Landmarks Preservation Commission December 13, 2016, Designation List 492 LP-0962

### EXCELSIOR STEAM POWER COMPANY BUILDING, 33-43 Gold Street, Manhattan

Built 1882, 1887-89; architect and engineer, William C. Gunnell; mason and builder, Robert L. Darragh

Landmark Site: Borough of Manhattan Tax Map Block 77 Lot 24 in part, consisting of former Lot 25, 1 the portion of Lot 24 bounded by a line beginning at the northeast corner of the Excelsior Steam Power Company Building, located at a point on the eastern lot line approximately 94 feet 3½ inches south of the southwest corner of Gold Street and Fulton Street; thence running southerly along the eastern lot line approximately 125 feet 6 inches to the southern lot line; thence running westerly along the southern lot line approximately 97 feet to the western lot line; thence running northerly along the western lot line approximately 124 feet 8 inches to the northwest corner of said building; thence running easterly along the exterior of the northern wall of said building approximately 99 feet 11½ inches to the point of beginning.

On May 10, 1977, the Landmarks Preservation Commission held a public hearing on the proposed designation as a Landmark of the Excelsior Power Company Building and the proposed designation of the related Landmark Site (Item No. 6). The hearing had been duly advertised in accordance with the provisions of law. A representative of the building's owner testified in opposition to the proposed designation, and a representative of the Municipal Art Society testified in favor of the proposed designation. The Commission also received two letters in favor of designation, including a letter from Elliot Willensky, co-author of *The AIA Guide to New York City*.

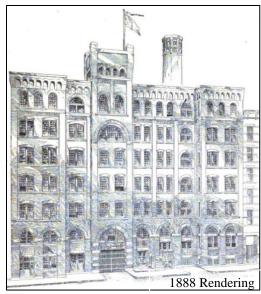
On November 5, 2015, the Landmarks Preservation Commission held a special public hearing on Backlog Initiative Items in the Borough of Manhattan, including the Excelsior Power Company Building and the related Landmark Site (Item I—Borough of Manhattan Group A, c). The hearing had been duly advertised in accordance with the provisions of law. Five speakers testified in favor of the proposed designation, including Borough President Gale Brewer and representatives of Council Member Margaret Chin, Community Board 1, the Historic Districts Council, and the Victorian Society of New York. A representative of the New York Landmarks Conservancy testified in opposition to the proposed designation. The Commission also received seven written submissions in favor of the proposed designation, including submissions from the Society for the Architecture of the City and from historian Joseph J. Cunningham, author of the book *New York Power*.

Statements about support for the Excelsior Power Company Building during the backlog process reflect specific testimony given or submitted during the hearing or while the record was open. In addition, the Commission received numerous more general communications about the backlog that were directed at all items on the backlog. These items were not specifically submitted while the record was open. Due to the volume and variety of these more general emails they are not tallied for individual buildings.

### **Summary**

A monumental reminder of New York's key role in the development of electric lighting and power systems in the United States, the Excelsior Steam Power Company Building is the oldest-known purpose-built commercial generating station standing in Manhattan. It is one of the few major structures remaining from Manhattan's pioneering era for electric lighting and power, which began with the illumination of a portion of Broadway with arc lamps in 1880 and ended with the consolidation of dozens of utilities into the New York Edison Company in 1901.

Designed by engineer and architect William C. Gunnell and constructed by master mason Robert L. Darragh, the Excelsior Building was operational by 1888, when it began generating and distributing electric power to printing houses, jewelry



manufacturers, and other industrial clients within the surrounding area for their elevators, presses, beveling machinery, and other equipment. Its seven 50-horsepower dynamos, and the motors used by its customers, were designed and manufactured by Leo Daft, an English immigrant who came to the United States in 1866. By the mid-1880s, Daft was a leading figure in the development of commercial electric power systems, having designed the first such system for Boston in 1884. In that year, Daft also installed, in Lower Manhattan, New York's first two electric elevator motors, which were powered by a Daft generator installed alongside the engines of the Excelsior Steam Power Company in its Spruce Street headquarters. Over subsequent years, Daft's electrical network, powered by Excelsior's steam engines, spread rapidly in Lower Manhattan, leading to the replacement of steam engines with small electric motors in many New York City businesses. Its success led Excelsior to begin planning and constructing this building in 1887. By 1888, Daft was upgrading the building's generators, which included a ten-ton, 250-horsepower model reported to be "the largest dynamo in the world."

The Excelsior Building is a handsome example of the muscular industrial architecture of the 1880s. Romanesque Revival in style, it has a five-part main facade with projecting end and tower pavilions and a high base decorated with foliated terra-cotta plaques and a metal sign identifying the building in elegant period lettering. The precision and quality of Darragh's brickwork is evident throughout the facade, but especially in its large round arches with their deep reveals, curved profiles, intricately fitted gauged bricks, and denticulated archivolts. The building's machicolated cornice and stout tower add to its massive, fortress-like appearance.

The Excelsior Steam Power Company Building provided electricity for lighting and power to local factories and office buildings for many years and was later converted from a generating station into a substation. In 1978, Consolidated Edison sold the building and it was subsequently renovated for residential use. Nestled among the office towers, apartment houses, and hotels of Lower Manhattan on narrow Gold Street, the Excelsior Steam Power Company Building remains a significant link to Lower Manhattan's industrial past. Having played a major role in New York's transition from steam power to electricity, it recalls its area's former prominence as the nation's media capital and as an industrial beehive populated by hundreds of printers, jewelry makers, and other manufacturing concerns.

#### DESCRIPTION

Designed by William C. Gunnell and built by mason Robert L. Darragh, the Excelsior Steam Power Company Building has a Romanesque Revival style main facade fronting on Gold Street. The building, when completed, was seven stories with a tower extending above the seventh story. One-story rooftop additions were constructed south of the tower around 1902 and north of the tower around 1979. The earliest portion of the building constructed was at the northwest corner of the lot, in 1882; this work, for a previous owner, the American Heating and Power Company, did not include the front of the present building. The building essentially gained its present form between 1887 and 1889, when it was constructed by Darragh according to modified plans by Gunnell for the property's new owner, the Excelsior Steam Power Company. The northern two-thirds of the building, including and extending northward from the tower pavilion containing the large second-story arch and "Excelsior Power Co. Bldg." sign, was completed by April of 1888, when work began, under a separate application, for a full-height 40foot addition that extended the building to the southern lot line. The second-story bracket lamp, installed circa 1913, was designated as part of the Landmarks Preservation Commission's designation of more than 100 historic street lamps in 1997. At the time of designation, a sidewalk bridge was installed in front of the building.

### East (Gold Street) Facade

Historic: Belgian-block driveway with granite curbing in front of (reading south to north/left to right) fourth bay; granite building base; red brick facade, laid in common bond: asymmetrical five-part facade with projecting end pavilions and tower pavilion slightly to the south of facade's center; square-headed first-story openings with rough-faced brownstone lintels; granite step in front of former entrance at first first-story bay; metal sill containing small round lights at second first-story bay; rough-faced brownstone blocks flanking former freight-entrance opening at first story of tower pavilion; plaques reading "1888" and "A. D." below border of terra-cotta rosettes, reused from decorative panel originally over first-story opening one bay to the north; metal "EXCELSIOR POWER CO. BLDG." sign; metal bracket lamp (installed c. 1913); curved-brick piers supporting round second-story arches composed of curved gauged bricks with rough-faced stone imposts and denticulated archivolts; foliated terra-cotta plaques over second-story arches on recessed portions of facade; quadruple-rowlock second-story arches with denticulated archivolts on north and south faces of end pavilions; projecting piers and mixture of round and segmental gauged-brick arched openings at upper stories; denticulated archivolts over round-arched upper-story openings; corbelled patterned brick above sixth-story openings and seventh-story tower openings; machicolated cornice; tower with round-arched openings with corbelled corner piers.

Alterations: Hydrant at front of driveway; concrete walls in front of basement entrance; stoop between (reading south to north/left to right) fifth and sixth bays removed prior to 1977; first and third first-story bays converted from door to window openings (c. 1979); former freight-entrance opening at fourth first-story bay (on tower pavilion) filled with brick, windows, and through-wall air-conditioning unit (c. 1979); brick infill and replacement door within fifth first-story bay (c. 1979); terra-cotta plaque reading "A. D. 1888" within a field of rosettes removed from over fifth first-story bay and some rosettes and "A. D. 1888" portion of plaque (reversed to read "1888 A. D.") relocated to area beneath Excelsior sign (c. 1979); former location of terra-cotta plaque replaced with sashes (c. 1979); multipane sashes at base, including tripartite window

over Excelsior sign, replaced (c. 1979); first-story window grilles; tripartite windows within large round-arched openings at upper stories, and multipane double-hung sashes within other upper-story window openings, replaced; portion of machicolated parapet south of tower removed, and one-story rooftop addition constructed (c. 1902); brick rooftop addition north of tower (c. 1979); smokestack near northwest corner of building removed (c. 1922); rooftop water tank.

