

SEARS ROEBUCK & COMPANY MAIL ORDER PLANT
3625 Truman Road
Kansas City
Jackson County
Missouri

HABS No. MO-1928

HABS
MO-1928

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN BUILDINGS SURVEY
MIDWEST SUPPORT OFFICE
National Park Service
U.S. Department of the Interior
1709 Jackson Street
Omaha, NE 68102

HISTORIC AMERICAN BUILDING SURVEY
SEARS, ROEBUCK AND COMPANY MAIL ORDER PLANT
KANSAS CITY, MISSOURI

HABS No. MO-1928

Location: 3625 Truman Road. The site is bounded by Truman Road on the north, 18th Street on the south, Cleveland Avenue on the east and Indiana Avenue on the west.

Legal: SW 1/4; SE 1/4; Section 3; Township 49N; Range 33W.

Quad: Kansas City, Missouri-Jackson County

UTM: Zone 3. Easting: 366900;
Northing: 4327800

Date of Construction: 1925 with an addition in 1979.

Architects: George C. Nimmons & Co., Chicago, (1925); J. E. Dunn, Kansas City, (1979).

Mechanical Engineer: Martin C. Schwab Company, Chicago.

Structural Engineer: Lieberman and Hein, Chicago.

Builder: B-W Construction Company, Chicago.

Present Owner: Sears, Roebuck and Company,
Hoffman Estates, Illinois

Present Use: vacant

Significance: The Sears, Roebuck and Company Warehouse, Kansas City, Missouri is representative of one of 10 mail order plants of the nation's largest mail order and merchandise concern. Constructed in 1925 and designed by George C. Nimmons and Company, Chicago, the Sears plant demonstrates the efficiency of what has been called the American Industrial Style of architecture.

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Report prepared by:

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Kansas City, Missouri, 64113.

Date:

November 17, 1995.

Overview

The Sears, Roebuck and Company Mail Order Plant, located at 3625 Truman Road, Kansas City, Missouri, is sited on a 57-acre parcel two miles east of the central business district on Interstate 70. The site is bounded on the north by Truman Road, on the south by 18th Street, on the east by Cleveland Avenue and on the west by Indiana Avenue.

The historic portion of the Sears, Roebuck and Company Mail Order Plant, designed by George C. Nimmons and Co., and built in 1925, consists of two connected individual units sited on a 37.5 acre parcel (see site plan): the two-story L-shaped administration and retail wing on the north and the nine-story U-shaped merchandise wing to the south. The 1,455,000-square-foot plant is constructed of reinforced concrete with light rose colored brick and Bedford stone trim.¹ The exterior walls measure 21" thick and the 8" concrete floors are overlaid with maple hardwood flooring. All industrial-style windows are framed with steel casings. The parapet roof with sawtooth skylights features a Hyplon roof system installed in 1984. There are 39 dock doors located at the west and north elevations of the merchandise unit.²

In the courtyard that is formed by the interior of the historic U-shaped nine-story merchandise wing, there is two-story flat roof train shed with 7 gabled skylights, each covered with a Trokal membrane.³ The train shed, at the south end, is connected to a barrel vaulted "court" featuring 4 sawtooth skylights clad in corrugated aluminum.

In 1979, a three-story structure constructed by J. E. Dunn Construction Company was added to the south elevation of the merchandise wing. This reinforced concrete structure with steel paneled siding, measuring 763' x 404', added approximately 1,150,000 square feet to the plant and provided an additional 90 dock doors. The first floor has a 20' clearance, while the second and third floors have a 28' storage clearance height. A mezzanine was later added to accommodate the full-case sorter system and to provide additional storage space.⁴

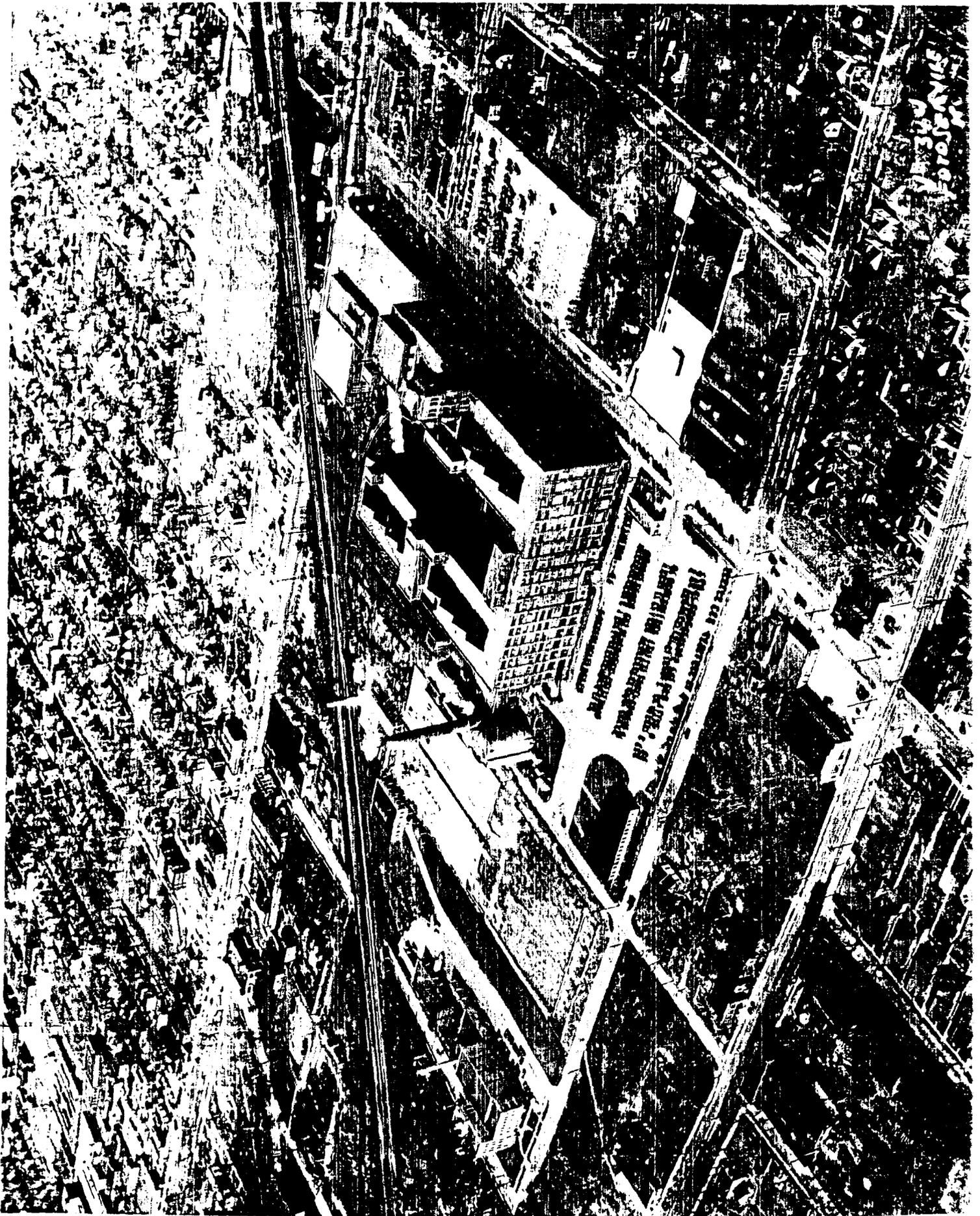
¹George C. Nimmons, Industrial Buildings Their Great Architectural Opportunities and an Appeal to the Architects to Help the American Industries Whose Buildings They have Neglected in the Past," *The American Architect*, Vol. CXXIX., No. 2488 (January 5, 1926): 24.

