Landmarks Preservation Commission
February 10, 2004, Designation List 350
LP-2139

THOMSON METER COMPANY BUILDING (later **New York Eskimo Pie Corporation Building)**, 100-110 Bridge Street (aka 158-166 York Street), Brooklyn. Built 1908-09; Louis E. Jallade, architect; Hennebique Construction Co., general contractor.

Landmark Site: Borough of Brooklyn Tax Map Block 66, Lot 18 in part, consisting of the property bounded by a line beginning at the northeast corner of the lot, extending westerly along a portion of the northern lot line to a point corresponding to the westernmost edge of the above-described building (excluding the later garage addition at 152-156 York Street), southerly along the westernmost edge of the above-described building and a line extending southerly to the southern lot line, easterly along a portion of the southern lot line, and northerly along the eastern lot line, to the point of beginning.

On December 9, 2003, the Landmarks Preservation Commission held a public hearing on the proposed designation as a Landmark of the Thomson Meter Company Building (later New York Eskimo Pie Corporation Building) and the proposed designation of the related Landmark Site (Item No. 1). The hearing had been duly advertised in accordance with the provisions of law. Twenty-one people spoke in favor of designation, including representatives of City Councilman David Yassky, State Senator Martin Connor, Brooklyn Community Board 2, DUMBO Neighborhood Association, Vinegar Hill Neighborhood Association, Municipal Art Society, Historic Districts Council, New York Landmarks Conservancy, and Friends of Terra Cotta. A representative of the property's owner spoke in opposition to designation. In addition, the Commission has received several hundred letters and postcards in support of designation, including letters from City Councilmember Letitia James and the Metropolitan Chapter of the Victorian Society in America.

Summary

The Thomson Meter Co. Building, among the most aesthetically interesting industrial structures in New York City, is a pioneering American building that employs, in part, a frank exterior expression of its concrete structure. It also displays a fairly early use in New York of polychromatic glazed terra cotta. The success of the Thomson Meter Co., founded c. 1890 in Brooklyn to manufacture John Thomson's patented water meters, led to a new 4-story (plus basement) factory, built in 1908-09 to the design of Louis E. Jallade, with the Hennebique Construction Co. as general contractor. The structure is made of reinforced concrete, poured at the site, with spandrels adorned with multi-hued tapestry brickwork, and terminated by elaborate decorative polychromatic glazed terra cotta above arched windows. Its articulation as monumental arcades follows in the long New York tradition of arcaded warehouses and other building types. Jallade was an architect-engineer who had studied at the Ecole des Beaux-Arts and previously employed the reinforced-concrete system of Francois Hennebique, a contractor/engineer in Belgium and France.

Hennebique achieved success with branches licensed to construct designs with his system, which was widely used in the U.S. Reinforced concrete emerged as a significant structural material in the U.S. in the first decade of the 20th century. The first major American builder in the material was Ernest L. Ransome, considered the inventor of the "daylight factory," characterized as "multi-story American industrial buildings with exposed concrete frames, filled in only by transparent glazing." The use of exposed concrete on building exteriors, however, was debated by architects, who perceived drawbacks in its finish, color, texture, and susceptibility to moisture. While it was widely agreed that it should be decorated with other materials for better effect, certain architects and engineers advocated concrete's "truthful" exposure. The Thomson Meter Co. Building, interestingly, achieved a fairly early compromise between these positions -- the concrete structure was both exposed and adorned. Jallade's use of ceramic ornament, particularly leaf motifs in terra cotta, was clearly influenced by Parisian examples.

After Thomson's death, this building was sold in 1927 to the New York Eskimo Pie Corp., a subsidiary of the parent firm, for the regional manufacture of the first American chocolate-covered ice cream bar (created in 1920). Eskimo Pie products were made here until 1966.

DESCRIPTION AND ANALYSIS

John Thomson and the Thomson Meter Company [1]

The Thomson Meter Co. was founded around 1890 by inventor-manufacturer John Thomson (1853-1926). Born in Scotland and raised in upstate New York, he embarked around 1869 to Rochester, where he found employment with a jeweler repairing watches and clocks. Showing a mechanical aptitude, he studied mechanical, civil, and electrical engineering, and received his first patents in 1877 for watch improvements. Thomson moved to Brooklyn around 1880, continuing to invent, and received several mechanical patents by 1884. A special interest was the water meter, a device to accurately record the flow and, hence, the usage of water; he made a number of patented meter improvements in 1883-85, which were assigned to a Brooklyn manufacturer. Thomson patented his important disk water meter in 1887. Another interest was the printing press; in 1887, he assigned his first such invention to the Colt Patent Fire Arms Mfg. Co. in Hartford. Thomson moved to Hartford to work for Colt for three years.

Returning to Brooklyn around 1890, he founded and headed the Thomson Meter Co. and the John Thomson Press Co. His two major inventions proved highly popular, with the Thomson Printing Press standard in American printing plants and about 20 million Thomson disk water meters in use around the world. At the World's Columbian Exposition in Chicago in 1893, the *Brooklyn Eagle* enthused that

> *Among the thousands of inventions which make the department of manufactures interesting none is more ingenious, more interesting or has a more important bearing on the health of people massed in cities than that of the Thomson Meter company... Preventing waste in the water supply of large cities has long stared municipal governments in the face as one of their most important problems. Most experts have found the problem practically insoluble without a simple, strong and accurate meter...* [2]

In 1899, after the Consolidation of Greater New York, the Commissioner of Water Supply ordered water meters to be installed in "all stores, workshops, hotels, manufactories, public edifices, at wharves, ferry houses, stables, and in all places where water is furnished for business consumption."[3] Thomson's was one of the four approved types.

Thomson was granted some 350 patents in all, including those for the refinement of metallic zinc and the manufacture of zinc oxide, for which he founded the Electric Zinc Co. in London. He also served as president of the Engineers Club of New York, and was chief engineer of the Primary Electrical Subway Commission of New York, which installed the first underground conduit for telegraph and telephone wires.

The Thomson Meter Co. factory was first located at 79-83 Washington Street, at York Street, in the area north of the Brooklyn Bridge (completed 1883) along the East River waterfront that was developing with factories and warehouses. Among these were the Empire Stores (1870, 1885); E.W. Bliss Co., machine works (1885); Robert Gair Co. (1888 on), packaging; Arbuckle Bros., coffee roasting plant (1891); Grand Union Tea Co., distribution plant (1897); and Arbuckle Sugar Co., refinery (1897).

Construction of the Thomson Meter Co. Building [4]

The success of the Thomson Meter Co. led to the construction of a new four-story (plus basement) building, announced in the *Real Estate Record & Guide* in May 1908. A lot at the corner of Bridge and York Streets was transferred from Catherine F. Street to the Thomson Meter Co. in June.[5] Construction, to

the design of architect Louis E. Jallade, began in November 1908 and was completed in April 1909. The Hennebique Construction Co., headed by Raymond Baffrey, was general contractor. *Architects' & Builders' Magazine* described the structure's reinforced concrete construction and ornamentation:

> *In pouring the concrete the columns and walls were poured at the same time, thus securing a homogeneous construction and avoiding the necessity of putting on a surface layer to even up the joints. The forms were constructed so as to leave recesses on the outside below the windows and in the spandrels above the arched lintel at the cornice. These spaces were filled later with brick and terra cotta, much to the adornment of the building. The window panels were filled with tapestry brick-work, which is laid in a uniform design for all. A decoration of polychrome terra cotta in the arches and spandrels below the cornice forms a continuous frieze about the building. The cornice, plainly moulded, projects 2 feet, giving a good shadow line. The final finish of the exterior concrete consisted of a brush coat of Berkshire white cement.* [6]

Similarly, the *Record & Guide* noted that

> *This building, which covers half a block, is entirely constructed of reinforced concrete, the rough columns being exposed on the exterior, and no finish having been applied on them, except a brush coat of white Portland cement. ... Recesses were... afterwards filled with a special colored brick, and the cornice decoration, which is of colored terra cotta, all light tones, was set in place by means of brass hooks.* [7]

The building has three fully designed facades, reflecting the fact that the southern side once faced onto Talman Street (since de-mapped). This "daylight factory" type structure is fireproof and features large windows, which are metal-framed with wire-glass horizontal-pivot sash, set into the concrete. The reinforced floor slabs are composed of panels about 16-feet square and 4 inches thick, carried by five beams that span the transverse girders. The first story initially housed offices (president, secretary-treasurer, director, and clerical; stock, finished stock testing, assembling, and packing rooms; shipping office), the second and third stories were for manufacturing machinery, and the fourth story was a foundry. The building was served by elevators and dumbwaiters; a gas plant provided light and power.

The Thomson Meter Co. Building was not only published in *Architects' & Builders' Magazine* in 1909, but was also included in the *Year Book of the Brooklyn Chapter of the American Institute of Architects* in 1910.