#### SITE HISTORY

## Lower Manhattan's Printing and Jewelry Districts<sup>2</sup>

At the time of its construction in the 1880s, the Excelsior Steam Power Company Building's location on Gold Street just south of Fulton Street placed it within Manhattan's printing and jewelry districts. Extending southward from the Brooklyn Bridge to around John Street, the printing district had been the city's press center since the 1830s, when Nassau Street was home to 14 newspapers as well as "numerous bookstores, stationers, paper-warehouses, printers, bookbinders," and religious periodicals. In 1842, the *New York Herald* and its rival penny paper the *Sun* moved to the intersection of Fulton and Nassau Streets, and in 1858, the *Times* occupied its new headquarters at Park Row and Spruce Street (Thomas R. Jackson, demolished) overlooking City Hall. So advantageous was Park Row as a newspaper center that many other papers soon followed, and by the 1860s, Park Row had become known as "Newspaper Row" and the plaza at its northern end, at Spruce Street, as "Printing House Square." Much of the industry's spectacular growth during this period was made possible by the 1847 invention and introduction of the rotary steam press by New York native Richard M. Hoe.

At their height, the newspapers surrounding Printing House Square produced more than a quarter of a million papers each day; given the city's economic, political, and cultural influence, the area was considered America's preeminent press center. Reflecting their burgeoning wealth and status, newspaper companies began constructing mammoth new skyscrapers in the 1870s that were among the city's most-visible and best-known landmarks of the time. The shift of newspapers away from the area began after the *Herald* moved to Sixth Avenue and 35th Street in 1895 and the *Times* moved to Longacre Square (subsequently renamed Times Square) in 1904, although most of the city's newspapers remained in Lower Manhattan through the 1920s. While newspapers were the district's most prominent businesses, the area was also home to dozens of other printing-related firms, including job printers, which operated throughout the area between Park Row and Broadway and the East River. By the middle of the 19<sup>th</sup> century, New York was "the printing capital of the United States," and this area was its heart.

In the district's southern portion, printers operated side-by-side with manufacturers and other suppliers of the city's premier jewelry and watch district, which was centered on Maiden Lane. Located there since the 1840s, the jewelry district had spread to Nassau and other neighboring streets by the following decade; after the Civil War, it emerged as the most important jewelry center in the United States for wholesale jobbers, supply houses, and retail firms. Although increasing rents were driving some firms out of the area by the 1880s, many stayed, attracted by its rich assortment of manufacturers, craftspeople, and other suppliers. In 1925, it was reported that "more than 2,400 jewelry concerns are still located in the old Maiden Lane district and it would be impossible for even one-half of them to move uptown, especially those who require manufacturing facilities." Nevertheless, the increasing movement of

insurance and financial firms into the district as well as the construction, starting in the 1920s, of dedicated jewelers' facilities on West 47th Street, soon led many jewelers to relocate to Midtown. In 1941, the Diamond Dealers Club, which had been founded just ten years earlier at Fulton and Nassau Streets, moved to West 47th Street, marking the end of Maiden Lane's century-long preeminence as the city's jewelry center and cementing West 47th Street's status as its new "Diamond District."

### Early Electric Lighting and Power in Manhattan<sup>8</sup>

The site of Thomas Edison's pioneering Pearl Street power station, the longtime home of Nikola Tesla, and a key early battleground in the rivalry between alternating-current (AC) and direct-current (DC) systems, Manhattan played a leading role in the development of commercial electric lighting and power systems. It entered the electrical age on December 20, 1880, when the Brush Electric Light Company illuminated several blocks of Broadway stretching northward from Union Square with pole-mounted arc lights. These lamps, which reached 34th Street the following year, were supplied by the city's first electric lighting station, constructed by the Brush Company at 133 West 25th Street. Although arc-light use subsequently expanded in Manhattan, illuminating streets, docks, and large interior spaces such as warehouses, factories, theaters, and department stores, the technology had many shortcomings, most notably the glaring quality of its light, which was too intense for homes and offices.

One year before Brush instituted its Broadway arc-light service, Thomas Edison filed a patent for an evacuated glass bulb containing a carbonized filament, the basis for practical incandescent lighting. In December of 1880, the Edison Electric Illuminating Company was established to build a model generating plant, which Edison sited in Lower Manhattan among the bankers and financiers whose support would be crucial to his venture's long-term success. On September 4, 1882, direct current flowed from Edison's generators at 255-257 Pearl Street, illuminating light bulbs in the Wall Street offices of Drexel, Morgan & Company, at the *New York Times*, and in other nearby businesses, and "initiating the modern era of electricity." The area served by the Pearl Street station, roughly bounded by Spruce and Wall Streets on the north and south, and extending from Nassau Street to the East River, has been dubbed the "First District" given its seminal role in the history of electric service.

Although Edison was the leader in this field, the city soon granted franchises to more than two-dozen competing firms to provide electricity throughout Manhattan. Because of direct current's limited range, each generating station could only supply an area of about one square mile; Edison estimated that 36 powerhouses would be needed to provide service below 59th Street. In 1888, the firm opened two uptown generating stations at 47 West 26th Street and 117 West 39th Street to serve their surrounding blocks, which were filled with businesses eager to adopt this fashionable new technology. Although electricity was primarily used for lighting, researchers were developing electric motors and power systems that could replace the noisy, dirty steam engines powering most industrial equipment at that time. Among the leaders in this field was Leo Daft, whose dynamos would occupy the basement of the Excelsior Steam Power Company Building.

The introduction of alternating-current systems revolutionized the industry, obviating the need for the small local generating stations of Edison's system and allowing for the construction of enormous powerhouses serving a wide area. <sup>12</sup> George Westinghouse, who had licensed numerous European and American patents related to alternating current, including those of the brilliant Nikola Tesla, was AC's main champion in the United States. "Like Brush and Edison,

Westinghouse viewed New York City as vital to the promotion of his system," according to historian Joseph J. Cunningham, and in 1889, he gained control of a small Manhattan utility and reorganized it under the name of United Electric Light and Power, which expanded AC service throughout Manhattan during the 1890s. <sup>13</sup> At the same time, the industry was consolidating, largely through the efforts of Anthony N. Brady, who in the late 1890s joined several utilities—including the Edison Electric Illuminating Company, as well as Excelsior's successor firm, the New York Heat, Light and Power Company—under the name of the New York Gas and Electric Heat, Light and Power Company. The Consolidated Gas Company subsequently acquired a controlling interest in this firm as well as United, merging them, in 1901, into the New York Edison Company and gaining a practical monopoly on gas and electric service in Manhattan and much of the Bronx. That year also saw the opening of Waterside, a massive AC powerhouse on the East River at 38th Street. <sup>14</sup>

New York Edison's creation marked the end of the pioneering era for electric lighting and power in New York City. Over little more than two decades, Manhattan had seen its first electric street lights and generating station; the country's first commercial incandescent lighting with the opening of Thomas Edison's Pearl Street station; its first replacement of steam engines with electric motors; the launch and expansion of alternating current throughout the borough; the construction of Manhattan's first mammoth riverfront generating station; and the consolidation of an industry populated by dozens of competing utilities into a single entity. The Excelsior Steam Power Company Building is a major landmark of this era. The oldest-known purpose-built commercial generating station surviving in Manhattan, its location within Lower Manhattan's "First District" recalls the crucial role this area played in commercializing electricity for power and lighting in the United States. 15

## Leo Daft<sup>16</sup>

Born in Birmingham, England, in 1843, Leo Daft was a major figure in the development of electric systems for powering machinery and railroads. His father, Thomas B. Daft, was a civil engineer who was friends with many of England's most prominent engineers and inventors of the time; young Leo's "first toys were electrical batteries, and he had a small workshop rigged up at his home where he spent most of his leisure hours experimenting with electricity, steam, and other forces." In 1858, Leo went to work as a draftsman in his father's London office, and in 1859 he entered University College, London. For a while, Daft worked for his father as an electrician and agent, which took him to Liverpool, "where he came into contact with several enthusiastic Americans, and in a short time made up his mind to leave England." 18

Daft sailed from Liverpool to New York in 1866, first working as a railroad engineer in Kentucky before manufacturing electrical annunciators in Philadelphia. When this enterprise failed, Daft opened a photography studio in Troy, New York. Despite his success in this field, Daft decided to return to electrical engineering following his father's 1879 death. With several associates, he formed a company called the New York Electric Light Association, which had a small factory on Centre Street and was soon merged into a new firm, the Daft Electric Light Company. In 1881, the Daft Company moved its factory to the Greenville neighborhood of Jersey City, where, despite its name, "the company was almost immediately and exclusively devoted to the development of electric power." Among the company's early successes was its installation, in 1883, of an electric elevator at Garner Cotton Mills in Newburgh, New York. Powered by a Daft motor and dynamo, it was probably the first electric elevator in the United States and represented, at that time, one of "but two instances where an electro-motor is in

practical use" according to a contemporary account in the journal *The Electrician*. One year later, Daft furnished all the equipment for a new generating station in Boston constructed by the Massachusetts Electric Power Company. Designed to provide electricity specifically for power rather than lighting, this was "the first ... complete central station for the electrical distribution of power on a commercial scale" in the country. <sup>21</sup>

In addition to his work on power transmission and industrial motors, Daft was recognized as "one of the pioneers in electric railroading." In November of 1883, his locomotive the *Ampere* traversed the full ten miles of the Saratoga, Mt. McGregor & Lake George Railroad, marking "the first public experiment ... in this country in the use of the electric motor upon an ordinary railway." One year later, he provided the locomotive for a new railway on Coney Island's West Brighton pier, which was reported to be "the only electric railway for commercial purposes in America" at that time. In August of 1885, the Baltimore Union Passenger Railway began operating Daft electric equipment on its Hampden branch, making it the country's first electric railroad with regular service. Daft's electric locomotive, the *Ben Franklin*, ran on an experimental basis on Manhattan's Ninth Avenue Elevated line in 1884 and over the fall and winter of 1888-89.

