interlocking iron parts that were manufactured at a foundry and shipped to the building site for assembly. This system made rich surface ornamentation possible either by casting designs directly into the building elements or by casting separate decorative pieces that could be bolted onto the basic structure.

Here we see eight elegant ground-floor columns replete with reeded bases, guilloche panels and ribbon-tied garlands (or swags). As iron bolts have rusted, an occasional decorative part has fallen off, including the garlands on the two southern-

most columns.

142 Greene Street, 1871, Henry Fernbach, architect Walk inside the Leo Castelli Gallery. Notice that its vast interior is interrupted by only a few cast-iron columns. A structural necessity, these cast-iron columns support the upper floors of this exceptionally wide building. They perform their task with great efficiency: the eight fluted columns occupy relatively little floor space. The lofty area is ideally suited for this gallery to exhibit large-scale works by Robert Rauschenberg, Roy Lichtenstein, Jasper Johns, and others.

Directions: Return south to Prince Street and walk west.

113-15, 113-19, and 121 Prince Street, 1890-91, Cleverdon & Putzel, architects

These three separate iron-front buildings which share a common facade were rapidly constructed within a nine-month period by developer Frank Seitz. Although constructed as functional warehouses, they are attractive buildings with panels of striking diamond-weave pattern, floral sprigs, and intricate leaf ornament half hidden behind fire escapes on the second through fifth floors.

Today the buildings are caught up in SoHo's rebirth as a fashionable district. Vines entwine the fire escapes—evidence that residences have preempted former industrial spaces. Dean and Deluca (a flourishing gourmet food and kitchenware establishment), a health food store, and a contemporary art gallery

and frame shop occupy its ground floor.

Additional reading

AIA Guide to New York City by Norval White and Elliot Willensky, revised edition, Macmillan, 1978.

Badger's Illustrated Catalogue of Cast-Iron Architecture by Daniel D. Badger, Dover, 1981. Reprint of Illustrations of Iron Architecture, 1865.

 ${\it Cast-Iron\ Architecture\ in\ New\ York}$ by Margot Gayle, Dover, 1974.

Cast-Iron Decoration: A World Survey by Dr. Edward Graeme Robertson, Whitney Library of Design, 1977.

Metals in America's Historic Buildings by Margot Gayle, David W. Look, and John G. Waite, U.S. Dept. of the Interior, 1980.

SoHo-Cast Iron Historic District Designation Report, New York City Landmarks Preservation Commission, 1973.

Transit information

SoHo is well served by mass transit. Consult the map to find your way from subway and bus exits to the first stop on the walking tour at 383 West Broadway, between Spring and Broome Streets.

Station Train Canal Street IRT#1 Spring or Canal Street **IRT #6** Spring or Canal Street IND E, AA, CC Canal Street IND A Broadway-Lafayette IND B, D, F Prince or Canal Street BMT RR, N Canal Street BMT N, M, J

Bus Stop

Broadway M1 or M6
West Houston Street and Broadway.

West Houston Street and West
Broadway.

Friends of Cast Iron Architecture (FCIA) is a membership organization founded by Margot Gayle over ten years ago to protect iron-fronted buildings and cast-iron ornaments in cities and towns throughout America. FCIA was a notable force in encouraging the New York City Landmarks Preservation Commission to designate SoHo a historic district in 1973 and was the first group to offer walking tours of this architecturally distinguished area. Through publications, lectures, guided walks, and a technical advisory service, FCIA disseminates information to municipalities, preservation organizations, restoration architects, and building owners on the means of preserving and restoring cast iron.

Margot Gayle has directed FCIA since its inception. A former staff writer for CBS and a dedicated preservationist, Ms. Gayle has received wide recognition and many awards for her ceaseless efforts to preserve cast-iron structures.

Robin Lynn is an architectural historian and freelance writer who conducts walking tours of New York City's neighborhoods. In her work with FCIA during the last five years, she has led groups through SoHo, Tribeca, the Ladies' Mile, and even past cast-iron bridges in Central Park.

Friends of Cast Iron Architecture 235 East 87th Street New York, NY 10128