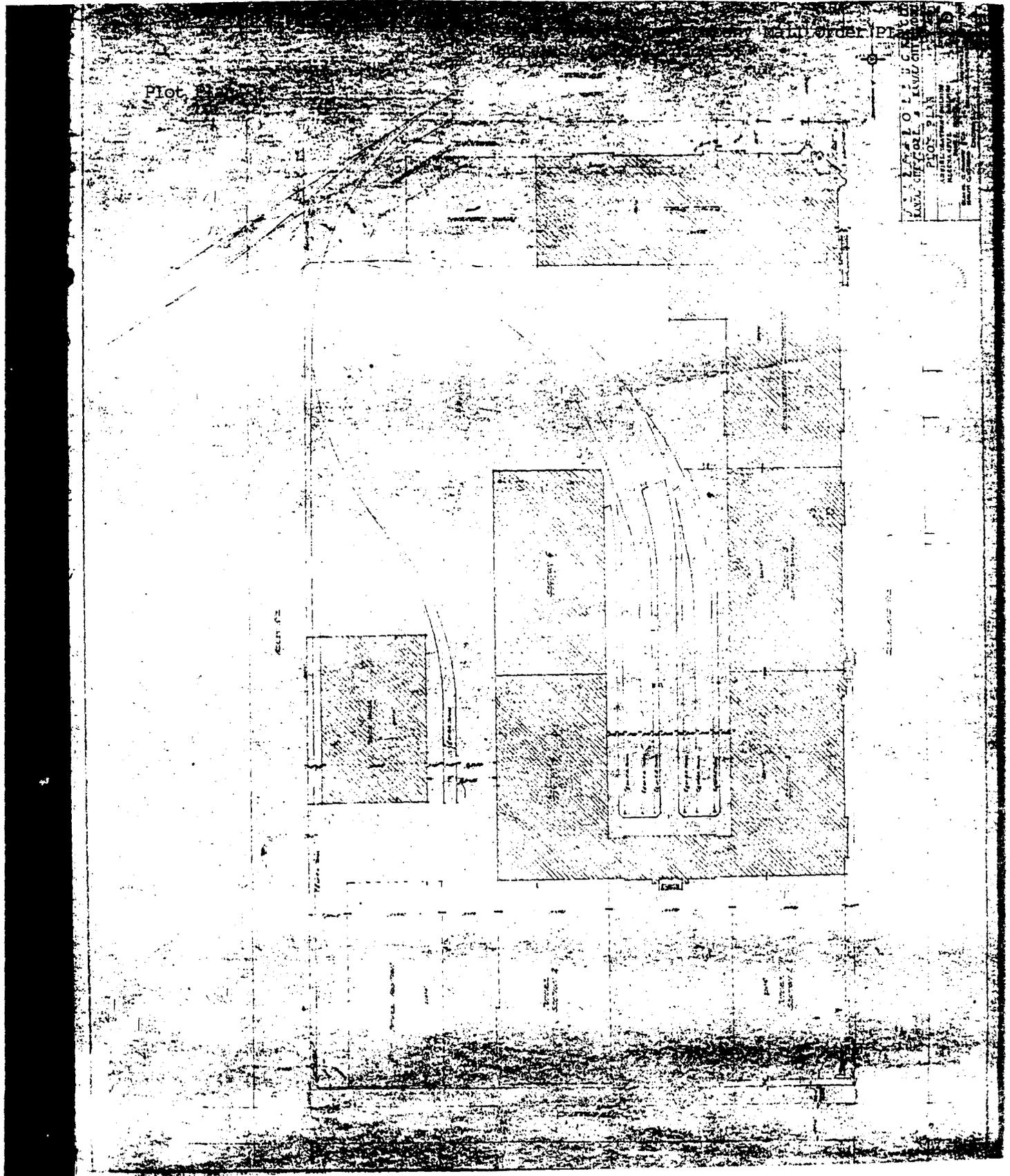
²Kansas City CMC-481, A Unit of SLS. Copy. Files, Sears, Roebuck and Company, 1650 Cleveland Avenue, Kansas City, Missouri, 1. As originally designed, there was capacity for 50 freight cars or their equivalent of mail cars. See also Sears Distribution Center. Promotional brochure, Zimmer Realtors/Developers, Kansas City, Missouri.