When it installed its equipment in the Excelsior Building in the late 1880s, the Daft Electric Light Company was at its peak. In 1888, it moved to a huge new factory in the Marion neighborhood of Jersey City, where its facilities were reported to be "unexcelled by those of any similar company in the world," employing hundreds of workers. The "magnificently lighted" factory was remarkable for its extensive use of electric motors, which were powered by a large dynamo in its engine room. The company's success was short-lived, however, and following its purchase in 1890 by the United Electric Traction Company, it fell into receivership by 1896. After the sale of his company, Daft moved to Seattle, where he served as a consulting engineer on large railway and lighting projects. He later consulted on special projects for General Electric and Westinghouse, returned to England, moved back to New Jersey by 1910, and settled in Manhattan by 1920. Toward the end of his life, Daft was working in the electrochemical field. He died in Albany in 1922 at the age of 78.

# Architect and Engineer William C. Gunnell<sup>29</sup>

The architect and engineer of the Excelsior Building, William Covington Gunnell, was born in Washington, D.C. in 1834 and graduated from Columbian College—the forerunner of George Washington University—in 1851. In his early career, Gunnell worked on the construction of the Washington Aqueduct and as an assistant engineer on the construction of the United States Capitol Dome. During the Civil War, Gunnell oversaw the construction and maintenance of the fortifications defending Washington along the north side of the Potomac River, a role in which he was praised for exhibiting "great zeal and intelligence." <sup>30</sup> Gunnell served as Engineer of United States Commissions at the Paris Expositions of 1867 and 1889, receiving the French Legion of Honor for his work on the latter fair. He opened a New York office, first on Pine Street and later at 90 Broadway, by 1869, and lived at various Manhattan addresses between 1872 and 1874 before moving to Connecticut to serve as chief engineer, under architect Richard M. Upjohn, on the construction of the Connecticut State Capitol (1872-78). During his time in Hartford, Gunnell continued to maintain a New York office, on Nassau Street. He returned to New York by 1882 and despite later moving to Washington, he maintained his Nassau Street office until around 1900. Although little else is known about Gunnell's work, he was described in 1903 as "architect of various constructions for industrial companies and the

United States Government in New York, Virginia, Illinois, Connecticut, and the District of Columbia."<sup>31</sup> Toward the end of his life, he was living with his nephew's family in Fairfax County, Virginia, where he died in 1926 at the age of 92. The Excelsior Building is Gunnell's only-known work in New York City.<sup>32</sup>

## Mason and Builder Robert L. Darragh<sup>33</sup>

Master mason Robert L. Darragh was one of the city's most prominent builders. Born in New York in 1825, he appears to have started out as a mason's apprentice before opening his own firm. Over the course of his career, Darragh was credited as the mason or builder for dozens of Manhattan structures, including residences, hotels, office buildings, stables, and factories designed by some of the city's leading architects. He erected several buildings designed by John B. Snook, including the Rossmore Hotel at Broadway and 41st Street (1873-75), the Lincoln Safe Deposit Building at 32 East 42nd Street (1882-83), and the lavish "Triple Palace" of William Henry Vanderbilt, his wife Maria, and their daughters Margaret Shepard and Emily Sloan, on Fifth Avenue between 51st and 52nd Streets (1879-82).

Other high-profile commissions for Darragh included the United Bank Building at the northeast corner of Wall Street and Broadway (1880-81) designed by the prestigious Boston firm of Peabody & Stearns; Union Theological Seminary at Park Avenue between East 69th and 70th Streets (William A. Potter, 1882-84); and the nine-story Dalhousie at 59th Street between Fifth and Sixth Avenues (John Correja, 1883-84), one of the city's earliest luxury apartment houses. Within the Lower Manhattan printing district, in addition to the Excelsior Building, Darragh served as mason for the Evening Post Building at the corner of Broadway and Fulton Streets (Thomas Stent, 1875), for a massive eight-story brick printing house for N. L. Munro (1882), and for the World Building on Park Row (George B. Post, 1889-90), the tallest building ever constructed up to that time. Darragh was also the mason for the "Telephone Building" at 140 Spring Street (1889-90, within the SoHo-Cast Iron Historic District) designed by Cyrus L. W. Eidlitz. Among his last projects was the Home Life Insurance Building on Broadway opposite City Hall Park (1892-94, a designated New York City Landmark); designed by Napoleon LeBrun & Son, this skyscraper was nearing completion at the time of Darragh's death in 1894.

# Construction of the Excelsior Steam Power Company Building<sup>37</sup>

Work on the Excelsior Building was initiated by a separate firm, the American Heating and Power Company, in 1882. American Heating and Power was one of the first two companies providing steam from centralized plants, through underground pipes, to Manhattan homes and businesses. Steam was in widespread use of that time, for heating and for powering elevators and other machinery, but businesses and buildings using this kind of equipment either had to maintain their own boilers—which required constant oversight, consumed immense amounts of coal, and presented a very real danger of explosion—or purchase power from a firm like the Excelsior Steam Power Company, which distributed power from a central steam engine to customers through a system of shafts and belts. Shortly after American Heating and Power's rival firm, the New York Steam Company, initiated service from its Greenwich Street station in 1882, the *Evening Post* marveled at the prospect of "furnishing New Yorkers with steam heat and power from central stations, just as gas is furnished from the gas works." 38

Although American Heating and Power lagged slightly behind the New York Steam Company in initiating service, it began laying its mains in the fall of 1881. In January of 1882, it purchased the lot at 33-43 Gold Street and began modifying an existing structure on the site to

serve as a coalhouse.<sup>39</sup> Three months later, William C. Gunnell filed plans for a new four-story, \$150,000 "steam heating and power works" there.<sup>40</sup> By June of 1882, American Heating and Power had installed a half-mile of pipe beneath portions of John, Pine, Cedar, Liberty, and Wall Streets and was beginning to install mains under Gold Street. Although it appears to have begun delivering steam by the end of that summer, the firm almost immediately encountered serious problems, starting with an explosion from its John Street main in early November that terrified pedestrians, snarled traffic, and coated surrounding buildings in a thick layer of the lampblack used to insulate its pipes. After a similar incident at Nassau and John Streets in which "the bed of the street was thrown up violently and a miniature Vesuvius spouted up," the *Evening Telegram* declared the American Heating and Power Company to be "an unmitigated nuisance," noting that at least one lawsuit had been filed against the firm.<sup>41</sup> By May of 1883, the company was in receivership.

The property of the American Heating and Power Company, including its patents and the Gold Street site, was purchased by a group of its bondholders at auction in 1884. The Excelsior Steam Power Company acquired the Gold Street parcel in early October of 1887. Later that month, Gunnell, now working for Excelsior, filed an alteration application for the former American Heating and Power Company structure, noting that of the four-story building originally planned by the firm, only "part of the basement and the first two stories" had been finished. All of the completed work appears to have been at the northwest corner of the present building and did not include any of the current front facade. 43

The Excelsior Company, with Robert L. Darragh as its mason, proposed to modify the original plans for the building, including raising it to seven stories and setting a portion of the facade back from narrow Gold Street to allow more light to reach the lower floors. This work encompassed the northern two-thirds of the present building, including, and extending northward from, the portion of the facade containing the large second-story arch and "Excelsior Power Co. Bldg." sign. It was completed by April of 1888, when Gunnell filed another application, with Darragh again serving as mason, for a full-height 40-foot addition that extended the building to its southern lot line and essentially gave it its present form. All of this work was completed by March of 1889. 44

# The Design of the Building<sup>45</sup>

The Excelsior Steam Power Company Building is a handsome example of the muscular industrial architecture of the 1880s, much of which survives in the nearby Tribeca Historic Districts. Like many industrial buildings of the period, the Excelsior Building is primarily Romanesque Revival in style, reflecting aspects of the style as popularized by Henry Hobson Richardson, including its use of large round arches and rough-faced stone and general feeling of massiveness. Industrial buildings were growing ever larger at that time, and to prevent them from appearing monotonous, architects often broke up their facades into smaller units and used other devices to promote visual interest. Gunnell divided the Excelsior Building's 125-foot main facade into five alternately projecting and receding sections, including two end pavilions and a shallower tower pavilion just south of the building's center. These sections' varying widths and the tower's off-center placement reflect the planning and construction of the Excelsior Building in stages.