The Architect: Louis E. Jallade [8]

Louis Eugene Jallade (1876-1957) was an architect and engineer who had a long, prolific, and varied career. Born in Montreal, Canada, he was the son of a French-born upholsterer who moved his family to New York City in 1877. Louis graduated from the New York Latin School (1892) and was further educated at the Metropolitan Museum of Art Schools (1892-96), and Beaux-Arts Society Architectural Ateliers, New York (1896-99). Interestingly, Jallade later credited his initial interest in architecture to evening study at the West 23rd Street branch of the Young Men's Christian Association (YMCA).[9] He left for Paris to study at the Ecole des Beaux-Arts (1901-03). Returning to the United States, Jallade worked in 1904 for Paul E. DuBoy on the construction of the Ansonia Hotel (1899-1904), 2101-2119 Broadway,[10] and then for the Boston office of [Frederick R.] Allen & [Charles] Collens, supervising construction of the firm's Union Theological Seminary (designed 1906-07), Broadway and West 121st Street, New York.[11] After 1905, Jallade practiced independently. His first commission was the Naval YMCA building (1906-08), Norfolk, Va., which employed the Hennebique concrete system.[12] According to the *Real Estate Record & Guide* in 1909, Jallade "for several years was employed as consulting engineer for the New York branch of the Contancein [sic -- Cottancin] Reinforced Concrete Co."[13] During the same period (c. 1907-09) as the construction of the Thomson Meter Co. Building, his office was at the same address as that of the Hennebique Construction Co., the general contractor of the building.[14]

Jallade was appointed a building consultant to the national board of the YMCA (c. 1912-19), becoming a specialist in the design of YMCA buildings.[15] His practice also encompassed churches, factories, colleges, schools, hotels, libraries, garages, and clubs.[16] Jallade served as a building consultant to the Society of Directors of Physical Education in Colleges, the Playground and Recreation Association, the Russell Sage Foundation, and the Boys Club of America; was a consulting engineer for the Dept. of Correction for Rikers Island Penitentiary; served as president of the New York Society of Architects; participated in municipal public housing and slum clearance programs; and was active in the New York National Guard after 1914, retiring as a brigadier general. His son, Louis E. Jallade, Jr. (1909-1978), joined the firm in 1938, and

another son, John Henry, also worked for him as an architect.[17] The majority of Jallade's oeuvre is well-designed yet stylistically conservative, making the Thomson Meter Co. Building the aesthetic highlight of his long career.

General Contractor: Hennebique Construction Co. [18]

Francois Hennebique (1842-1921) became an independent contractor based in Brussels, Belgium, around 1867. He experimented with the use of pre-cast reinforced-concrete beams by 1879 and for years researched the design of reinforced-concrete beams, for which he received a patent in France and Belgium in 1892. Moving to Paris, Hennebique ceased work as a contractor and became a consulting engineer. He achieved incredible success by opening branch agencies throughout Europe licensed to construct designs according to his concrete system, staffed by architects, engineers, and contractors trained in his system. Initially, designs emanated from the central office, but later design was done at branch offices. By 1898, he had developed a complete system of concrete construction, which included floors, walls and columns. The publication *Le Beton Arme* [*Reinforced Concrete*] was launched to promote and publicize the firm's work. It is estimated that by the time of his death, some 40,000 buildings, bridges, and public works had been constructed with the Hennebique system. A recent history on early reinforced concrete states that "Hennebique's system was the most widely used in America" at the beginning of the 20th century, but that the use of a "single system" was brief in the United States, the preference being construction with a combination of different systems.[19]

A 1903-04 *New York City Directory* listed the "Hennebique Patents Armored Concrete Constructions." The following year, the Hennebique Construction Co. was listed, headed by family members: Raymond Baffrey (married to Marguerite Hennebique) was president, and Jules J. Hennebique was vice president. This New York Hennebique branch was one of nine then located in the United States and Canada.

The Use of Reinforced Concrete in the First Decade of the 20th Century [20]

Because of its economic and functional benefits, reinforced concrete became the dominant building material in the United States in the 20th century, and technical innovations continually expanded its structural possibilities. American engineers, however, are considered to have initially lagged behind in the adoption of reinforced concrete, despite the innovations seen in England, France, and Germany. Various individuals developed systems of reinforced concrete, such as that of Joseph Monier, patented as early as 1867. Another was a "continuously woven mesh-type reinforcement" system developed by French engineer-contractor Paul Cottancin (1865-1928) and patented in 1889 (three years prior to Hennebique's), represented by Louis Jallade early in his career.[21] The 1900 Paris Exposition featured the European systems, which impressed a wider international audience with the potential of reinforced concrete.

The American preference for steel construction, the costs and skill necessary for the labor-intensive casting-in-place of concrete, and perceived defects of concrete were among the factors inhibiting its use here. The first major American builder in reinforced concrete was Ernest L. Ransome (1844-1917). An emigrant from England in 1870, Ransome worked for the Pacific Stone Co., San Francisco, and received a patent for a reinforcing bar in 1884. After developing a ribbed floor construction system in 1889, he became the most prominent American concrete contractor until being surpassed by the Hennebique system. Reyner Banham called Ransome "the apparent inventor of the concrete frame in its American version and thus of the true Daylight factory," characterized as "multi-story American industrial buildings with exposed concrete frames, filled in only by transparent glazing."[22] Among Ransome's pioneering works were the Pacific Coast Borax Co. factory annex (1903-04), Bayonne, N.J., and the United Shoe Machinery Co. factory (1903-04), Beverly, Mass. The first reinforced concrete skyscraper in the world was the Ingalls Building (1902-03, Elzner & Anderson; Henry N. Hooper, structural engineer), Cincinnati, which employed multiple concrete systems. Minneapolis engineer Claude A.P. Turner (1869-1955), theorizing that beams could be eliminated in concrete floor construction, applied for a flat floor slab patent in 1905 and first built such a system in the Johnson-Bovey Building (1905-06). After Turner's patent was accepted in 1908 (Orland Norcross, a Boston engineer, had patented a similar system in 1902), he later developed the flared "mushroom" column.

The leading American builders in reinforced concrete by 1904 were Ransome; the Baltimore Ferro-Concrete Co. (1901); the Ferro-Concrete Co. (1901), Cincinnati; the Turner Construction Co. (1902), founded by Henry C. Turner, an engineer formerly on Ransome's staff; and the Trussed Concrete-Steel Co., Detroit (1903), established by Julius Kahn (brother of architect Albert Kahn).[23] The American Concrete Institute was established in 1905, largely to formulate regulations on the use of the material, and the New York City Dept. of Buildings approved the use of the Ransome system the same year. The Robert Gair Co.

Warehouse No. 3 (1904-05, William Higginson), 55 Washington Street, Brooklyn, built by the Turner Construction Co. for the packaging business, was the largest concrete building in the world, only to be surpassed a year later by the Marlborough Hotel Annex (1905-06, Price & McLanahan, later Blenheim Hotel), Atlantic City.

At first, concrete was used primarily in the United States in the construction of bridges, grain elevators, and factories. The latter were described by Betsy H. Bradley in *The Works: The Industrial Architecture of the United States*:

> *Most factory buildings of reinforced concrete were monolithic structures. The first step in their construction involved the construction of "formwork," into which reinforcing rods were placed and wet concrete was poured and allowed to set. Then the forms were repositioned, new reinforcing bars were connected to those already embedded, and pouring continued so that the structure was, in a sense, cast as a single entity.* [24]

Exposed Concrete on Building Exteriors [25]

Despite the widespread acceptance of concrete as a structural material during this period architects internationally debated the use of exposed concrete on the exterior of buildings. Among the material's perceived drawbacks for exteriors were its variable or poor finish, color, and texture, and susceptibility to moisture. *Cement Age* in 1910 opined that

> *Up to the advent of concrete we had depended for so many years on brick, stone, terra cotta, and various decorative materials for architectural effects that we had come to regard a building with an exterior of any other material as unattractive.* [26]

And as English terra cotta historian Michael Stratton stated:

> *Most architects rejected out of hand the thought of public or commercial buildings having facades of exposed concrete. During the first flurry of interest in concrete, faience was presented as one means whereby it could be given a more attractive public face.* [27]

This issue was discussed in a 1907 essay "The Architectural Problem of Concrete," by A.D.F. Hamlin, in *The Architect & Building News*, in which he wrote that

> *if concrete is ever to be extensively used in monolithic buildings of monumental size and importance, it will almost certainly not be without the aid of other materials. There is no reason why stone and terra-cotta should not be used for certain features where the contrast of their texture, color and decorative character with the concrete would be desirable. Inlays of ceramic tiles and of marble of various colors could be employed to introduce color and vivacity into the sombre deadness of the prevailing tone. ... monolithic concrete, per se, is an ungrateful and repellent material for exterior architectural effect; that it must be kept flat as possible, the larger areas disguised or frosted by flat surface-ornament, and the general effect varied and brightened by accessory details executed in other materials.*[28]

Numerous architects responded with basically concurring opinions in the publication, following this essay, including:

> *this material is only adaptable to utilitarian buildings or commercial buildings, and picturesque schemes, but in no way fit for the more serious monumental or classic buildings, whether of a public or private character.* (Carrere & Hastings) [29]

> *I doubt if as good an architectural effect, artistically speaking, can be produced for the same outlay of money, using reinforced concrete as by using the usual building stones and bricks, in the present stage of this system. ... I am aware that the office of the Hennebique Company in Paris and other buildings in Europe have the exterior showing the cement finish, but the color is bad, and a finer effect could be had at less cost than the modeling and casting of the applied ornament involved, by the use of tile or terra-cotta and for a little more expense beautiful marble inlay or mosaic might be employed.* (George Keller, Hartford) [30]

> *it is better to clothe the reinforced structure with other materials, the same as a steel structure is covered. The natural color of cement or concrete is not artistic... Further, the great absorption of moisture by concrete is against its use externally*. (Adin B. Lacey, Philadelphia) [31]

> *Reinforced concrete is a structural material the same as steel, and we see no reason why it cannot be masked and treated, the same as we would a steel building, with terra-cotta, brick, stone, or any other material that the architect may choose to use*. (Morgan &

Walls, Los Angeles) [32]

Certain architects and engineers, however, gave opinions advocating concrete's "truthful" exposure. These included:

> *it should not... be forced to compete with other materials, nor should there be any attempt to make concrete imitate other materials, either as to finish or design. ... The architectural details of design and composition should show that the mateial used is concrete; it should be allowed to stand for itself.* (Donn Barber) [33]

> *it is feasible to so design a reinforced-concrete structure as to obtain an artistic effect... letting it show as though it were designed in plastic material, and not in imitation of stone or stucco treatment.* (Horgan & Slattery, who claimed "the first reinforced-concrete structure in New York City," the Bacteriological Laboratory (c. 1900), Willard Parker Hospital, East 16th Street, demolished)[34]

> *We cannot bring ourselves to believe that concrete should be clothed with a veneer of any sort, in just the same way as our steel skeletons have been covered, but rather that it should be used as a structural material which can also be made acceptable in design with some combination of flush panels or patterns made of brick or tile set in the concrete, which might be used on the exposed structural concrete...* (Mauran, Russell & Garden, St. Louis) [35]

> *no doubt the time will gradually arrive when a new style, founded absolutely on truthfulness of expression, will supersede the present crude attempts to treat a cement construction as though it were of steel or masonry.* (Somervell & Cote, Seattle) [36]

> *Reinforced concrete, like all other material, it should be obvious, must be designed in accordance with its essential nature, and I have no doubt that if this is taken as a basis extremely interesting and varied results might be obtained.* (Louis H. Sullivan, Chicago) [37]

> *We feel that such material and method of construction is capable of being treated "with artistic and architectural effect" in a manner showing the distinct individual character of the material and methods employed in its use.* (Wyatt & Nolting, Baltimore) [38]

The use of exposed concrete on the exterior of American buildings was not entirely theoretical, however, as a number of structures were already standing as examples. There were daylight factory buildings, such as Ernest Ransome's Pacific Coast Borax Co. factory annex (1903-04), Bayonne, whose exteriors were composed solely of exposed concrete floor slabs and spandrel panels that framed the windows, and Albert Kahn's Packard Motor Car Co. Building No. 10 (1905), Detroit, with an exposed concrete frame and brick spandrels. And Frank Lloyd Wright's famous Unity Temple (1905-08), Oak Park, Ill., employed reinforced concrete as the entire exterior material.

<u>The Exterior Articulation of the Thomson Meter Co. Building</u>

The lower stories of the Thomson Meter Co. Building are in most respects typical of a contemporary reinforced-concrete "daylight factory" type structure. The building is made particularly notable by its arched fourth story, its partial use of exposed concrete, and its terminating terra-cotta ornament. The exterior articulation of its three fully-designed facades as monumental four-story arcades follows in the older tradition of arcaded buildings popular in New York City in the late-19th century, as identified by architectural historian Sarah Bradford Landau, and seen in such examples as the warehouse at 141-147 Mercer Street (1887-88, William Schickel & Co.).[39] The *Real Estate Record & Guide* commented of Thomson Meter that

> *The whole exterior is bright and attractive, and is certainly a new note in factory architecture. The architect of the building was instructed by the owners to design a factory which would be an advertisement for their materials and that would have a maximum amount of daylight.* [40]

The Thomson Meter Co. Building, interestingly, achieved a fairly early compromise between the positions in the debate over the use of exterior concrete -- the concrete structure was both exposed and adorned. While the *Record & Guide* overstated the case when it claimed that it was "the first American building in which a designer has attempted to use the rough concrete construction as architectural decoration," particularly in regard to the above-cited examples, the publication clearly recognized the novelty of its use in New York City on the Thomson Meter building. Jallade was said to feel

> *that a new departure in reinforced concrete design was very necessary in this country, and that here was a good opportunity to do*

something new. He believes that a concrete building should not be designed to look as though it was made of stone or brick, and that more efforts on the part of concrete architects should be given towards the beautifying of their building without money loss to the owners. The decorations in this case have amounted to less than one per cent of the total cost of the building. [41]

Thomson Meter (along with the contemporary work of Ransome, Kahn, Wright, etc.) is a pioneering example of an American building that employed a frank and "truthful" expression of exterior concrete that anticipated the famous later advocacy of European architects such as Le Corbusier, Walter Gropius, and Mies van der Rohe.

Thomson Meter was adorned both by recessed spandrel panels with multi-hued brick set in a herringbone pattern with a brick border and central concrete diamond motif, and by terminating terra cotta, consisting of a continuous background field of leaves and ribbons bordered by lines of terra-cotta blocks; small rondels atop the arches; tablets carried on corbeled (lion heads) cross-shaped brackets and curvilinear frames in the spandrels above the arches; and corner cartouches bearing the letters "T" and "M" (for Thomson Meter). Jallade's use of ceramic ornament, particularly the leaf motifs in terra cotta, was clearly influenced by such Parisian examples as 25b rue Franklin (1904, Auguste and Gustave Perret), constructed with the Hennebique system, but entirely clad in ceramics by Alexandre Bigot. At this time, concrete was not usually employed in an exposed manner on the exterior of Paris buildings; concrete was typically faced in ceramic, except on strictly utilitarian structures. 25b rue Franklin employed two types: plain flat tiles applied in strips on the exterior of the structural skeleton, and panels with chestnut leaves on the surfaces of non-loadbearing areas.

The Thomson Meter Co. Building is also a fairly early example of the use of polychromatic glazed terra cotta on a New York structure. Though polychromatic glazed terra cotta had been employed in such designs as the Broadway Chambers Building (1899-1900, Cass Gilbert), 273-277 Broadway, the Beaver Building (1903-04, Clinton & Russell), 82-92 Beaver Street, and Madison Square Presbyterian Church (1903-06, McKim, Mead & White, demolished),[42] monochromatic and subtle shades, hues resembling masonry, and "discreet" use of color were general rules for terra cotta in New York until the Art Deco style of the 1920s. Critic Herbert D. Croly in 1906, however, challenged architects in the use of polychromatic glazed terra cotta:

While the process of making glazed and colored terra cotta has not yet been entirely perfected, there can be no doubt that the manufacturers of the material are more successful about making it than the architects are about using it. American architects are, of course, very timid about adopting a material, for the successful employment of which there are no good precedents. They are, of course, accustomed to using terra cotta in the ordinary way, and most of them appreciate fully the color values of rough or white glazed terra cotta. But the use of livelier colors is a very different thing... [43]

Susan Tunick, president of the Friends of Terra Cotta, has identified six different glazes on the Thomson Meter Co. Building: cobalt, turquoise, beige, yellow, green, and white.[44] In this respect, the building was also a departure from some of its Parisian counterparts. 25b rue Franklin, for instance, was clad in ceramics with areas differentiated by a slight contrast of monochrome and subdued tone. Some French architects, such as Jules Lavirotte, used greater variations of ceramic color. Elsewhere in Europe, colorful ceramics also appeared, such as in the work (c. 1898-1901) of Otto Wagner and Max Fabiani in Vienna.

New York Eskimo Pie Corp. [45]

In 1926 (the year of John Thomson's death), the Thomson Meter Co. was acquired by the Neptune Meter Co. and transferred to its facility in Long Island City. The Thomson Meter Co. Building was sold in 1927 for approximately $350,000 to the New York Eskimo Pie Corp., a recently incorporated subsidiary of the Eskimo Pie Corp. of Louisville, Ky., for the manufacture of its products in New York City.[46] R.S. Reynolds, Sr., of the Reynolds Tobacco Co., was president of the New York Eskimo Pie Corp. The *Brooklyn Eagle* proudly proclaimed that

located as it is in the heart of one of Brooklyn's fastest growing manufacturing and wholesale sections, this new enterprise will add to the boro's standing as the fourth largest manufacturing center in the United States. [47]

The "Eskimo Pie," originally called the "I-Scream Bar," was the first American chocolate-covered ice cream bar. Created by Norwegian-born teacher Christian Kent Nelson (1893-1992) in 1920 in Iowa, it became a local hit. Nelson became partners in 1921 with future candymaker Russell C. Stover in order to produce and market the re-named confection nationally, retaining the royalties but selling the manufacturing

rights. By 1922, Eskimo Pies were trademarked and patented as "an ice cream confection containing normally liquid material frozen to a substantially hard state and encased in a chocolate covering to maintain its original form during handling."[48] Wrapped in newly-developed aluminum foil, the ice cream bars immediately sold at a rate of one million per day and were soon made by around 2700 licensed manufacturers. The success of the Eskimo Pie, however, spawned competition among many imitators, and the firm lost its patent in 1923; Stover sold out his interest in the company. The Eskimo Pie Corp., the largest client of the United States Foil Co. (later Reynolds Metal Co.), headed by R.S. Reynolds, Sr., was sold in 1924 as a subsidiary of that firm. Reynolds moved the Eskimo Pie Corp. to Louisville in 1926. Nelson remained with the firm until 1961. The company became independent in 1992.

Foremost Dairies, Inc., which operated a pasteurization plant and wholesale depot in the former Thomson Meter building, was announced as the handler for a newly formed citywide milk cooperative in 1938.[49] A Buildings Dept. alteration filed in 1942 listed the building as a "4-story milk bottling distribution establishment."[50] The property was transferred from the New York Eskimo Pie Corp. to the Eskimo Pie Corp. in 1949. Swift & Co., which had leased the plant since 1941 in order to manufacture Eskimo Pie products as a franchise in the New York-Philadelphia region,[51] owned the building from 1952 to 1966.

Later History [52]

The building was acquired by the Gadol Realty Corp. in 1966, was transferred to the 110 Bridge Realty Corp. in 1967, and then to JMF Properties Corp. in 1969. It housed Apex Thermoplastics, Inc. The property passed from the Plymouth Apex Co. to the 110 Bridge Street Realty Corp. in 1982. The building remains in manufacturing use.