³Don Higgins, closing unit manager, Sears, interview with author, Kansas City, Missouri, 26 September 1995.

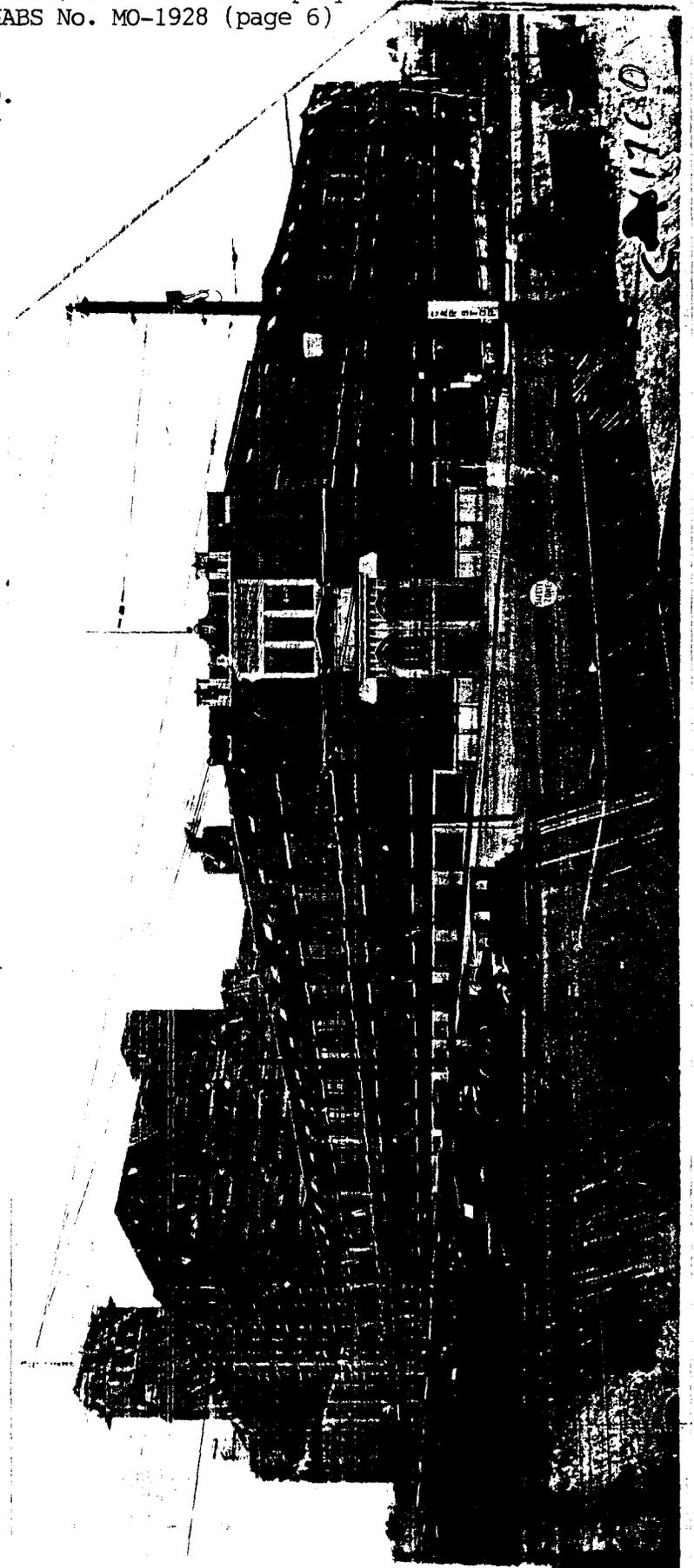
⁴Kansas City CMC-481 A Unit of SLS, 1.

View of Sears, Roebuck and Company, c. 1935. MVR, Kansas City, MO Public Library





Sears, Roebuck and Company, c. 1930.
MVR, Kansas City, MO Public Library



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A four-story reinforced concrete and brick power house, sited on the west side of the west wing of the merchandise wing, just east of Askew Avenue, was demolished in 1979.⁵ There are two non-contributing buildings located on the site: a one-story brick building (on the western portion of the site) built c. 1961⁶ and a gas station, erected in 1973 by Sears and Roebuck Company, located on 10 acres of land on the east side of Cleveland Avenue.⁷

Site Considerations and Building Campaigns: 1911-1925

In June of 1912, businessmen and public officials of Kansas City, Kansas met with representatives of Sears, Roebuck and Company of Chicago regarding the erection of a mail order house. A tract of 2 1/2 acres at 18th Street and Stewart Avenue, well suited for switching purposes on the Northwestern branch of the Missouri Pacific Railroad, was offered to Sears, Roebuck for the mail order house site free of charge.⁸ Although a small six-story branch office at 1201 St. Louis Avenue in the West Bottoms of neighboring Kansas City, Missouri had been in operation since 1911⁹, there was no room for the expansion needed to erect a mail order house at that location.

While many perks were offered to Sears, Roebuck for the building of the branch house on the Kansas side, including water and electricity at cost, the construction of a special post office branch supplemented with motor car service and excellent freight service¹⁰, the company decided to build their plant on five acres of land in North Kansas City, Missouri. The official announcement was made by Julius Rosenwald, the president of the company, on August 1, 1912.¹¹

The site for the new plant was leased from the Union Depot Bridge and Terminal Railway Company. The tract was bounded by Holmes and Charlotte Streets and North Eighteenth and Liberty Road. The location for this new building was advantageous because the Excelsior Springs electric line ran along Liberty Road and the navigable Missouri River is eighteen blocks to the south. The new site also provided room for future growth and the construction of homes for Sears, Roebuck employees.¹²

⁵Charles Gerber, interview with author, 26 September 1995.