Grouped repeating arches, or arcades, were frequently used to break up large facades and draw the eye, and Gunnell incorporated them at the second and seventh stories. The second-story arches spring from deep curved piers and crown the most-decorated portion of the facade, its

high base, where they are surrounded by ornate, foliated terra-cotta plaques. The largest second-story arch, on the tower pavilion, crowns a sign identifying the building in elegant period lettering. Beneath this sign was the building's enormous freight entrance; heavy rough-faced stone blocks flank this former opening and serve as imposing ground-story lintels and as imposts for the second-story arches. Gunnell added variety to the upper stories by interspersing round arches among its segmentally arched openings, and by grouping these openings between projecting brick piers that convey the strength of the underlying structure. These piers contribute to the facade's verticality and its monumentality, a quality that is especially apparent when viewing the building from narrow Gold Street. Horizontal elements, including arcades, shallow denticulated sills, and a machicolated parapet, partially relieve the facade's vertical thrust.

Robert L. Darragh's masonry work is impeccable. Its quality and precision are evident throughout the facade but especially in its second-story arches, with their deep reveals, curved profiles, intricately fitted gauged bricks, and denticulated archivolts. Equally impressive are the quadruple-rowlock arches with similar archivolts on the north and south faces of the end pavilions. Corbelled, patterned brick above the sixth-story window openings draws the eye upward toward the building's stout tower—a characteristic feature of industrial buildings during this period—and its corbelled-brick piers.

Adjoining the large second-story arch on the tower pavilion is a historic bracket lamp, installed as part of an early-20<sup>th</sup>-century campaign to light the narrow streets of Lower Manhattan. A bracket version of the arms installed as part of the "Boulevard" lighting system introduced on Broadway in 1908, it retains its original scrollwork and fixture. Along with more than 100 other historic streetlamps, this bracket lamp was officially designated as a New York City Landmark in 1997. <sup>46</sup>

# The Excelsior Steam Power Company Building as a Pioneering Generating Station<sup>47</sup>

A major contributor to New York's transition from steam power to electricity, the Excelsior Power Company Building represents a signature achievement of its time in generating and distributing electric power on a commercial scale. It traces its roots to Manhattan's first commercial steam plant, which opened on Spruce Street just east of Printing House Square around the late 1850s, with a small boiler and steam engine supplying power to businesses in two buildings. In 1873, this operation came under the control of a new firm, the Excelsior Steam Power Company, which was soon renting "stores, basements, and lofts, with steam power day and night, in Frankfort, Spruce, Beekman, and William Streets." 48 By 1881, Excelsior was one of about a half-dozen companies in Lower Manhattan generating steam power using massive boilers and engines and distributing it to local businesses through a network of shafts running beneath the surrounding streets. Excelsior's "great engine," the New York Sun reported at that time, "supplies power to the Sun, Tribune, and Evening Mail newspaper offices, as well as to nearly all the job printing offices in Spruce and Frankfort Streets. At one of these offices alone nearly 100 weekly story papers and periodicals of one kind and another are printed."49 By 1887, the firm was operating three large engines developing 800 horsepower, which it distributed through shafts and belting over a four-block area. Its headquarters was at 13 Spruce Street (demolished), where Excelsior's offices were on the second floor and its equipment occupied the cellar and basement.<sup>50</sup>

As Excelsior grew to become a major power supplier in Lower Manhattan, Leo Daft was building his reputation as a pioneer in electric power distribution. In the early 1880s, practical electric motors were in their infancy and the electric utilities were essentially illuminating

companies; as the journal *The Electrician* noted in October of 1883, "While about half the illuminating companies have been incorporated as Electric Light *and Power* companies ... we doubt whether one of them ever exercised the right to sell power furnished by electro-motors." This, specifically, was Daft's goal: to create a distinct electric power supply for industrial customers, employing motors and dynamos designed and manufactured by his company as part of a complete package called the Daft System of Electrical Transmission. It began to be realized with the 1884 opening of the Massachusetts Electric Power Company's pioneering Boston plant, which used Daft's system and was the first "special motor circuit" providing commercial electric power in the country.

In an early demonstration of Daft's proficiency, the journal *The Electrical World* hired him to design a system for its display at the 1884 International Electrical Exhibition in Philadelphia that would enable it to print its weekly edition onsite using electricity. His equipment, which included a Daft dynamo and motor powering a specially designed press, was successful, making *The Electrical World* "the only paper that has ever printed regular editions, week by week, with the aid of electricity." The journal hoped that this achievement, which was covered nationally and around the world, would "assist materially in hastening the day when the transmission of power by an electric current will be as common and universal as the present distribution of water, gas, or steam." Certainly it did not go unnoticed in New York's printing district or by the management of the Excelsior Steam Power Company, which included one of the city's major printers, Martin B. Brown, among its leaders.

Daft's company had already entered into an agreement with a new firm called the Electric Power Company to operate its system in New York, and by January of 1884, it had installed a Daft generator alongside the engines of the Excelsior Steam Power Company at 13 Spruce Street. Within the next three months, the first two electric elevators in the city's history, powered by Daft motors supplied by the Spruce Street generator, started operating in two leather warehouses at 32 and 34 Spruce. In 1885, the Electric Power Company formalized its relationship with Excelsior, which apparently saw itself being supplanted by direct steam service and viewed electricity as a necessary "substitute and supplement" to its business.<sup>54</sup> One year later, The Electrical World reported that "The Electric Power Company of New York ... is ... constantly adding to its plant. Many of the elevators, printing presses, shafting lathes, and ventilating fans situated below Chambers Street are operated by this company."55 The Daft motors powering this equipment were leased to customers, who paid a weekly charge covering their use of the motors, electrical current, maintenance, and repairs. By the summer of 1887, Excelsior was reported to be experiencing "a remarkable call for motors" and was working on "a steam plant specially designed for electricity generating purposes."<sup>56</sup> Daft at that time was the recognized leader in commercial electric power, with its New York system providing 200 horsepower and its Boston system about half as much.<sup>57</sup>

Work on the new Excelsior Steam Power Company Building began in October of 1887 and its dynamos were generating electricity for customers by July of 1888. One month later, the *Evening Post* reported on the rapid replacement of steam engines with small electric motors in "city workshops," calling the Daft Company "the pioneer in this business" and including a description of the new Excelsior Building.<sup>58</sup> Although its upper stories were rented out to industrial firms and other tenants, the building's basement contained six boilers and a massive steam engine transmitting power through a 14-foot flywheel and 30-inch-wide belt to seven 50-horsepower dynamos. The electricity generated by these dynamos was distributed to more than 100 nearby businesses, mostly in the printing, jewelry, and leather trades, which used Daft

motors to run a variety of equipment including "elevators, ventilating fans, printing presses, shoemaking machinery, leather-stamping machinery, paper-cutting machines, diamond cutters, bookbinding machines, beveling wheels, pumps, jewelers' machinery, plating and polishing machinery, [and] lens grinders." "Whatever can be done with the small steam engine, from ten horsepower down to enough force to run a sewing machine, can be done by the electric motors at a decided saving of trouble and with a saving in expense," the *Post* explained, adding that "Electricity now promises to ... replace the steam engine ... [with] an electric motor, occupying half the space, making no noise, giving out no heat, and requiring no attention compared to a steam engine." In many workshops, Daft motors did replace steam engines; in others, they supplanted horses or foot treadles, and in one business, a Daft motor did "the work of six persons" previously needed to "hoist up a hatchway six stories high."

Daft was constantly improving his equipment, and by the end of 1888, he was already constructing much-larger dynamos to be installed in the building, including a 250-horsepower, ten-ton model that was reported to be "the largest dynamo in the world." Within that year, the Electric Power Company also equipped and activated a "West Side circuit," with its generators at Park Place and College Place (now West Broadway), and stretching from Leonard Street to Cortlandt Street and from Broadway to the Hudson River. The Excelsior Building continued to serve as the generating station for the company's larger East Side circuit, which reached from Chambers to Beaver Street and from Broadway to the Hudson River.

In 1901, the engineering journal *Cassier's Magazine* looked back on Daft's accomplishments in New York, observing that

In 1889 about 700 horsepower was daily distributed by the Daft system to about 200 consumers in quantities varying from ½ to 30 horsepower. All the apparatus, including motors, generators, switches, meters, etc., was of Mr. Daft's design, and there was probably no other installation of the kind in that respect in the world. In other words, Mr. Daft was the only inventor, up to that time, who had taken up the problem of the distribution of power electrically and worked it out in the same manner as current for lighting, providing and perfecting the necessary apparatus throughout. 63

#### Later History

In 1895, the Excelsior Steam Power Company merged with the New York Heat, Light and Power Company, which had been founded four years earlier and was "said to be successor" to the Daft Electric Light Company. The Excelsior Building continued in use as the powerhouse for the combined firm, which furnished "electric light and electric power at low, safe voltage" that was "on all day and all night" and "always ready for use." Customers at that time included the *New York Daily Press*, area factories and office buildings, and the "Excelsior Power Building (with its many manufactories)," which included printing-related firms and jewelry manufacturers. The plant also apparently supplied steam heat to area customers. This firm later became part of the New York Gas and Electric, Heat Light and Power Company, which merged with the New York Edison Company in 1901. Minor changes to the building in the 1890s included the addition of a rooftop bulkhead in 1892 and the installation of skylights in 1899.