Description

The Thomson Meter Co. Building, located at the corner of Bridge and York Streets, is 100 feet by 122 feet. The four-story (plus basement) structure has three fully designed facades. The basement level, rising several feet above ground level, has rectangular openings (originally with windows; now some have louvers, glass blocks, concrete, or metal mesh), a concrete watertable, and a concrete areaway with concrete buttresses and bordered by a historic steel pipe railing with non-historic chainlink fence along Bridge and York Streets. The four stories are articulated as monumental arcades, composed of continuous concrete piers with a cement finish terminating in round arches. The Bridge Street facade has seven arched bays, while there are five arched bays each on the York Street and south facades. In addition, the north and south facades have an additional narrow bay with rectangular openings. Window bays are tripartite with concrete mullions and have original metal-framed wire-glass horizontal-pivot sash (central four-over-four, flanked by three-over-three; round arches contain additional sash). Many windows were filled in with concrete on the first and second stories (after 1967). Recessed spandrel panels above the first through the third stories are ornamented by multi-hued brick set in a herringbone pattern with a brick border and central concrete diamond motif.

The building is terminated by terra-cotta ornamentation on the three fully-designed facades above the fourth-story arched windows, and a concrete cornice and parapet. The glazed terra cotta, in hues of cobalt, turquoise, beige, yellow, green, and white, consists of a continuous background field of leaves and ribbons bordered by lines of terra-cotta blocks; small rondels atop the arches; tablets carried on corbeled (lion heads) cross-shaped brackets and curvilinear frames in the spandrels above the arches; and corner cartouches bearing the letters "T" and "M" (for Thomson Meter).

Bridge Street Facade The original main entrance, located in the second bay from the north, is approached by granite steps and curved cheekwalls spanning the areaway, is flanked by historic lower decorative brick panels and upper windows (now covered by metal mesh), is surmounted by windows (now covered by metal mesh), and has non-historic metal doors. There are through-the-wall air conditioners on the first story. Several metal signs have been placed at the north corner of the first story.

York Street Facade The narrow bay with rectangular openings is located at the westernmost end, which has a non-historic metal door and metal rolldown gate at the first story, above metal steps and a metal platform. An historic fire escape spans this bay and part of the bay to the east. A metal fire box has been placed at the east corner of the base, and several metal pipes protrude from the base. A metal sign has been placed at the east corner of the first story. Most second-story openings now have glass block. Many third-story window panes have been covered. Three long metal ventilator pipes protrude from fourth-story windows.

South Facade (formerly Talman Street facade) There are three narrow entrances located in: the westernmost arched bay, the narrow bay with rectangular openings set between the two westernmost arched bays, and in the easternmost bay, all with non-historic metal doors and the latter with non-historic

metal steps. The westernmost bay has an historic fire escape and loading dock (with a non-historic metal rolldown gate). Two metal signs have been placed at the east corner of the first story.

West Facade This facade, clad in painted brick, is pierced by windows on the third story, above the adjacent later garage addition at 152-156 York Street [which is not located on the designated Landmark Site]. A large canvas advertising sign has been placed here.

Southern Portion of the Landmark Site The southern portion of Lot 18, adjacent to the Thomson Meter Co. Building, includes the area that was originally the streetbed and sidewalks of Talman Street (which was demapped). The curbs still exist. A non-historic metal frame and rolldown gate has been placed at the lot line along Bridge Street.

Report prepared by
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Research Department

NOTES

1. "John Thomson," *Dictionary of American Biography* 9 (N.Y.: Chas. Scribner's Sons, 1964), 485-486.
2. "Thomson Meter Company's Exhibit," *Brooklyn Eagle (Chicago Edition)*, June 27, 1893, 24.
3. "To Consumers of Water," *Brooklyn Eagle*, July 24, 1899, 14.
4. Kings County, Office of the Register, Liber Deeds and Conveyances; *Real Estate Record & Guide (RERG)*, May 23, 1908, 964; "Moonshine Vaults Found Under Sidewalk," *Brooklyn Eagle*, Oct. 26, 1908; "Concrete Building for the Thomson Meter Company, Brooklyn, N.Y.," *Architects' & Builders' Magazine* (Nov. 1909), 56-59; "Improved Concrete Construction," *RERG*, Dec. 4, 1909, 995; *Year Book of the Brooklyn Chapter of the American Institute of Architects* (1910), 53; U.S. Dept. of the Interior, National Park Service, National Register of Historic Places, "Thomson Meter Company Building Inventory-Nomination Form," prepared by Karen Huebner (1988).
5. The Thomson Meter Co. acquired an additional parcel of adjacent land in 1914.
6. "Concrete Building...," 57.
7. Dec. 4, 1909.
8. "Louis E. Jallade," *Who's Who in New York* (N.Y.: Lewis Histl. Publg. Co., 1938), 573, and *Who Was Who in America* 3 (Chicago: Marquis Who's Who, 1960), 444; Dennis S. Francis, *Architects in Practice, New York City 1840-1900* (N.Y.: Comm. for the Pres. of Archl. Recs., 1979), 44; James Ward, *Architects in Practice, New York City 1900-1940* (N.Y.: Comm. for the Pres. of Archl. Recs., 1989), 40; NYS Census (1880); Sandra L. Tatman, "Louis Eugene Jallade," www.philadelphiabuildings.org website; LPC, Architects files; Jallade obit., *New York Times (NYT)*, Feb. 27, 1957; *New York City Directories* (1903-10); Andrew S. Dolkart, *Morningside Heights: A History of Its Architecture and Development* (N.Y.: Columbia Univ. Pr., 1998); John Clubbe, *Cincinnati Observed: Architecture and History* (Columbus: Ohio State Univ. Pr., 1992), 454-455; Paula R. Lupkin, "YMCA Architecture: Building Character in the American City, 1869-1930" (dissertation, Univ. of Pa., 1997).
9. Louis E. Jallade, "When My Future Was Still Undetermined," *Association Men* (Sept. 1917), 37. Jallade was naturalized in 1897, and formed the partnership of Jallade & [Joel D.] Barber around 1900.
10. The Ansonia is a designated New York City Landmark.
11. Portions of the Seminary are a designated New York City Landmark.
12. Betons Armes Hennebique, Bureau Technique Central archives.
13. Dec. 4, 1909.

14. Jallade ran a school with architect Maurice Prevot and lectured on design and building construction at Columbia University and the Society of Beaux-Arts Architects (1908-11). With Paul P. Cret and Albert Kelsey, he entered the competition for a proposed Robert Fulton Memorial (1909).

15. His commissions (many in association with Louis Allen Abramson, then in his office) included those in Portsmouth, Newport News, and Roanoke, Va.; Worcester, Mass.; Newport, R.I.; Allentown, Pottstown, Warren, and McKeesport, Pa.; Hartford and Meriden, Conn.; Augusta, Maine; Trenton, Bayonne, Plainfield, Morristown, and Passaic, N.J.; Bronx Union, West Side annex (8th Avenue and West 57th Street), and Harlem (later Rice High School, 276-278 Lenox Avenue), New York City; Havana, Cuba; and the Naval YMCA, Philadelphia (1928).

16. These included the Flatbush Congregational Church (1910, with Allen & Collens), 1802-1806 Dorchester Road, located in the Ditmas Park Historic District; Broadway Presbyterian Church (1911), 601 West 114th Street; gymnasium of the Union Theological Seminary (1912); International House (1921-24, with Andrew Lindsay & Harry E. Warren), a dormitory-type residence at 500 Riverside Drive; the English Norman style Mariemont Community Church (1926), Cincinnati; Metropolitan-Duane Methodist Church (1931), 201 West 13th Street, located in the Greenwich Village Historic District; and Brewster Public Library (1932), Brewster, N.Y.

17. Later Jallade commissions included the Welfare Island Dispensary (1940), 535 East 80th Street; Melrose Houses (1951-52), Mott Haven, the Bronx; and Bethpage School (1952), Long Island, N.Y.

18. David P. Billington, "Francois Hennebique," *Macmillan Encyclopedia of Architects* 3 (N.Y. Free Pr., 1982), 354-355; New *York City Directories* (1901-13); Gwenael Delhumeau, "Hennebique and Building in Reinforced Concrete around 1900," *Rassegna* (Mar. 1992), 15-25; "Georges Baffrey-Hennebique," *Who's Who in the World* (Chicago: Marquis Who's Who, 1975), 59.

19. Frank Newby, edit., *Early Reinforced Concrete* (Burlington, Vt.: Ashgate Publg. Co., 2001), xxxiii-xxxiv.

20. Newby; Marie-Jeanne Dumont, "The Philosophers' Stone: Anatole de Baudot and the French Rationalists," *Rassegna* (Mar. 1992), 37-43; Peter Collins, *Concrete: The Vision of a New Architecture. A Study of Auguste Perret and his Precursors* (N.Y.: Horizon Pr., 1959); Donald Friedman, *Historical Building Construction* (N.Y.: W.W. Norton & Co., 1995), 105-106; Thomas Flagg, "DUMBO Neighborhood," in *Brooklyn: East of the River, South of the Sound* (N.Y.: Society for Industrial Archeology, Roebling Chapter, 2002), 11-13.

21. Cottancin's contribution in the history of concrete in this period is now termed "overlooked" by various historians. His buildings are notable for their unusual structural features and "his use of brickwork was perhaps the most extraordinary" of his materials. Seen most prominently at the Eglise Saint-Jean-de-Montmartre (1894-1904, Anatole de Baudot), Paris, he used reinforced brickwork (pierced bricks with steel reinforcing rods) for compression members and reinforced cement for tension members. G.J. Edgell, "The Remarkable Structures of Paul Cottancin," in Newby, edit., 172.