⁶This building was used as a carpenter shop/maintenance building.

⁷*News and Views*, Vol. 29, No. 5 (June-July, 1973), 1. This was the employee publication for Sears, Roebuck and Co., Kansas City, Missouri. The original automotive center, located on the southeast corner of Cleveland Avenue and Truman Road and built in 1935, was demolished in 1973.

⁸*Kansas City Star*, 27 June 1912.

⁹*Kansas City Star*, 15 September 1912.

¹⁰*Kansas City Star*, 27 June 1912.

¹¹*Kansas City Times*, 2 August 1912.

¹²*Ibid.*

Completed in July, 1913, the new North Kansas City Sears, Roebuck and Company warehouse¹³ was designed by George C. Nimmons, architect of the Sears, Roebuck and Company Mail Order Plant in Chicago.¹⁴ The \$400,000, nine-story building was constructed of reinforced concrete with terra-cotta and brick. Measuring 220' x 101', the Industrial Gothic-styled branch office was actually the "cornerstone of a great plant eight times the size of the building"¹⁵ which the company expected to erect at a later date. Apparently, land adjacent to this structure had been purchased by Sears, Roebuck for the purpose of expansion¹⁶, but for reasons unknown at this time, this transaction never occurred.

Twelve years after the completion of the North Kansas City warehouse, negotiations to select a new site for the location of a huge \$4 million plant for Sears, Roebuck and Company were finalized. On January 8, 1925, the mail order company signed a contract with Foster Lumber Company who agreed to sell thirteen and one-half acres bounded by 15th and 17th Streets, Cleveland and Askew Avenues in Kansas City, Missouri to Sears, Roebuck for \$400,000.¹⁷ In addition, Sears, Roebuck obtained from Frank M. Oglebay, owner of a large tract between the Foster land and the Terminal tracks, an agreement to permit switch tracks from the Terminal tracks to the new mail order plant.¹⁸

Like the nine-story building in North Kansas City, this new plant for Sears, Roebuck was designed by Chicago architect George C. Nimmons.¹⁹ Work on the building, comprised of a two-story administrative and retail wing connected to a nine-story merchandise wing, was begun immediately "in an effort to

¹³This building was not designed as a mail order house, but a warehouse. The central location was chosen to insure quick delivery and reduce freight charges on the "heavier class of merchandise" for customers in Arizona, Arkansas, Colorado, Kansas, Missouri, Nebraska, Nevada, New Mexico, Utah and Wyoming. It should be pointed out that several periodicals erroneously listed the location for this building in Kansas City, Missouri. The correct location is North Kansas City, Missouri, just north of neighboring Kansas City, Missouri.

¹⁴Robert Craik McLean, "The Modern Factory as Illustrated in the Works of George C. Nimmons," *Western Architect*, Vol. XXIII, No. 1 (January, 1916): 4-5.

¹⁵*Kansas City Star*, 15 September 1912, n.p.

¹⁶A 1914 Sanborn Map of North Kansas City, Missouri indicates that land adjacent to the Sears Building was owned by the company.

¹⁷*Kansas City Star*, 8 January 1925, n.p.

¹⁸*Ibid.* Askew Avenue originally divided the holdings of Oglebay and the Foster tract. In the settlement, Oglebay agreed to close the entrance of Askew Avenue into Fifteenth Street (a narrow diversion at the Fifteenth Street Viaduct). To keep the Oglebay holdings accessible, and also as a neighborhood improvement, it was arranged to widen Seventeenth Street fifteen feet from Indiana Avenue east to Cleveland Avenue.

¹⁹See photocopies of original plans included in this document.

complete the immense plant for the fall business of [1925]."²⁰ Included in Nimmons plans for this 1,455,000 square foot plant was a design for a power house. The original plans also allowed for three major additions and extensive landscaping featuring a small park, shrubs and fountains on the Cleveland Avenue frontage.²¹ Unfortunately, these portions of Nimmons' preliminary planning were never implemented.

Work on the Sears Kansas City plant began in March, 1925, three months after site negotiations were finalized. Six months into the project, the concrete frame was virtually finished and one of the units of the merchandise building had been faced with brick. By August 27, the only part of the exterior of the plant which had not taken definite form was the fourteen-story tower and the exterior of the power plant. The bulk of the merchandise storage space was complete except for the ninth floor.²²

There were strong incentives written into the contract between Sears, Roebuck and B-W Construction Company, Chicago, contractors for the massive project. The contract stipulated that "for each day the plant is completed before [September 15], the building company will receive a \$1,000 bonus."²³ The contract further stated that a \$1000 fine for each day work continued after the deadline. Originally estimated as an eighteen-month project, the erection of the Kansas City Sears, Roebuck and Company plant "established a world construction record."²⁴ No other "single unit structure as large . . . ever has been erected in an equal period of time."²⁵

According to Nimmons, the Sears plant was "completed, ready for business, September 14, 1925,"²⁶ while an article in the *Kansas City Star* stated that although the building was in operation, workmen had remained on the site to complete the project.²⁷ The same article also stated that the \$1,000-a-day provision in the contract had not been settled.

²⁰*Kansas City Star*, 8 January 1925.

²¹*Ibid.* See also Plot Plan and Nimmons, "Industrial Buildings Their Great Architectural Opportunities," 24.

²²*Kansas City Star*, 5 July 1925.

²³*Ibid.*

²⁴*Kansas City Star*, 27 August 1925.