Despite the construction of mammoth new alternating-current powerhouses at the turn of the 20<sup>th</sup> century, the city's extensive direct-current infrastructure, the superiority of early DC motors, and the widespread use of DC-powered equipment ensured direct-current's survival for decades to come. As a result, many of Manhattan's local generating stations were turned into

substations that converted the alternating current produced by powerhouses into direct current used by customers. According to historian Joseph J. Cunningham, the Excelsior Building was equipped as a substation in 1899 and retained standby generators into the early 1920s. During the early 20<sup>th</sup> century, New York Edison made relatively few exterior changes to the building, although it did construct a 12-foot-high addition on the southern portion of its roof in 1902. The building retained industrial tenants on its upper floors into the early 1920s, when its occupants included bookbinders Eidenoff & Grabowitsky and, on its top four floors, jewelry manufacturers Goldsmith & Stern. These tenants were gone by 1923, when the building's basement through third floors contained a transformer station, and the floors above were dedicated to various office functions. In 1949, the building's function was described as "substation and office storage." Following the creation of the Consolidated Edison Company in 1936, the Gold Street station functioned in a supporting role during peak-load times. It appears to have been decommissioned by 1961 and was unused for many years.

In 1978, Con Edison sold the Excelsior Steam Power Company Building and the adjacent building at the southwest corner of Fulton and Gold Streets, and the two buildings were converted to apartments by the firm of Wechsler, Grasso & Menziuso in 1979. Thanges made at that time included sash replacement and the installation of brick infill and new doors and windows at the building's base, and the construction of a single-story brick rooftop addition north of its tower. Despite these changes, the Excelsior Steam Power Company Building continues to serve as a monumental link to Lower Manhattan's industrial past and a reminder of its key role in the development of commercial electric service in the United States. One of the few major structures remaining from Manhattan's pioneering era in electric light and power service, it played a seminal role in the city's transition from steam to electric power and is the oldest-known purpose-built commercial generating station remaining in Manhattan. Today, its location on narrow Gold Street among the office buildings, apartment houses, and hotels of Lower Manhattan recalls both the limitations of direct-current technology—which required generators of electric current to be within close proximity of their customers—and the prominence of the surrounding area in the late 19<sup>th</sup> century as the nation's media capital and as an industrial beehive populated by hundreds of printers and jewelry-manufacturing concerns.

> Report prepared by Michael Caratzas Research Department

#### **NOTES**

<sup>&</sup>lt;sup>1</sup> The boundaries of Lot 25 are shown on the 1968 Manhattan Tax Map, accessed on December 5, 2016 from the New York City Department of Finance's Digital Tax Map site at gis.nyc.gov/taxmap/map.htm.

Portions of this section are adapted from LPC, American Tract Society Building Designation Report (LP-2038) (New York: City of New York, 1999), prepared by Jay Shockley; LPC, Bennett Building Designation Report (LP-1937) (New York: City of New York, 1995), prepared by Gale Harris; and LPC, 63 Nassau Street Building Designation Report (LP-2213) (New York: City of New York, 2007), prepared by Jay Shockley. Other sources include Janet Zapata, "Diamond District" and "Jewelry"; Michael Emery and Thorin Tritter, "Newspapers"; William S. Pretzer and G. Thomas Tanselle, "Printing"; and Lisa Keller, "Printing House Square," in Kenneth T. Jackson, Ed., The Encyclopedia of New York City (New Haven, Connecticut: Yale University Press, 2010), 365-66, 677-78, 893-906, 1037-38, and 1038; "Heavy Jewelry Robbery: A Scientific Burglary in a John-Street Jewelry-Store," New York Times, October 28, 1872, 8; "One More Landmark Gone: The Old 'Commercial Advertiser' Building Burned," New York Times, September 16, 1891, 5; "Hard Work for Firemen: Two Big Fulton Street Buildings Nearly Destroyed," New York Times, July 30, 1894, 1; "Join the Jewelers' Colony," New York Times, June 1, 1906, 7; "Jewelry Firms to Move Uptown," New York Times, January 9, 1924, 37; "Robbers Harvest \$37,000 in a Day," New York Times, February 7, 1924, 19; "Maiden Lane of the Jewelers," New York Times, February 17, 1924, SM7; "Uptown Trade Movement: Diamond Merchants Desert Maiden Lane District for Midtown Section," New York Times, February 19, 1924, 31; "Maiden Lane Still Is Jewelry Centre," New York Times, March 1, 1925, RE1; and "Two Firms Move Uptown," New York Times, December 28, 1927, 42.

<sup>&</sup>lt;sup>3</sup> "Paternoster Row of New-York," *New York Mirror*, May 14, 1836; Cited in LPC, *American Tract Society Building Designation Report*, 3.

<sup>&</sup>lt;sup>4</sup> These included the Tribune Building (Richard Morris Hunt, 1873-75, demolished) at 154 Nassau Street; the Evening Post Building (Thomas Stent, 1875, demolished) at Broadway and Fulton Street; the Times Building (George B. Post, 1887-89, a designated New York City Landmark), which replaced its 1857-58 predecessor at Park Row and Spruce Street; and the World Building (George B. Post, 1889-90, demolished) at 53 Park Row, the world's tallest building at the time of its completion. Other prominent skyscrapers of the time built in this vicinity include the Morse Building (Silliman & Farnsworth, 1878-80) at 140 Nassau Street; the Potter Building (N. G. Starkweather, 1883-86) at 35-38 Park Row; the Temple Court Building (Silliman & Farnsworth, 1889-90) at 3-9 Beekman Street; the Park Row Building (Robert H. Robertson, 1894-95) at 15 Park Row; and the American Tract Society Building (Robert H. Robertson, 1896-99) at 150 Nassau Street, all of which are designated New York City Landmarks.

<sup>&</sup>lt;sup>5</sup> Pretzer and Tanselle, 1038.

<sup>&</sup>lt;sup>6</sup> These included diamond and ribbon merchants; polishers, cutters, and setters of precious stones; gold and silver platers; enamelers; ornamental engravers; metal refiners; and makers of watch cases, diamond settings, badges, and medals. The 1891 article "One More Landmark Gone" describes the businesses present within the former Commercial Advertiser Building at the corner of Fulton and Nassau Streets, and the building at 85 Nassau Street, both of which had suffered a fire. According to the *Times*, "The ruined building and its damaged neighbor were literally beehives of industry. With a few notable exceptions they were occupied by small workshops, mostly of manufacturing jewelers and polishers, cutters and setters of precious stones."

<sup>&</sup>lt;sup>7</sup> "Maiden Lane Still Is Jewelry Centre."

<sup>&</sup>lt;sup>8</sup> Portions of this section are adapted from LPC, *Consolidated Edison Building Designation Report* (LP-2313) (New York: City of New York, 2009), prepared by Gale Harris. Other sources include Joseph J. Cunningham, *New York Power* (North Charleston, South Carolina: CreateSpace Independent Publishing Platform, IEEE Press, 2013); and William J. Hausman, "Light and Power," in Jackson, Ed., 744-46.

<sup>&</sup>lt;sup>9</sup> This building has been demolished.

<sup>&</sup>lt;sup>10</sup> Hausman, 745. Edison's Pearl Street station was destroyed by fire in 1890.

<sup>&</sup>lt;sup>11</sup> Both of these buildings have been demolished.

<sup>&</sup>lt;sup>12</sup> With alternating current, electricity can be transmitted at high voltage (and low resistance) over very long distances before being stepped down to a lower voltage near the point of use.

<sup>&</sup>lt;sup>13</sup> Cunningham, 39.

<sup>&</sup>lt;sup>14</sup> Conceived by Brady in 1899, Waterside distributed alternating current to substations that converted it to DC. It has been demolished.

<sup>&</sup>lt;sup>15</sup> Research was undertaken by the author to try to find older extant purpose-built commercial generating stations in Manhattan. This research included using Milo R. Maltbie's book, Franchises of Electrical Corporations of Greater New York (New York: Public Service Commission for the First District, 1911) to obtain the names of companies granted New York City electrical franchises prior to 1888. These companies included the Brush Electric Illuminating Company, Edison Electric Illuminating Company, United States Illuminating Company, Harlem Lighting Company, Mount Morris Electric Light, Ball Electric Light Company, East River Electric Light, Long Acre Electric Light and Power, Mutual Electric Illuminating, North New York Lighting Company, Safety Electric Light and Power, and Waterhouse Electric. Directories and historic maps were then used to find the locations of these companies' facilities. None were found to survive, except for a former Brush Company electric lighting station at 208-210 Elizabeth Street. When it was damaged by fire in August of 1888, this building contained "offices, shafting, machinery, lamps, and stores." The building was not purpose-built, however, having been adapted from its previous use as a soap factory. Following the fire, it was repaired and returned to service. See "Destruction of a Brush Station in New York," *The Electrical World*, August 21, 1886, 90; and "Alterations New York City," Real Estate Record and Builders' Guide (August 28, 1886), 1092. Joseph Cunningham considers the Excelsior Building to be "unique in both form and function being the last major standing structure in the city (perhaps the region) that both dates to the very early pioneer days of [the] technology and that also presents a large, ornate and impressive facade." Letter from Joseph J. Cunningham to Michael Caratzas, LPC, November 4, 2016. Other notable landmarks from Manhattan's pioneering era for electric lighting and power have been lost, including Edison's Pearl Street station, Edison's West 26th and West 39th Street generating stations, and the Waterside plant.