22. Reyner Banham, *A Concrete Atlantis: U.S. Industrial Building and European Modern Architecture 1900-1925* (Cambridge: MIT Pr., 1986), 32.

23. Carl W. Condit, "The First Reinforced-Concrete Skyscraper...," in Newby, edit., 266.

24. Betsy H. Bradley, *The Works: The Industrial Architecture of the United States* (N.Y.: Oxford Univ. Pr., 1999), 156.

25. "The Architectural Problem of Concrete" and "On the Artistic Expression of Reinforced-Concrete," *American Architect & Building News,* May 4, 1907, 163-174; Michael Stratton, *The Terracotta Revival: Building Innovation and the Image of the Industrial City in Britain and North America* (London: Victor Gollancz, 1993); Bradley; *Paris and the Legacy of French Architectural Ceramics* (N.Y.: Friends of Terra Cotta Pr., 1997); W. Hawkins Ferry, *The Legacy of Albert Kahn* (Detroit: Wayne State Univ. Pr., 1970).

26. Cited in Bradley, 239.

27. Stratton, 118.
28. "The Architectural Problem...," 163.
29. "On the Artistic...," 166.
30. Ibid., 168.
31. Ibid., 168.
32. Ibid., 169.
33. Ibid., 164.
34. Ibid., 167.
35. Ibid., 169.
36. Ibid., 170.
37. Ibid., 171.
38. Ibid., 172.
39. Sarah B. Landau, "The Tall Office Building Artistically Reconsidered: Arcaded Buildings of the New York School, c. 1870-1890," in *In Search of Modern Architecture: A Tribute to Henry-Russell Hitchcock*, Helen Searing, edit. (Cambridge: MIT Pr., 1982), 136-164. No. 141-147 Mercer Street is located within the SoHo-Cast Iron Historic District.
40. Dec. 4, 1909.
41. Ibid.
42. The two extant buildings are designated New York City Landmarks.
43. Herbert D. Croly, "Glazed and Colored Terra-Cotta," *Architectural Record* (Apr. 1906), 319.
44. Susan Tunick (president, Friends of Terra Cotta), letter to LPC, May 13, 1998. The manufacturer of the terra cotta is currently unknown. Jallade is known to have used the product of the Federal Terra Cotta Co. in 1915, the South Amboy Terra Cotta Co. in 1917, and the New York Architectural Terra Cotta Co. in 1927.
45. Kings County; "Buys Brooklyn Plant," *NYT*, Feb. 10, 1927, 40; "Louisville Candy Firm Buys Boro Waterfront Building," *Brooklyn Eagle*, Feb. 10, 1927, 21; "Eskimo Pie Corporation Records, 1921-1996," www.americanhistory.si.edu/archives website; "Eskimo Pie Corporation," *International Directory of Company Histories* 21 (N.Y.: St. James Pr., 1998), 218-220.
46. The firm acquired additional parcels of adjacent land in 1927 and 1929.
47. Feb. 10, 1927.
48. *International Directory...*, 218.
49. "Milk Cooperative to Begin Here Soon," *NYT*, Apr. 18, 1938, 1.
50. "Building Plans Filed," *NYT*, May 8, 1942, 37.
51. "Swift Seeks Eskimo Pie Plant," *NYT*, Feb. 4, 1941, 33.
52. Kings County; "Treasure or Eyesore, Old Building Evokes Passion," *NYT*, Mar. 19, 2000.

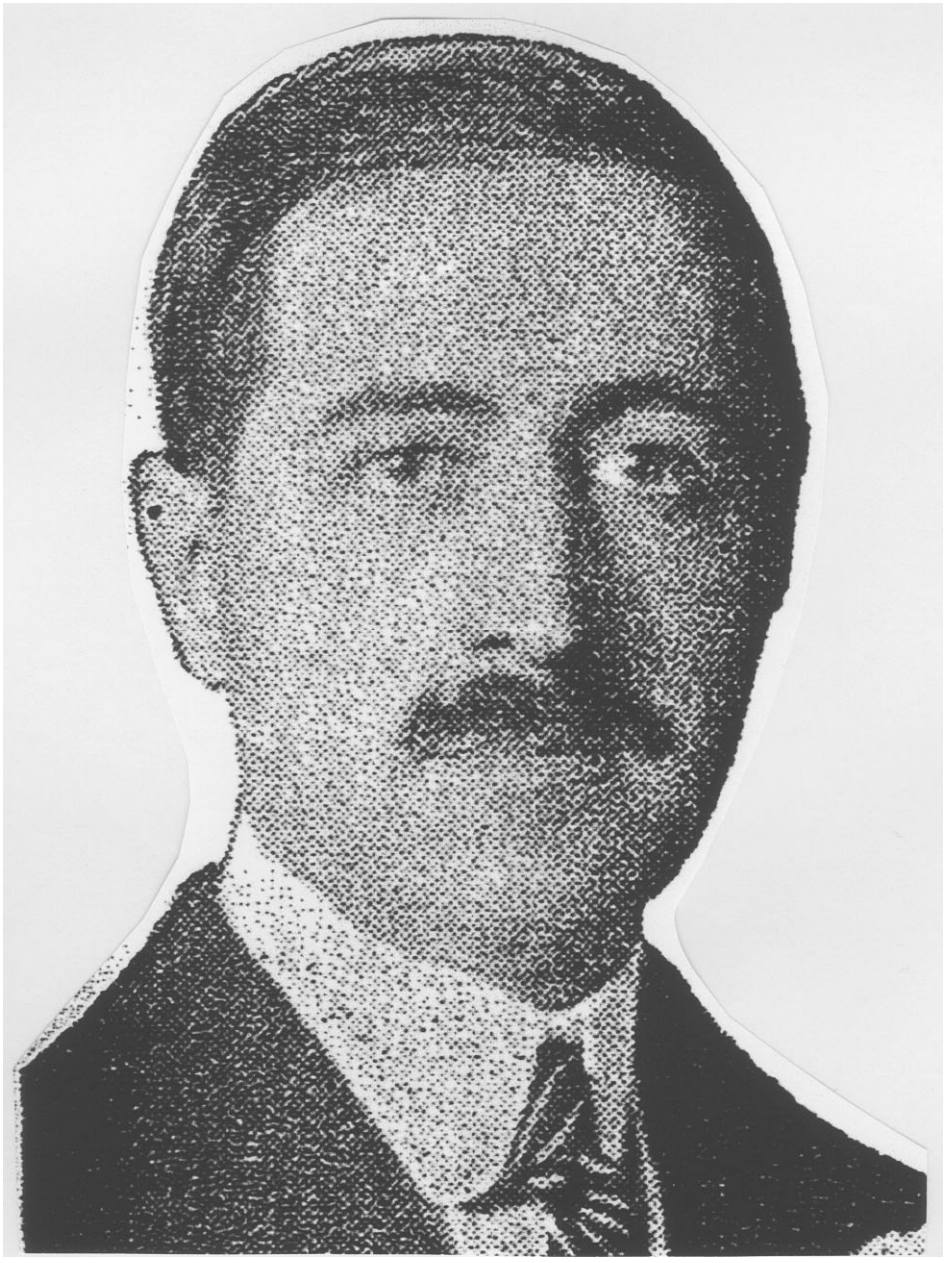
FINDINGS AND DESIGNATION

On the basis of a careful consideration of the history, the architecture, and other features of this building, the Landmarks Preservation Commission finds that the Thomson Meter Company Building (later New York Eskimo Pie Corporation Building) has a special character and a 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 Thomson Meter Company Building, among the most aesthetically interesting industrial structures in New York City, is a pioneering American building that employs, in part, a frank exterior expression of its concrete structure, and also displays a fairly early use in New York of polychromatic glazed terra cotta; that it was the new 4-story (plus basement) factory built in 1908-09 to the design of Louis E. Jallade, with the Hennebique Construction Co. as general contractor, for the successful Thomson Meter Co., founded c. 1890 in Brooklyn to manufacture John Thomson's patented water meters; that the structure is made of reinforced concrete, poured at the site, with spandrels adorned with multi-hued tapestry brickwork, and terminated by elaborate decorative polychromatic glazed terra cotta above arched windows, the monumental arcades on three fully-designed facades following in the long New York tradition of arcaded warehouses and other building types; that Jallade was an architect-engineer who had studied at the Ecole des Beaux-Arts and previously employed the reinforced-concrete system of Francois Hennebique, a contractor/consulting engineer in Belgium and France who achieved success with branches licensed to construct designs with his system, which was widely used in the U.S., including on this building; that reinforced concrete emerged as a significant structural material in the U.S. in the first decade of the 20th century, with the first major American builder in the material being Ernest L. Ransome, considered the inventor of the "daylight factory," characterized as "multi-story American industrial buildings with exposed concrete frames, filled in only by transparent glazing," of which Thomson Meter is an example; that the use of exposed concrete on building exteriors, however, was debated by architects, who perceived drawbacks in its finish, color, texture, and susceptibility to moisture, and that while it was widely agreed that it should be decorated with other materials for better effect, certain architects and engineers advocated concrete's "truthful" exposure, with the Thomson Meter Co. Building, interestingly, achieving a fairly early compromise between these positions, with the concrete structure both exposed and adorned; that Jallade's use of ceramic ornament, particularly leaf motifs in terra cotta, was clearly influenced by Parisian examples; that, after Thomson's death, this building was sold in 1927 to the New York Eskimo Pie Corp., a subsidiary of the parent firm, for the regional manufacture of the first American chocolate-covered ice cream bar (created in 1920), and that Eskimo Pie products were made here until 1966.