²⁵*Kansas City Star*, 5 July 1925. The concrete plant, located on the construction site, was said to have cost \$80,000. In eighteen hours, seventeen hundred cubic yards of concrete was poured. Approximately 3,000 men worked on this site in a single day.

²⁶Nimmons, "Industrial Buildings Their Great Architectural Opportunities," 24.

²⁷*Kansas City Star*, 15 September 1925, 2.

Architectural Description

General Comments

Like other designs by George C. Nimmons,²⁸ the Kansas City, Missouri plant features typical cellular screens of window groups enframed in spandrels and continuous broad buttress-like piers of brick with stone amortizements and banding. Throughout the exterior of both the administrative and retail unit and the merchandise wings, there is a systematic patterning of fenestration featuring multipaned metal industrial sash units with stone lintels and sills which is seldom interrupted by varied configuration. The simple rectangular geometry of the historic Sears building is punctuated by its overall horizontality and a vertical rhythm of colossal brick piers, which at the entrance bay and end bays of the Cleveland Avenue facade are slightly enlarged. The severity of the exterior is minimized by the frequent addition of stone detailing, the fourteen-story tower unit at the east facade of the merchandise building and the low-pitched pediments at the roofline. Designed in what has been called "Industrial Gothic"²⁹, the formidable Sears, Roebuck and Company Mail Order Plant imparts an undeniable sense of power in its overall massing and form.

As of this writing, the general condition of the Sears, Roebuck and Company Mail Order Plant is quite good. Brickwork and mortar joints remain stable and the original fenestration, with exceptions, is in extant and in fair to good condition. In various locations, windows have been damaged by vandals. The building, closed in 1993, remains vacant, but is still maintained by Sears, Roebuck and Company, Chicago, the property's owner.

The original design of the building has been impacted somewhat because of the 1979 addition and modifications to the main facade of the administration wing, yet the overall integrity of the building remains. Although the 1979 addition has obscured a portion of the south facade, resulting in a significant impact on the original design, a sense of time and place (feelings and associations with its historic period of construction) has been maintained.

The Administrative and Retail Wing

As previously mentioned, the two-story administrative and retail wing is L-shaped with a canted entrance at the northeast facade. The unit to the south of the main entrance is divided into fifteen bays, while the unit to the west of

²⁸An examination of Nimmons work from 1906-1925, including the Sears buildings in Chicago, North Kansas City, Missouri, and Seattle and the Kimball and Franklin Buildings in Chicago, illustrates this point.

²⁹"The Philadelphia Plant of Sears, Roebuck & Co.," *American Architect*, Vol. CXVII, No. 2298 (February, 1918): 8. Nimmons, himself, refers to the Gothic style in discussing industrial architecture.

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the canted entry is divided into fourteen bays. At the intersection of the units, placed on a north/south axis, is a centrally-placed three-story brick unit which projects above the roofline. Fenestration of both the Cleveland Avenue and Truman Road facades, second-story, feature tripartite industrial steel double-hung sash units with four-over-four and three-over-three vertical lights. Original first-story fenestration has been infilled with brick; concrete bases of piers have been painted. A series of three vertical light metal sash windows are symmetrically placed at the attic level. The administrative and retail unit is connected to the north end of the east wing of the merchandise building.

The projecting canted entrance bay at the northeast facade features a non-original aluminum-framed canopy and cast-stone panels which cover the entrance bay to the upper-story fenestration. The original elaborately ornamented entrance, featuring molded, pointed arches springing from clustered fluted columns, evocative of the Decorated style, is extinct; non-original entrance has been boarded-up. Above the canopy at the second story is tripartite fenestration featuring four-over-four vertical light, double-hung, metal sash units with prominent stone surround and sills. On a stone tablet above the windows, the words "Sears Roebuck and Company" are carved. The brick piers which define the corners of the entrance bay feature stone amortizements. A curved parapet with stone coping and ball-shaped finial and flagpole is flanked by merlon-like elements. A non-original concrete flower box lines the entrance at the street level.

Additional original entrances located at the primary facades have also been modified with aluminum-framed double-doors and sidelights, non-operable transoms, cast-stone panels, aluminum canopies and concrete flower boxes. The entrance at the third bay (running south to north) of the east facade has been boarded-up. An entrance at the west end of the west wing with projecting brick pediment surround has been bricked-in. A series of limestone stairs and solid rail are extant.

Fenestration and general rhythm of the primary elevations are repeated at the west and south facades with few exceptions. The end bays of the west facade of the west wing do not feature fenestration; stone banding, marking the pattern set by extant sills and lintels, is continuous. A secondary entrance, located at the south elevation of the west wing, features a metal door and canopy with brick railing. An single four-over-four vertical light, double-hung industrial metal sash window rests above the entrance. A security chain-link fence at the far east end encloses transformers. A one-story, non-original addition, one bay deep and three bays wide affixed to the west facade of the centrally placed three-story unit features industrial metal, multipaned fixed fenestration.

The first story of the west elevation of the south wing features an original dock entrance that has been slightly modified. The first and second bays from the north display non-original entrances; original freight doors have been modified with corrugated aluminum overhead doors and shed roof.

Merchandise Wing

Two nine-story brick L-shaped units, 24 bays in length, which run parallel to each other on a north/south axis, are connected at the south by a nine-story, four bay entrance unit which originally faced onto 17th Street. This unit, featuring slightly enlarged piers, low-pitched pedimented parapet and prominent pedimented entrance, as well as the south facade of the west merchandise wing, has been obscured by the 1979 modern warehouse addition.

Nimmons' U-shaped plan of the merchandise wing provided a courtyard for a 116' wide train shed and loading docks. In addition, switch tracks from the Terminal Railway were brought in an area between the north and west sections of the plant so that they could reach the loading docks. At the south end of the 200' long train shed is a stepped brick wall, extending one story above the shed. The wall displays multipaned, industrial metal sash fenestration with stone sills. A barrel vaulted court area with sawtooth skylights extends from the train shed to the connecting hall at the south end.