<sup>&</sup>lt;sup>16</sup> Sources for this section include Robert C. Post, "America's Electric Railway Beginnings: Trollers and Daft Dummies in Los Angeles," *Southern California Quarterly* (Fall 1987), 203-221; "Electricity the Power: The Daft System of Transmitting Power," *New York Daily Graphic* (December 21, 1888), 381; "Daft, Leo," "*The Electrician*" *Electrical Trades Directory and Handbook for 1893* (London: The Electrician Printing and Publishing Company, 1893), CXII; "Leo Daft," *The Street Railway Journal* (February 1894), 113; "Leo Daft: An Electric Railway Pioneer," *Cassier's Magazine* (July 1901), 263-264; Frank J. Sprague, "The Evolution of Electric Traction"; and "Electric Traction Twenty Years Ago," *The Electrical Age* (March 1905), 172-73, 201-202; "Obituary," *Railway Electrical Engineer* (June 1922), 208; United States Census (Rutherford Borough, Bergen County, New Jersey), 1910; and United States Census (New York, New York County, New York, 1920).

<sup>&</sup>lt;sup>17</sup> "Electricity the Power: The Daft System of Transmitting Power."

<sup>18 &</sup>quot;Daft, Leo."

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> "Electro-Motors," The Electrician (October 1883), 303.

<sup>&</sup>lt;sup>21</sup> "Leo Daft: An Electric Railway Pioneer," 263.

<sup>&</sup>lt;sup>22</sup> "Effect of Current on Traction," *The Electrical Engineer* (April 16, 1890), 230.

<sup>&</sup>lt;sup>23</sup> "Daft's Electro-Motor for Railways," *The Electrician and Electrical Engineer* (January 1884), 10.

<sup>&</sup>lt;sup>24</sup> "The Electric Railway at West Brighton, Coney Island," *The Electrician and Electrical Engineer* (August 1884), 167.

According to "Leo Daft: An Electric Railway Pioneer," 264, the Hampden Branch demonstrated, "in the face of general opinion to the contrary, that several cars could be worked in parallel from the same line, and that there was ample power for running around curves and mounting heavy grades." By 1888, according to "Electricity the Power: The Daft System of Transmitting Power," by the end of 1888, street railways using the Daft system were also in operation in Mansfield, Ohio; Asbury Park, New Jersey; Ithaca, New York; and Pittsburgh and Easton, Pennsylvania.

<sup>&</sup>lt;sup>26</sup> "Electricity the Power: The Daft System of Transmitting Power."

<sup>&</sup>lt;sup>27</sup> Ibid.

<sup>&</sup>lt;sup>28</sup> "Reports of Companies," *The Electrical Engineer* (June 11, 1890), 461; "Legal Notices," *New York Times*, December 1, 1896, 12. Although the reasons for the company's failure are unclear, it may have been related to advances in electric traction-motor design by former Edison associate Frank J. Sprague. Following the opening of the Richmond Union Passenger Railway using Sprague's technology in Richmond, Virginia, in 1888, Sprague's motors quickly overtook those of his competitors.

<sup>&</sup>lt;sup>29</sup> Sources include National Park Service, *Civil War Defenses of Washington Historic Resource Study, Chapter IV:* The Civil War Years (2004), accessed online at https://www.nps.gov/parkhistory/online\_books/civilwar/hrs1-4a.htm); James Howard Gore, *Legionnaires: A Directory of Citizens of the United States on Whom France Has Conferred Her National Order the Legion of Honor* (Washington, D.C: 1903), 51; The Twenty-Fifth Anniversary of the Founding of the Cosmos Club of Washington, D.C. (Washington: Cosmos Club, 1904), 309; New York City Directories, 1786-1933-34 (New York Public Library, 1950); United States Census (Hartford, Hartford County, Connecticut, 1880); and United States Census (Mt. Vernon District, Fairfax County, Virginia, 1910 and 1920).

<sup>&</sup>lt;sup>30</sup> National Park Service.

<sup>&</sup>lt;sup>31</sup> Gore.

<sup>&</sup>lt;sup>32</sup> This was determined by searching the *Real Estate Record and Builders' Guide* for the period between 1869 and 1900. The only references to Gunnell related to his work on the Excelsior Power Company Building.

<sup>&</sup>lt;sup>33</sup> Sources for this section include the following articles from *The Real Estate Record and Builders' Guide*: "The Clermont" (May 4, 1878), 382; "The Boreel Building" (February 22, 1879), 146; "New York's Model Warehouse" (July 31, 1880), 684; "Out Among the Builders" (October 7-14, 1882), 11; "Meeting of Mason Builders" (August 2, 1884), 813; "What They Say in Wall Street" (August 30, 1884), 891; "Out Among the Builders" (August 14, 1886), 1032; "Obituary" (June 23, 1894), 1012; and "Buildings Projected," Real Estate Record and Builders' Guide (August 14, 1869), 7; (September 25, 1869), 6; (November 6, 1869), 9; (May 7, 1870), 10; (March 18, 1871), 134; (April 22, 1871), 198; (July 1, 1871), 328; (June 1, 1872), 258; (August 10, 1872), 51; (August 24, 1872), 69; (May 3, 1873), 210; (June 28, 1873), 306; (August 8, 1873), 377; (December 20, 1873), 576; (June 6, 1874), 342; (May 1, 1875), 306; (June 26, 1875), 453; (July 7, 1877), 550; (October 13, 1877), 798; (October 27, 1877), 839; (July 13, 1878), 605; (June 28, 1879), 537; (March 6, 1880), 236; (April 24, 1880), 402; (June 5, 1880), 541; (September 25, 1880), 843; (March 26, 1881), 292; (June 18, 1881, 644); (May 27, 1882), 544; (June 17, 1882), 611; (July 29, 1882), 732; (October 7, 1882), 915; (November 11, 1882), 996; (February 10, 1883), 93; (June 7, 1884), 639; (May 16, 1885), 581; (April 3, 1886), 445; (May 29, 1886), 731; (July 10, 1886), 908; (December 11, 1886), 1545; (May 14, 1887), 684; (October 29, 1887), 1374; (June 1, 1889), 784; and (November 2, 1889), 1492. Information from the Record and Guide regarding Darragh's major commissions was cross-checked with Robert A. M. Stern, Thomas Mellins, and David Fishman, New York 1880: Architecture and Urbanism in the Gilded Age (New York: the Monacelli Press, 1999).

<sup>&</sup>lt;sup>34</sup> All of these buildings have been demolished.

<sup>&</sup>lt;sup>35</sup> All of these buildings have been demolished.

<sup>&</sup>lt;sup>36</sup> All of these buildings have been demolished. The Munro building was located at Vandewater and Rose Streets, which were demapped for the construction of Murry Bergtraum High School in the 1970s.

Sources on the American Heating and Power Company include "City Intelligence," New York Evening Post, April 22, 1882; "The Steam-Heating Companies," New York Evening Post, June 3, 1882; "Thirty-Four Millions," New York Herald, July 6, 1882, 8; "A Defective Steam-Pipe," New York Times, November 4, 1882, 8; "Keeping the Streets Torn Up," New York Sun, November 11, 1882; "The Steam Heating Nuisance," New York Evening Telegram, December 20, 1882, 2; "Exploding Under the Street," New York Times, January 28, 1883, 9; "News in Brief," Brooklyn Union, May 14, 1883; "History of a Day," New York Daily Graphic, August 15, 1883, 300; "The Newtown Creek Nuisances," Brooklyn Union, August 15, 1883; "Auction Sales," New York Times, January 14, 1884, 6; "The Real Estate Market," New York Times, January 14, 1884, 6; "Bought for the Bondholders," New York Herald, January 17, 1884, 8; "Gone Up in Steam," New York World, January 17, 1884, 8; and "Selling Out a Heating Company," New York Times, January 17, 1884, 8.