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 Thomson Meter Company Building (later New York Eskimo Pie Corporation Building), 100-110 Bridge Street (aka 158-166 York Street), Borough of Brooklyn, and designates Brooklyn Tax Map Block 66, Lot 18 in part, consisting of the property bounded by a line beginning at the northeast corner of the lot, extending westerly along a portion of the northern lot line to a point corresponding to the westernmost edge of the above-described building (excluding the later garage addition at 152-156 York Street), southerly along the westernmost edge of the above-described building and a line extending southerly to the southern lot line, easterly along a portion of the southern lot line, and northerly along the eastern lot line, to the point of beginning, as its Landmark Site.

Thomson Meter Company Building
Source: Real Estate Reocrd & Guide, Dec. 4, 1909

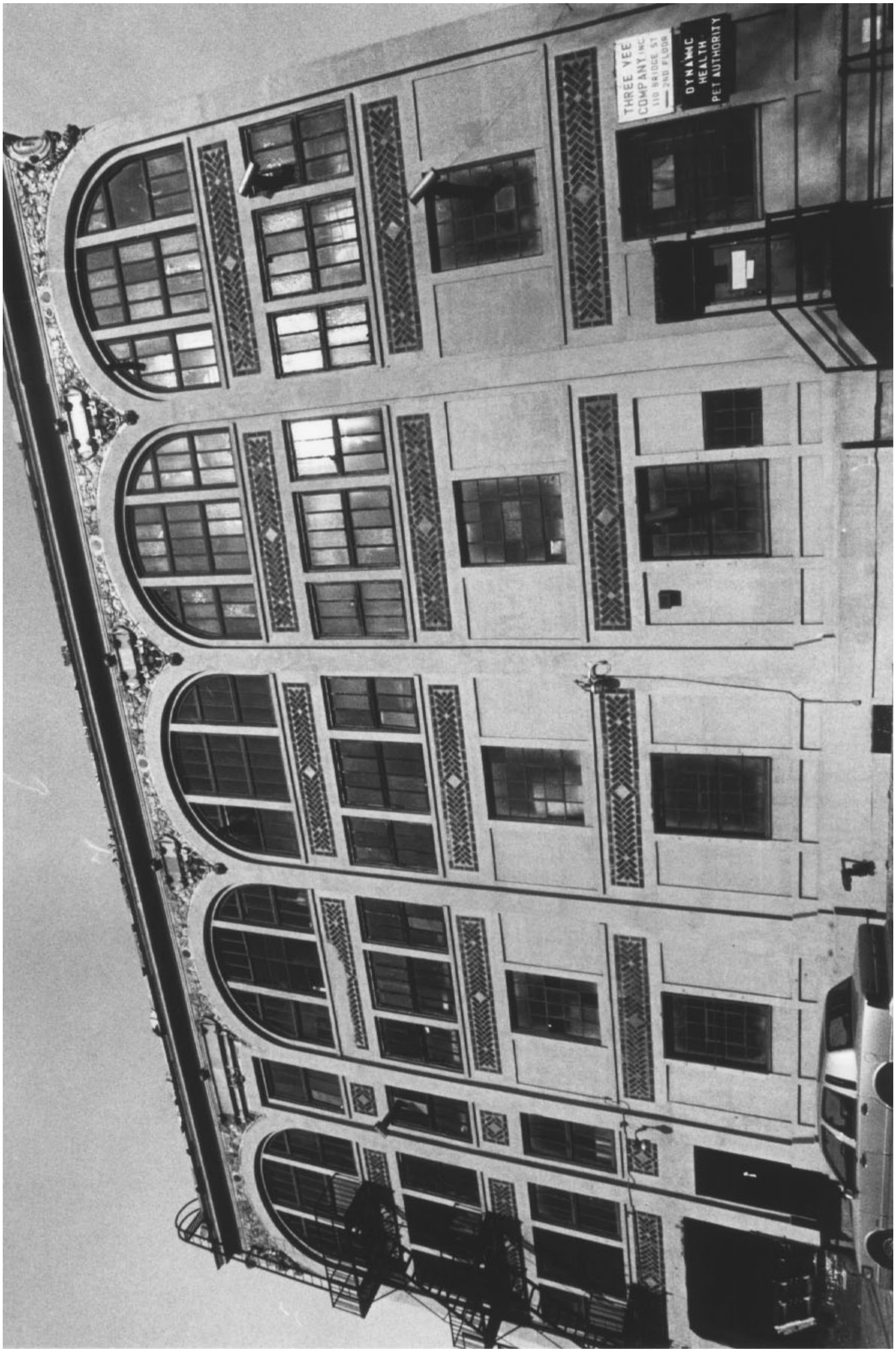


Louis E. Jallade, architect
Source*: Association Men,* (Sept. 1917)

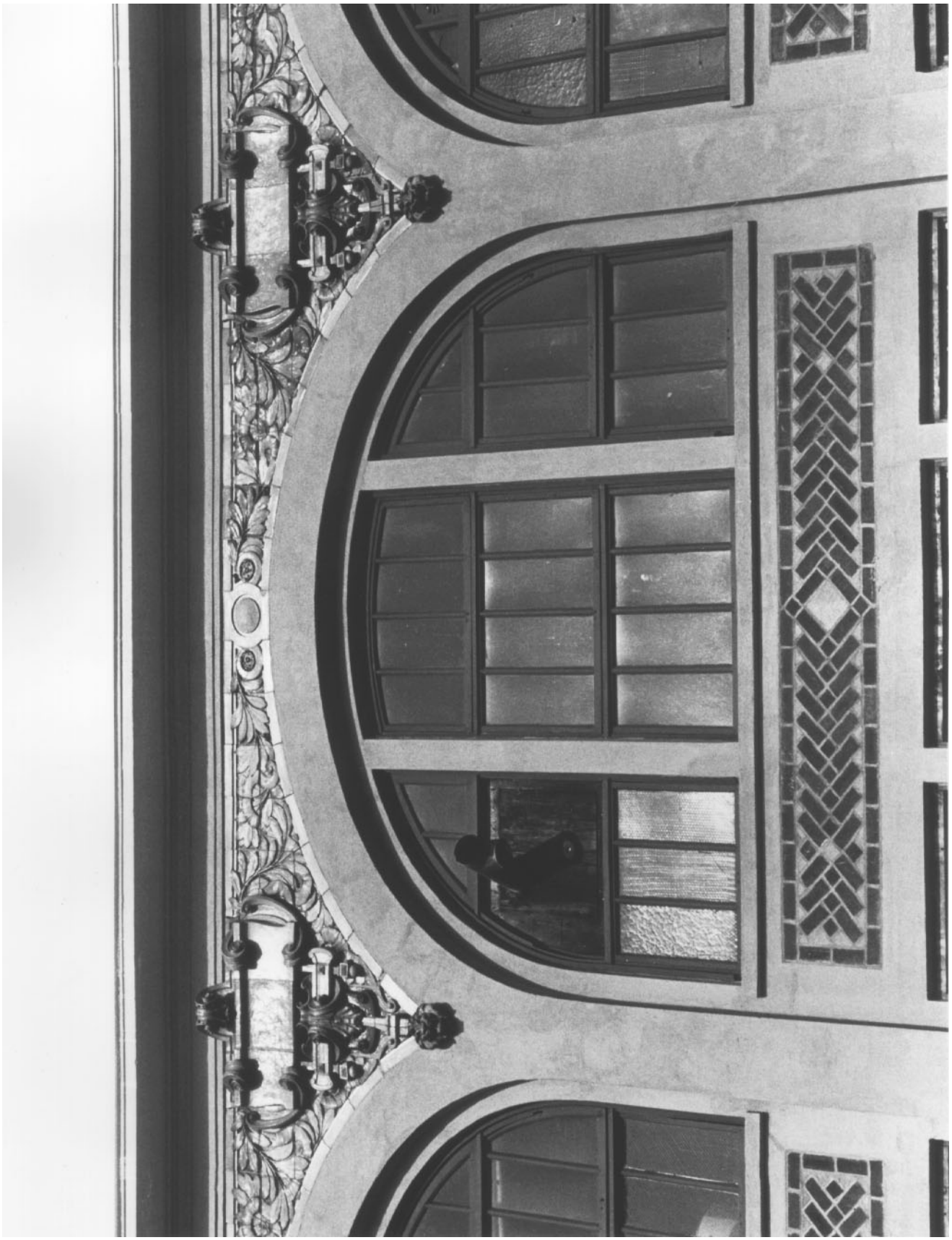
Thomson Meter Company Building, 100-110 Bridge Street (aka 158-166 York Street), Brooklyn
Photo: Carl Forster