The Cleveland Avenue facade of the merchandise wing, the principal facade, features multipaned industrial steel sash fenestration (incorporating awning-type units) with stone lintels and sills. Each bay features tripartite units with the exception of the end bays of each wing which features paired units. Because of the higher ceiling height, the first and second floor fenestration is taller than that of the remaining fenestration. The majority of the ninth floor fenestration display original louvered aluminum vents. Basement fenestration is also multipaned industrial steel sash with wide stone lintels and stone bulkheads; several of the glass panes have been cracked, while some damaged units have been covered with wood panels. Non-original glass block has replaced original units at the six northern-most bays. Two steel fire escapes are located at the the sixth bay (counting south to north and north to south); paired steel fire doors are located at the fire escape landing at each level.

The hallmark of the Cleveland Avenue facade is the fourteen story, four bay wide tower, marked at the street level by a pedimented recessed entrance, drastically modified from the original design. The natural horizontality of the building proper, emphasized by a continuous display of wide spandrels, is counterbalanced by the strict verticality of the tower and its formal elements: closely grouped fenestration and strongly emphasized central and corner piers. The final two stories of each facade of the tower, the most highly embellished extant element of the entire exterior, exhibits two pairs of industrial metal sash fenestration set in molded pointed arch surrounds which spring from clustered engaged columns with what appear to be floriated capitals.³⁰ The whole is set in a cast-stone surround with tracery-like elements set beneath a water table and above a denticulated stringcourse. A curved pediment, which crowns the tower at each facade, features stone

³⁰The upper stories of the tower were originally designed to harmonize with the Administration/Retail entrance and the tower entry.

coping and a molded, decorative panel. The top floor of the tower houses an 80,000-gallon water tank which is hooked up to the plant's sprinkler system. At the time of this writing, it is still operative.

The west facade of the east unit and the east facade of the west unit are arranged similarly to the Cleveland Avenue facade. Both facades are visible above the train shed and court which rise to the second story. The central portion of each wing is articulated by a five bay wide elevator and stairwell shaft, ten stories in height. The center stairwell bay at each floor is punctuated by a nine light industrial metal sash recessed window with stone sill; the upper six lights form an awning type unit. The remaining fenestration located at the elevator bays is twelve light with an awning unit at the center portion. Fenestration at the warehouse bays is sixteen light with a centered awning unit. Flanking the elevator/stairwell shaft are steel fire escapes and fireproof double steel doors at each landing. The northeast elevation of the west wing is canted. A one-story brick unit attached to the north elevation once housed the blower room for the pneumatic tube station.³¹

Additional ten-story elevator/stairwell shafts are located at the central portion of the north facade of the connecting hall and the end bays of the court side facades. Fenestration configuration of the aforementioned elevator/stairwell shafts is repeated at these locations.

The west facade of the west unit of the merchandise wing is twenty-two bays in length and features thirty-one "high loading" loading docks and overhead doors at the first story. All but the end bays of this elevation display multipaned industrial metal sash fenestration. Fire escape doors are featured at the end bays. Fire escape extinct at far south bay.

Additions/Demolitions and Expansions: 1935-1983

In 1935, Sears, Roebuck and Company erected their first addition to the mail order plant and retail complex. The Sears Service Station, a one-story free-standing brick building was constructed at the northeast corner of Cleveland Avenue, directly across from the 15th Street entrance. Both customers and employees of Sears could take advantage of having their cars serviced while they shopped or worked. As expected, the facility proved a success; expansion of the building took place in 1936 and again in 1953. In 1973, the service station was demolished for a new 28,918 square foot automotive center, constructed two blocks south on Cleveland Avenue.³² Operations at this location discontinued in c. 1985.

Another free-standing building was erected by Sears in 1961. The maintenance shop, a one-story 6,492-square-foot reinforced concrete structure with brick veneer and cast-stone trim, was built adjacent to the west

³¹Don Higgins, interview with author, 2 October 1995.