- <sup>42</sup> "Conveyances," *Real Estate Record and Builders' Guide* (October 8, 1887), 1260. Excelsior acquired the property from the Columbian Heating and Power Company, which was incorporated in June of 1884 by Charles C. Dodge, David D. Withers, and William D. Morgan, trustees for the bondholders of the American Heating and Power Company. Although the stated goal of Columbian was "supplying hot water, hot air, or steam for motive power, heating, cooking, or other useful applications in the streets and public and private buildings in the City of New York," it is unclear whether it continued to operate American Heating and Power's steam network. The firm does not appear to have made substantial changes to the property at 33-43 Gold Street during its ownership. County Clerk of New York County, Certificate of Incorporation, Columbian Heating and Power Company (June 11, 1884).
- <sup>43</sup> Detailed Statement of Specification for Alterations to Buildings 1890-1887 (filed October 27, 1887). The 1885 Robinson Atlas shows two separate buildings on the site: one adjoining the southern lot line, which appears to have been the coal house previously referenced, and a structure at the northwest corner of the lot, which was likely the powerhouse. E. Robinson and R. H. Pidgeon, *Robinson's Atlas of the City of New York* (New York: E. Robinson, 1885), 1.

<sup>&</sup>lt;sup>38</sup> "The Steam-Heating Companies." The New York Steam Company ended up being much more successful than American Heating and Power. It was ultimately absorbed into Con Edison, forming the basis for Con Ed's steam system, which continues to this day.

<sup>&</sup>lt;sup>39</sup> "The Real Estate Market," *New York Times*, January 25, 1882, 6; City of New York Bureau of Inspection of Buildings, Detailed Statement of Specification for Alterations to Buildings 77-1882 (filed January 24, 1882).

<sup>&</sup>lt;sup>40</sup> "Buildings Projected," Real Estate Record and Builders' Guide (April 22, 1882), 406.

<sup>&</sup>lt;sup>41</sup> "The Steam Heating Nuisance."

<sup>&</sup>lt;sup>44</sup> Detailed Statement of Specification for Alterations to Buildings 783-1888 (filed April 23, 1888).

<sup>&</sup>lt;sup>45</sup> Sources for this section include LPC, *Tribeca North Historic District Designation Report* (LP-1714) (New York: City of New York, 1992), 21-30; LPC, *Tribeca West Historic District Designation Report* (LP-1713) (New York: City of New York, 1991), 30-37; and Robert A. M. Stern, Thomas Mellins, and David Fishman, *New York 1880: Architecture and Urbanism in the Gilded Age* (New York: Monacelli Press, 1999), 468-93.

<sup>&</sup>lt;sup>46</sup> LPC, Historic Street Lampposts Designation Report (LP-1961) (New York: City of New York, 1997), prepared by Jeremy Woodoff.

<sup>&</sup>lt;sup>47</sup> Sources for this section include *Distributory Electrical Power Plants: Daft System* (New York: Jos. B. Stillwell & Co., 1888); "Electro-Motors," The Electrician (October 1883), 303; "Transmission of Power in Boston," The Electrical World (May 24, 1884), 1; "The Daft Electric Railway," The Electrical World (August 9, 1884), 42; "The Daft Electric Motor," The Electrical World (August 23, 1884), 1; "Electrical Development in Boston," The Electrical World (August 30, 1884), 66; "Miscellaneous Notes," The Electrical World (October 18, 1884), 151; "Miscellaneous Notes," The Electrical World (October 25, 1884), 163; "Priority in Printing by Electricity," The Electrical World (November 22, 1884), 204; "The Straight Line Engine at the Philadelphia Exhibition," The Electrical World (December 20, 1884), 1; "The Coming Tests of the Daft Motors," The Electrical World (April 18, 1885), 158; "The Daft Motors," The Electrical World (May 9, 1885), 186; "New York Notes," The Electrical World (July 31, 1886), 55; "Electric Motors," The Electrical World (February 26, 1887), 104-9; "New York Notes," The Electrical World (February 26, 1887), 114; "New York Notes," The Electrical World (June 18, 1887), 295; "New York Notes," The Electrical World (August 13, 1887), 84; "Electric Power Service," The Railroad and Engineering Journal (October 1887), 471-2; "Daft Power Service," The Electrical World (June 9, 1888), 296; "A Daft Electric Motor in a Printing Office," The Electrical World (June 23, 1888), 315; "Electricity for Steam," New York Evening Post, August 20, 1888, 1; "New York Notes," The Electrical World (January 5, 1889), 11; and "Death of Martin B. Brown," New York Times, December 25, 1893, 3.

<sup>&</sup>lt;sup>48</sup> "To Let for Business Purposes" (Advertisement), New York Herald, February 19, 1874. The Excelsior Steam Power Company was incorporated on July 21, 1873, according to Milo R. Maltbie, Franchises of Electrical Corporations in Greater New York (New York: Public Service Commission for the First District, 1911), 45.

<sup>&</sup>lt;sup>49</sup> "Shutting Off the Croton," New York Sun, October 27, 1881, 1.

<sup>&</sup>lt;sup>50</sup> "Flames in Spruce-Street," New York Times, March 8, 1886, 8.

<sup>&</sup>lt;sup>51</sup> "Electro-Motors." (Emphasis in original.)

<sup>&</sup>lt;sup>52</sup> "Printing by Electricity," *The Electrical World* (October 4, 1884), 120. According to *The Electrical World*, the only previous newspaper printed by electricity in the United States was the March 13, 1884 issue of the *Ilion* (N.Y.) *Citizen*, using an improvised system developed when its steam engine broke down. When the engine was repaired, the *Citizen* returned to printing by steam.

<sup>&</sup>lt;sup>53</sup> "Printing by Electricity." *The Electrical World* (September 20, 1884), 97.

<sup>&</sup>lt;sup>54</sup> "New York Notes," *The Electrical World* (June 18, 1887), 295.

<sup>55 &</sup>quot;New York Notes," The Electrical World (July 31, 1886), 55.

<sup>&</sup>lt;sup>56</sup> "New York Notes," *The Electrical World* (June 18, 1887), 295 and (August 13, 1887), 84.

<sup>&</sup>lt;sup>57</sup> The Electrical World described the Daft Company as "second to none" its work in the electrical distribution of power; The Railroad and Engineering Journal noted in late 1887 that although it was "still early for the establishment of special motor circuits," the Daft systems in New York and Boston had already existed for many years. "The Coming Tests of the Daft Motors"; "Electric Power Service."

<sup>58 &</sup>quot;Electricity for Steam."

<sup>&</sup>lt;sup>59</sup> "New York Notes," *The Electrical World* (June 18, 1887), 295.

<sup>60 &</sup>quot;Electricity for Steam."

<sup>&</sup>lt;sup>61</sup> Distributory Electrical Power Plants: Daft System, 27.

<sup>62 &</sup>quot;Electricity the Power."

<sup>63 &</sup>quot;Leo Daft: An Electric Railway Pioneer," 264.

<sup>&</sup>lt;sup>64</sup> Maltbie, 45.

<sup>&</sup>lt;sup>65</sup> Moses King, *King's Photographic Views of New York* (Boston: Moses King, 1895), 280-1. Printers Clark & Zugalla were noted as tenants in 1894 and 1898; jewelry manufacturers Stern Brothers in 1894 and 1903; and printers McDonald & Co. in 1906. "Hard Work for Firemen," *New York Times*, July 30, 1894, 1; "Women Faint at Gold Street Fire," *New York Times*, June 2, 1898, 12; "Fell From Fire Escape," *New York Times*, August 9, 1903, 9; and "To Printers and the Public" (Advertisement), *New York Sun*, January 10, 1906, 4.

<sup>66 &</sup>quot;Light and Power: New York Heat, Light and Power Co.," New York Press, June 22, 1896.

<sup>&</sup>lt;sup>67</sup> Detailed Statement of Specification for Alterations to Buildings 573-1892 (filed September 15, 1892) and 211-1899 (filed February 11, 1899).

<sup>&</sup>lt;sup>68</sup> In the late 1920s, according to Cunningham, 149-51 and 186-87, New York Edison announced that it was ending the further extension of direct-current service, and that it expected its complete retirement to take more than four decades. On November 14, 2007, direct-current service was finally ended at 10 East 40th Street, Manhattan's last DC customer, marking the end of 125 years of direct-current service that began with Thomas Edison's Pearl Street station and presenting, in the words of reporter Jennifer 8. Lee, "a final, vestigial triumph by Nikola Tesla and George Westinghouse." Jennifer 8. Lee, "Off Goes the Power Current Started by Thomas Edison," *New York Times*, November 14, 2007.

<sup>&</sup>lt;sup>69</sup> Letter from Joseph J. Cunningham to Michael Caratzas, LPC, November 4, 2016.

Department of Buildings of the City of New York, Application to Alter, Repair, Etc. 316-1902 (filed March 21, 1902).

<sup>&</sup>lt;sup>71</sup> Bureau of Buildings, Borough of Manhattan, City of New York, Alteration Application 140-1921 (filed January 22, 1921).

<sup>&</sup>lt;sup>72</sup> Bureau of Buildings, Borough of Manhattan, City of New York, Alteration Application 1708-1923 (filed July 17, 1923).

Department of Housing and Buildings, Borough of Manhattan, City of New York, Building Notice 104-1949 (filed January 13, 1949).