Thomson Meter Company Building, York Street facade
Photo: Carl Forster

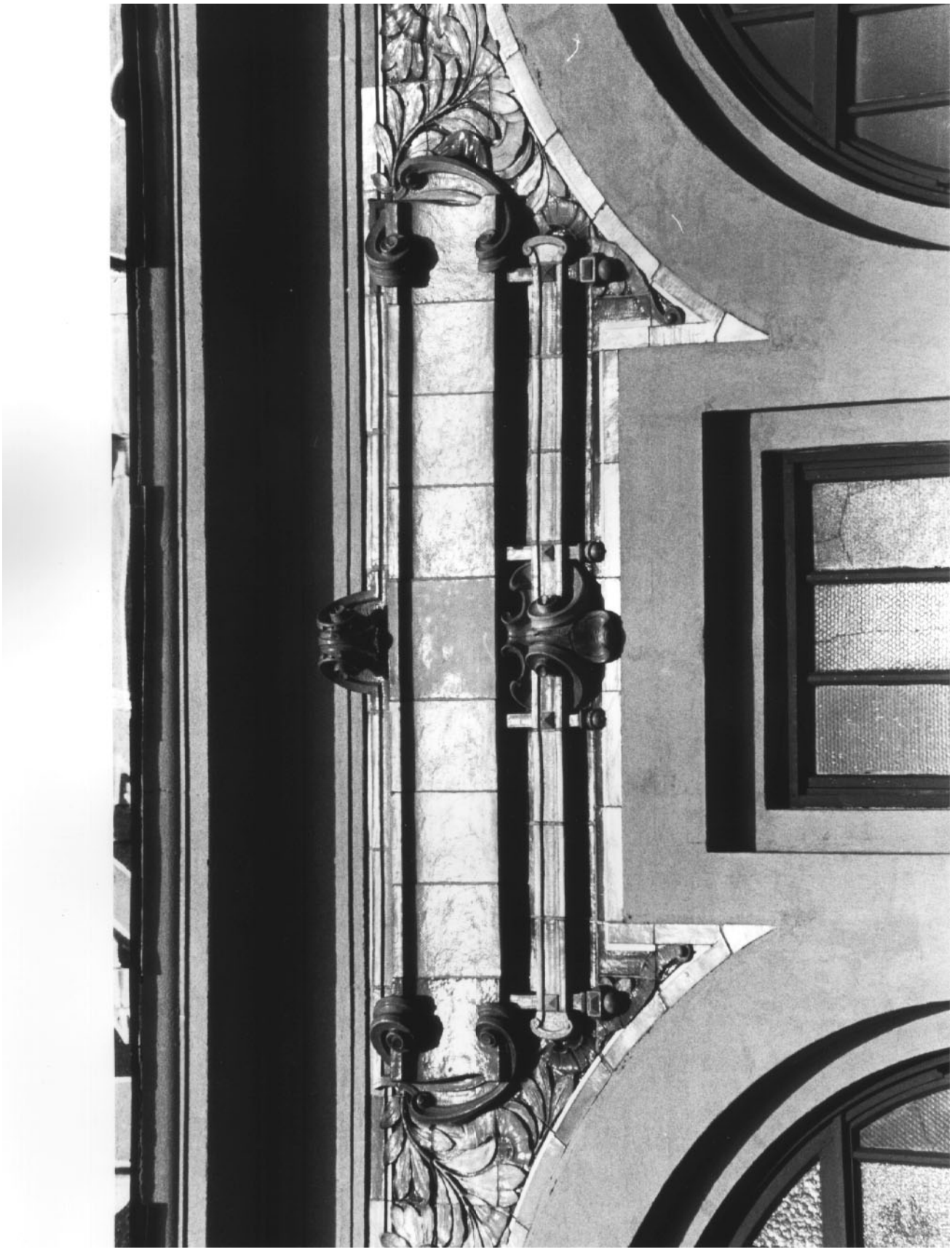
Thomson Meter Company Building, Bridge Street facade
Photo: Carl Forster



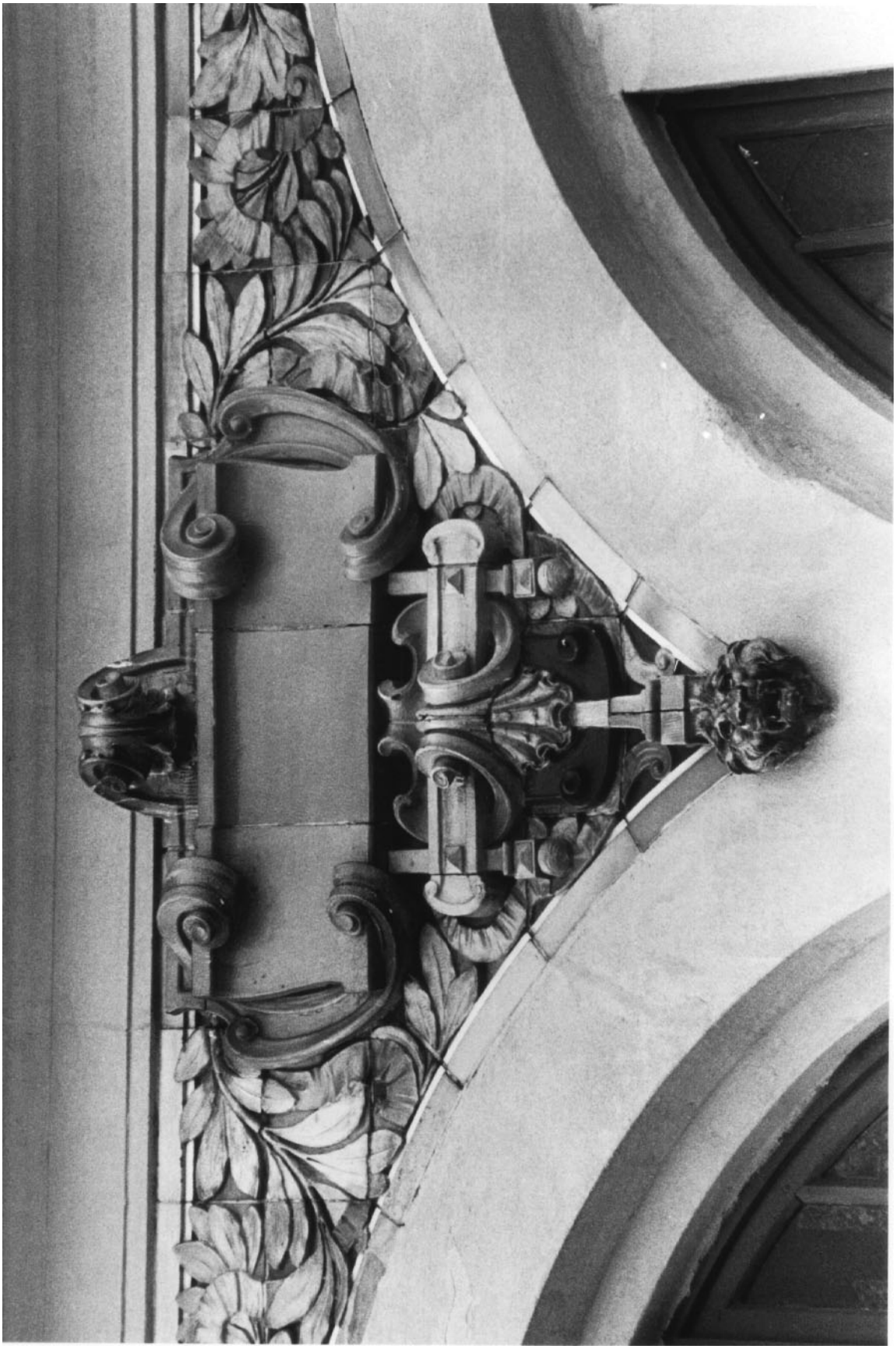
Thomson Meter Company Building, South (formerly Talman Street) facade
Photo: Carl Forster