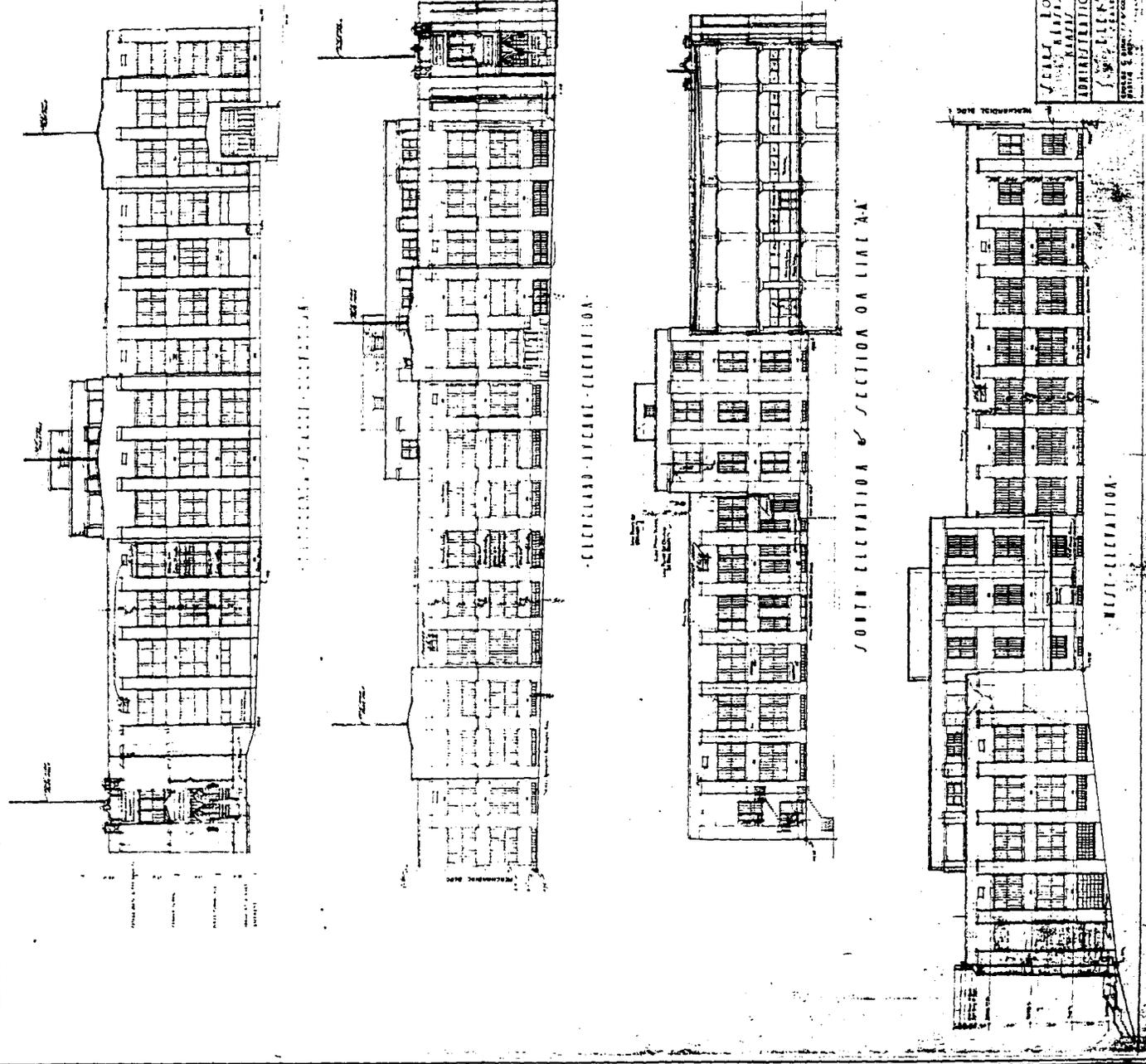
³²*News and Views*, Vol 29, No. 5 (June-July, 1973): 1.

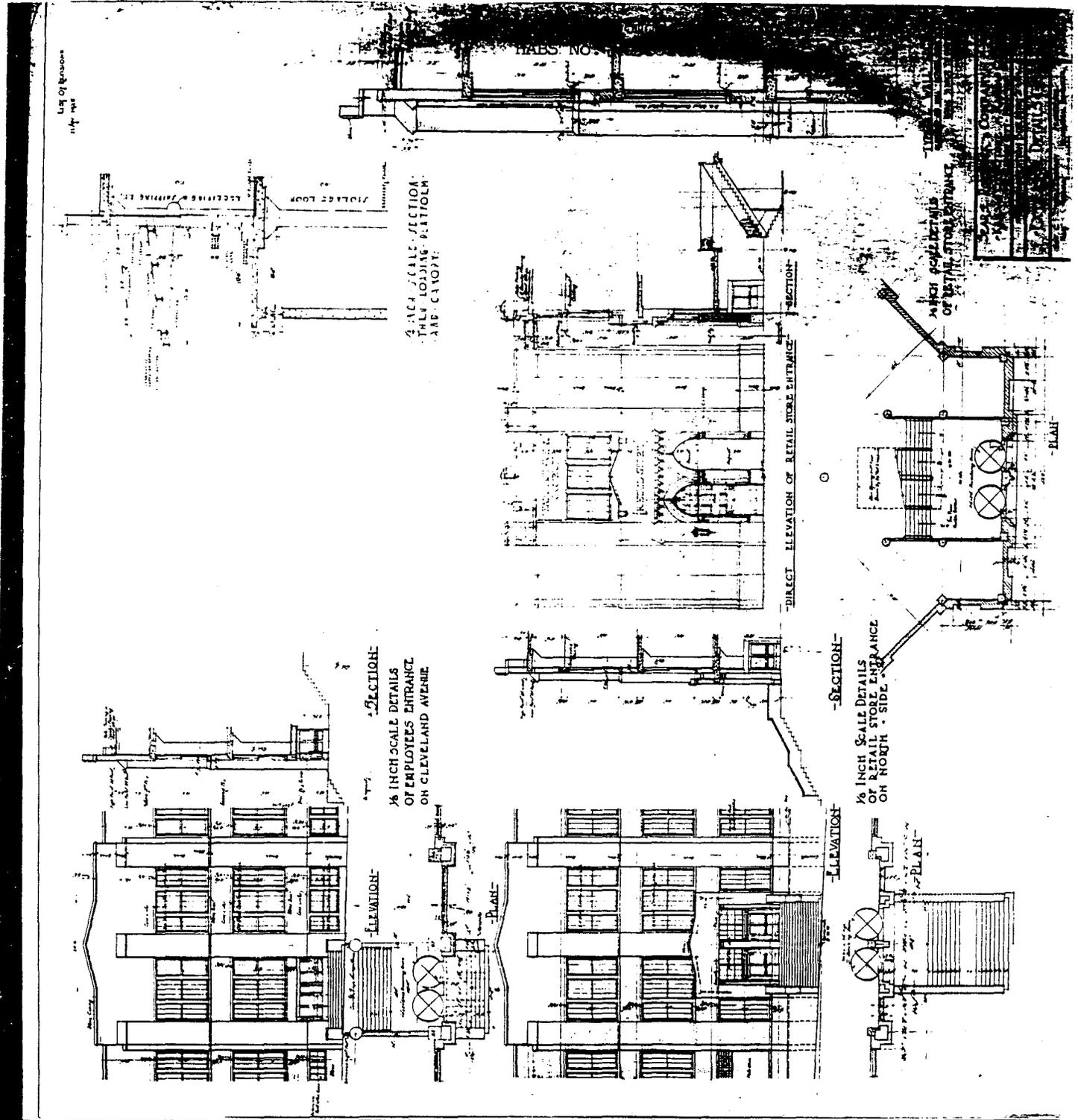
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1st Rev.
2nd Rev.
3rd Rev.