<sup>&</sup>lt;sup>74</sup> "Con Edison Takes Fulton St. Parcel," *New York Times*, August 4, 1961, 34 describes 33-43 Gold Street as "a former sub-station."

New York County, Office of the Register, Conveyance Reel 439, 1147-50 (May 18, 1978); "Max Wechsler, 86, Architect and Designer," New York Times, September 23, 1993, D22.

## FINDINGS AND DESIGNATION

On the basis of a careful consideration of the history, the architecture, and other features of the building and site, the Landmarks Preservation Commission finds that the Excelsior Steam Power Company Building has a special character and special historical and aesthetic interest and value as part of the development, heritage, and cultural characteristics of New York City.

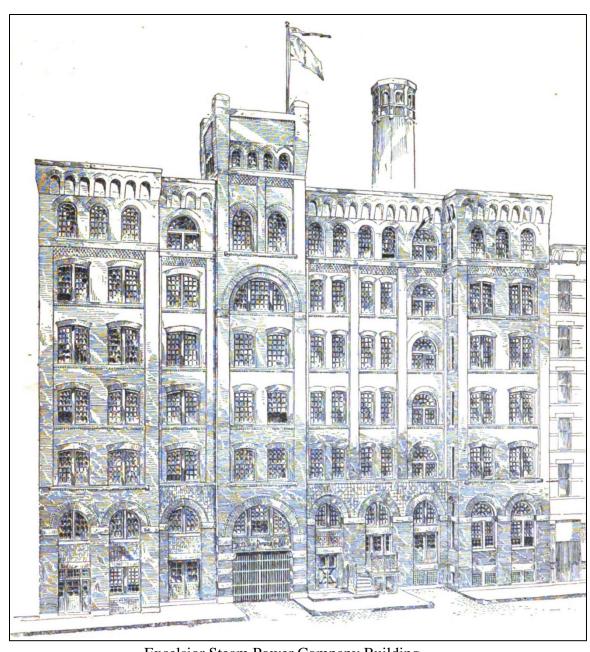
The Commission further finds that among its important qualities, the Excelsior Steam Power Company Building is a monumental reminder of New York's key role in the development of electric lighting and power systems in the United States; that it is the oldest-known purposebuilt commercial generating station standing in Manhattan; that it is one of the few major structures remaining from Manhattan's pioneering era for electric lighting and power; that it was designed by engineer and architect William C. Gunnell and constructed by master mason Robert L. Darragh; that it was operational by 1888, when it began generating and distributing electric power to printing houses, jewelry manufacturers, and other industrial clients within the surrounding area; that its dynamos and the motors used by its customers were designed and manufactured by English immigrant Leo Daft, a leading figure in the development of commercial electric power systems, who designed the first such system for Boston in 1884 and installed New York's first two electric elevator motors, which were powered by a Daft generator and the engines of the Excelsior Steam Power Company; that the building is a handsome example of the muscular industrial architecture of the 1880s; that it is Romanesque Revival in style, with a five-part main facade with projecting end and tower pavilions and a high base decorated with foliated terra-cotta plaques and a metal sign identifying the building in elegant period lettering; that the precision and quality of Robert L. Darragh's brickwork is evident throughout the building's facade; that the building provided electricity for lighting and power to local factories and office buildings for many years and was later converted from a generating station into a substation; and that the Excelsior Steam Power Company Building remains a significant link to Lower Manhattan's industrial past, having played a major role in New York's transition from steam power to electricity and recalling its area's former prominence as the nation's media capital and as an industrial beehive populated by hundreds of printers, jewelry makers, and other manufacturing concerns.

Accordingly, pursuant to the provisions of Chapter 74, Section 3020 of the Charter of the City of New York and Chapter 3 of Title 25 of the Administrative Code of the City of New York, the Landmarks Preservation Commission designates as a Landmark the Excelsior Steam Power Company Building and designates Manhattan Tax Map Block 77 Lot 24 in part, consisting of former Lot 25, the portion of Lot 24 bounded by a line beginning at the northeast corner of the Excelsior Steam Power Company Building, located at a point on the eastern lot line approximately 94 feet 3½ inches south of the southwest corner of Gold Street and Fulton Street; thence running southerly along the eastern lot line approximately 125 feet 6 inches to the southern lot line; thence running westerly along the southern lot line approximately 97 feet to the western lot line; thence running northerly along the western lot line approximately 124 feet 8 inches to the northwest corner of said building; thence running easterly along the exterior of the northern wall of said building approximately 99 feet 11½ inches to the point of beginning, as its Landmark Site.

Meenakshi Srinivasan, Chair Frederick Bland, Diana Chapin, Wellington Chen, Michael Devonshire, Michael Goldblum, John Gustafsson, Jeanne Lutfy, Adi Shamir-Baron, Kim Vauss, Commissioners

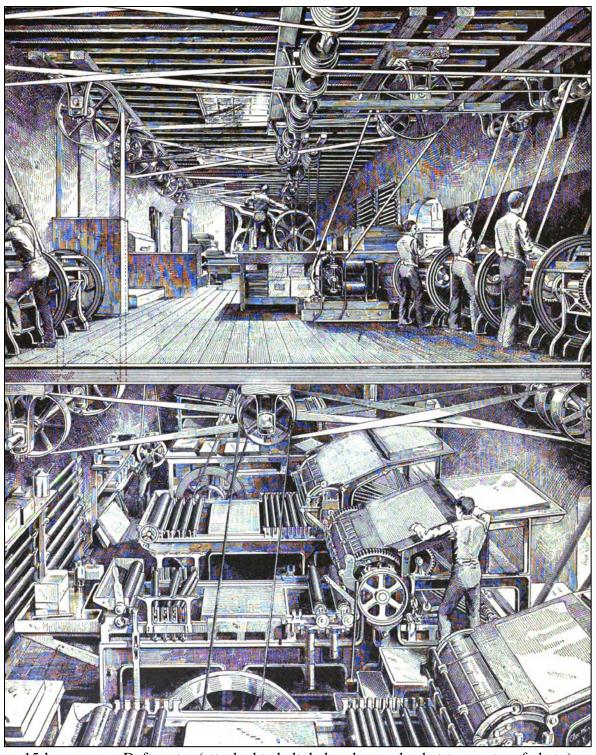


Excelsior Steam Power Company Building 33-43 Gold Street, Manhattan Block 77, Lot 24 in part Main facade *Photo: Sarah Moses, 2016* 



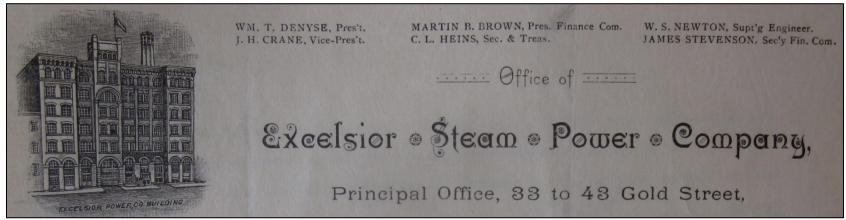
Excelsior Steam Power Company Building 1888 rendering

Distributory Electrical Power Plants: Daft System (New York: Jos. B. Stillwell & Co., 1888), 12.



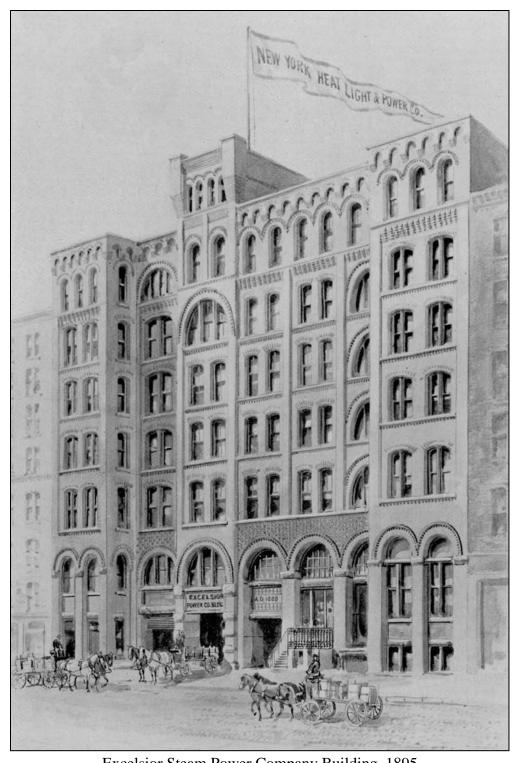
15-horsepower Daft motor (attached to belt, below large wheel at top center of photo) running printing equipment on two floors at Stillwell & Co., 20 Cliff Street, 1888

Distributory Electrical Power Plants: Daft System, 19.



Letterhead of Excelsior Steam Power Company, 1894

Department of Buildings of the City of New York, folder for Violation 450-94 (February 8, 1894)



Excelsior Steam Power Company Building, 1895 King's Photographic Views of New York (Boston: Moses King, 1895), 281.



Excelsior Steam Power Company Building, circa 1977 LPC files



Excelsior Steam Power Company Building, 2008 *Photo: Christopher D. Brazee* 