Thomson Meter Company Building, fourth-story detail
Photo: Carl Forster



Thomson Meter Company Building, terra cotta detail
Photo: Carl Forster



Thomson Meter Company Building, terra cotta detail
Photo: Carl Forster

Thomson Meter Company Building, terra cotta detail
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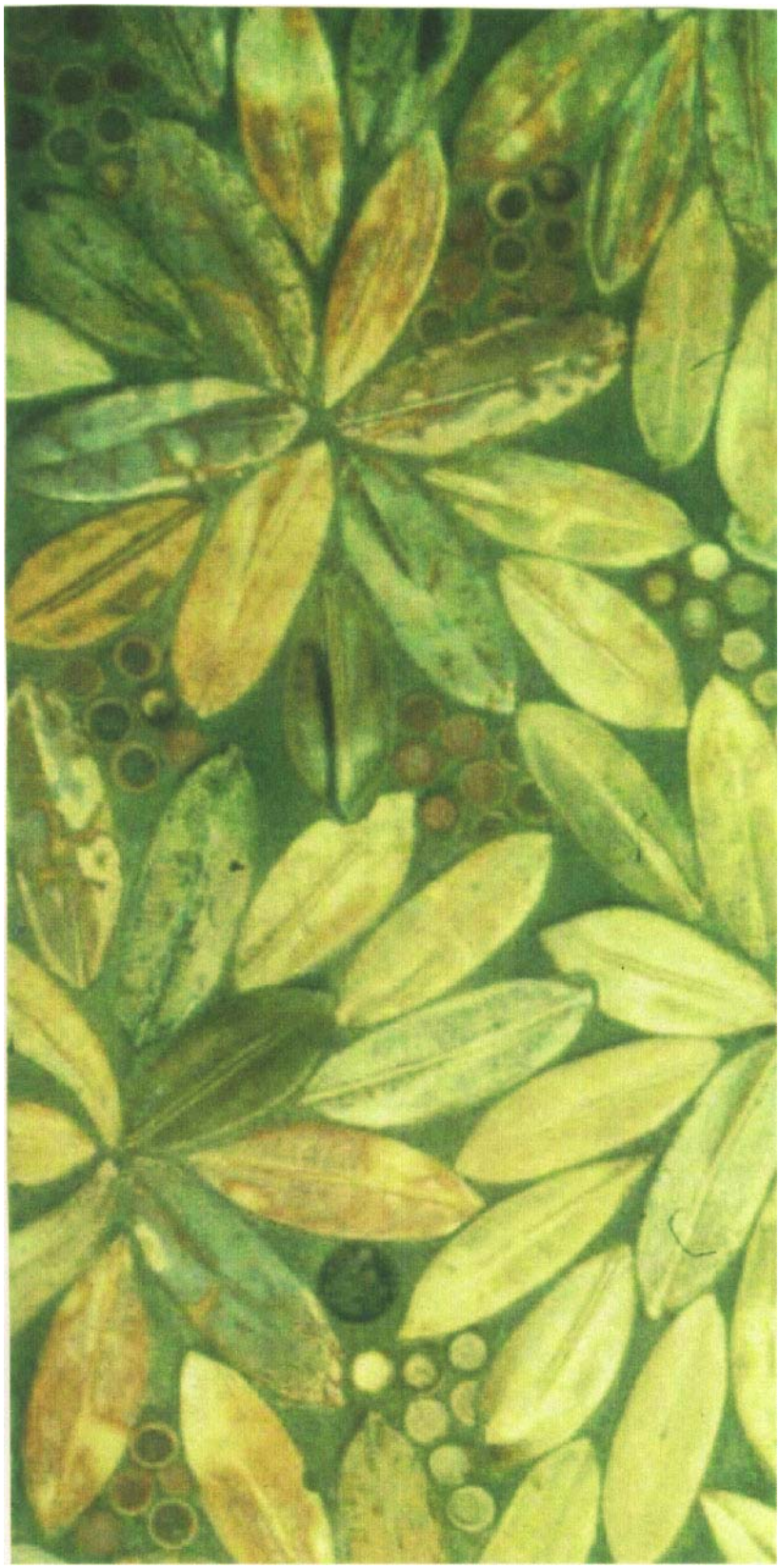
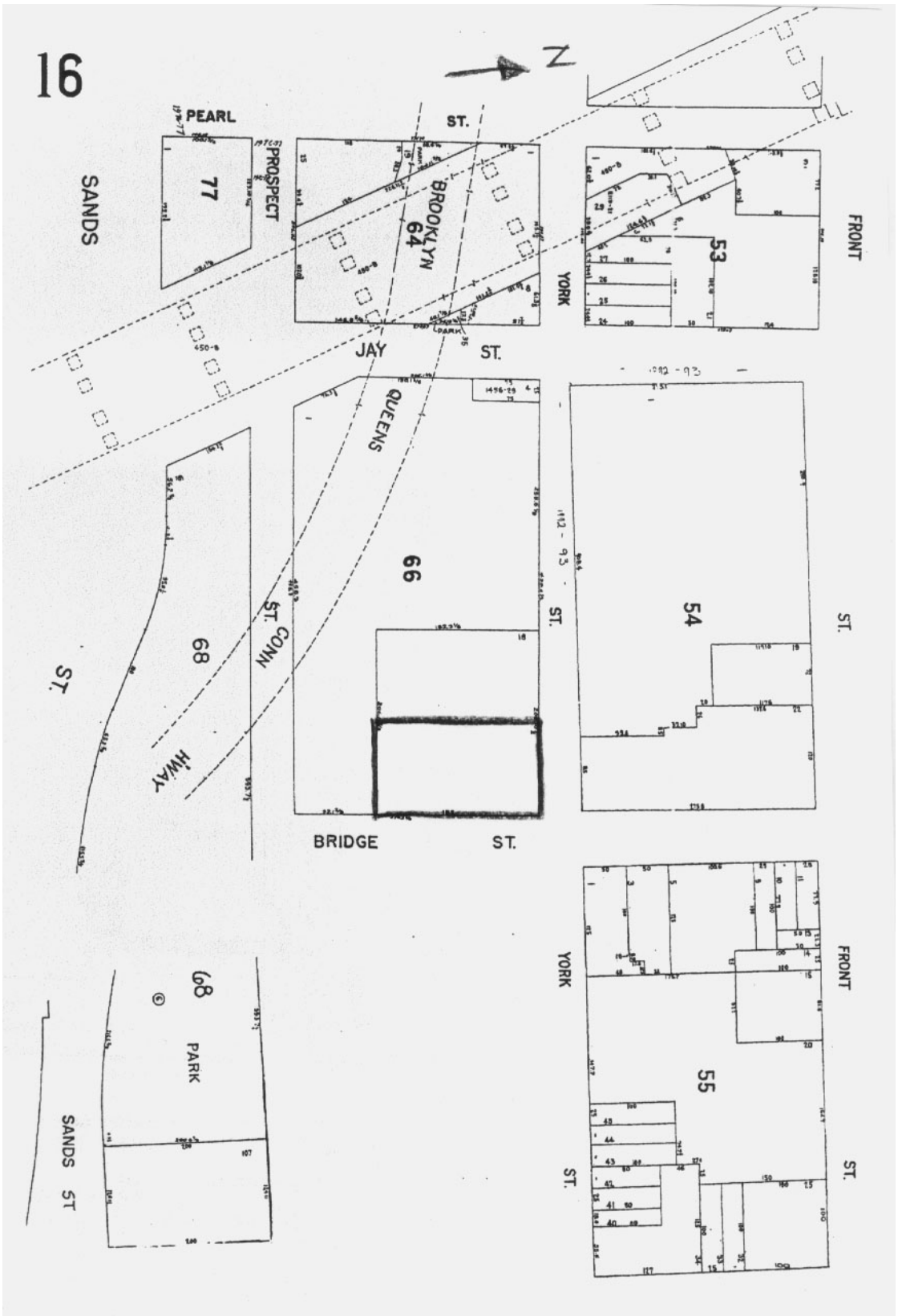
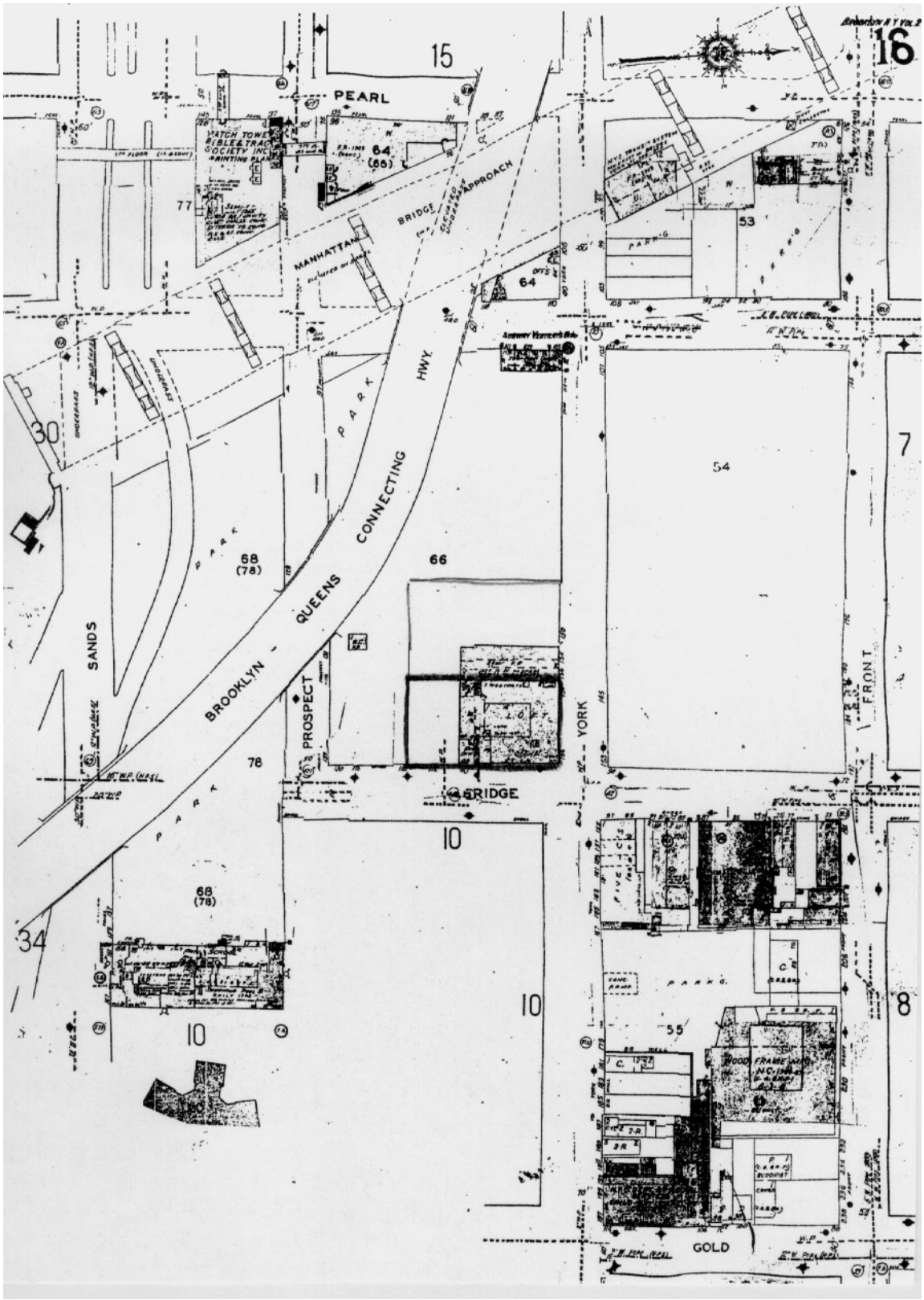


Ceramic detail (Alexander Bigot) on 25b rue Franklin, Paris (1904, Auguste and Gustave Perret)
Photo Credit: Paul A. Tunick



Thomson Meter Company Building

Landmark Site: Brooklyn Tax Map Block 66, Lot 18 in part
Source: Dept. of Finance, City Surveyor, Tax Map



Thomson Meter Company Building

Source: Sanborn, *Brooklyn Land Book* 2 (2003), pl. 16