Administration/Retail Wing

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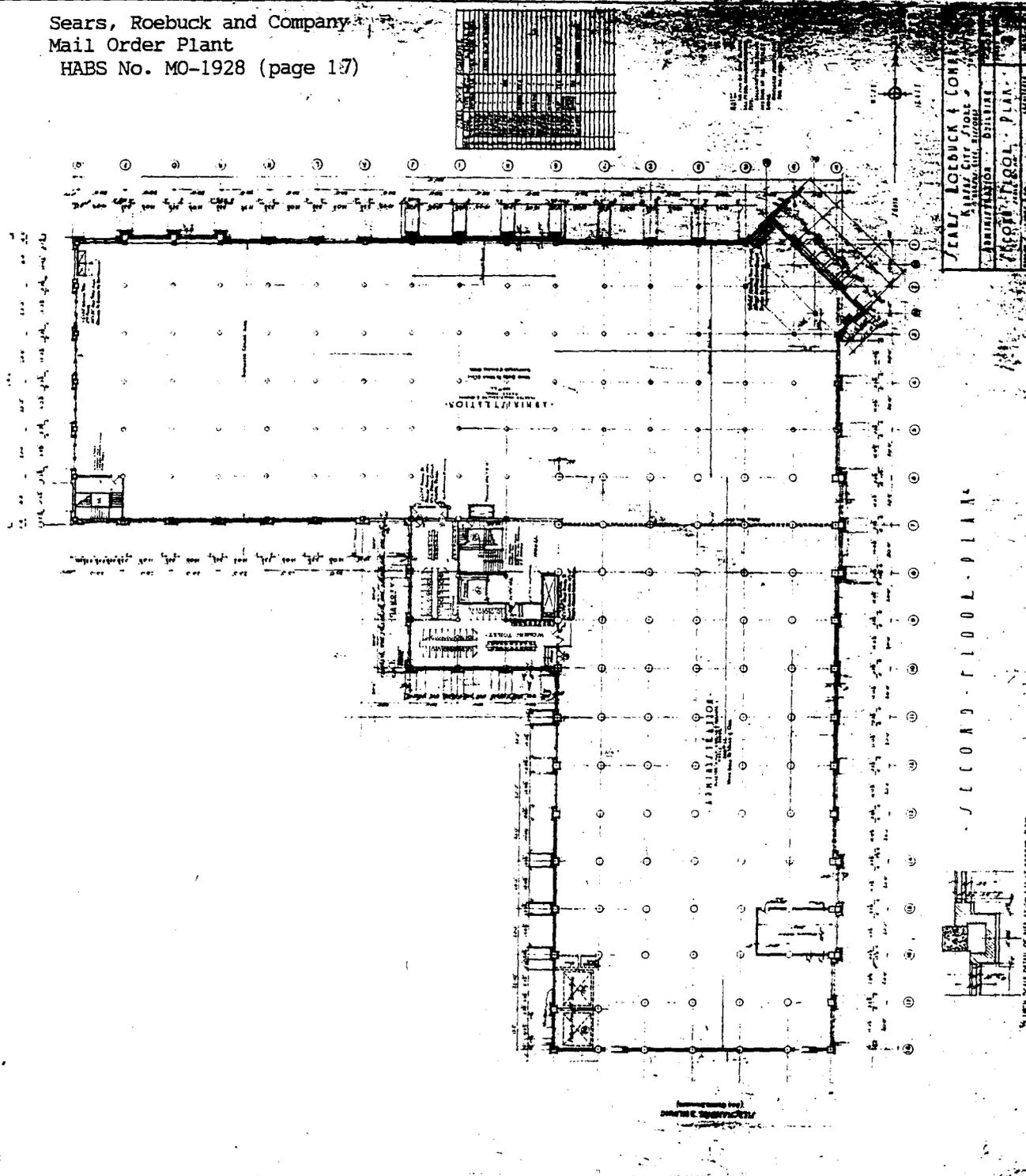
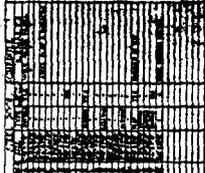
SEARS, ROEBUCK & COMPANY
MAIL ORDER PLANT
KANSAS CITY, MISSOURI
ADMINISTRATION BUILDING
J. S. PETERSON ARCHITECTS
KANSAS CITY, MISSOURI





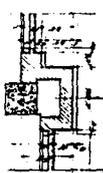
List of Rooms
See page 16

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SEARS, ROEBUCK & COMPANY
MAIL ORDER PLANT
ADMINISTRATION - BUILDING
SECOND FLOOR PLAN

SECOND FLOOR PLAN



1/4" EACH SCALE DETAIL OF PAVILION AT SECOND FLOOR

DESIGNED BY
DORRIS B. BENTLEY

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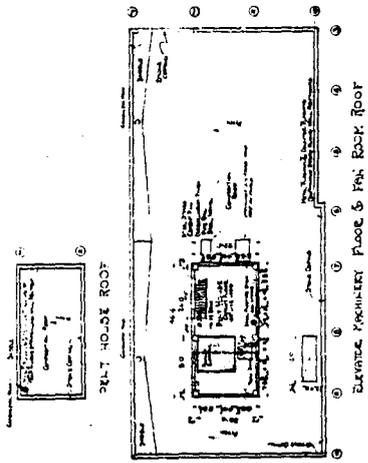
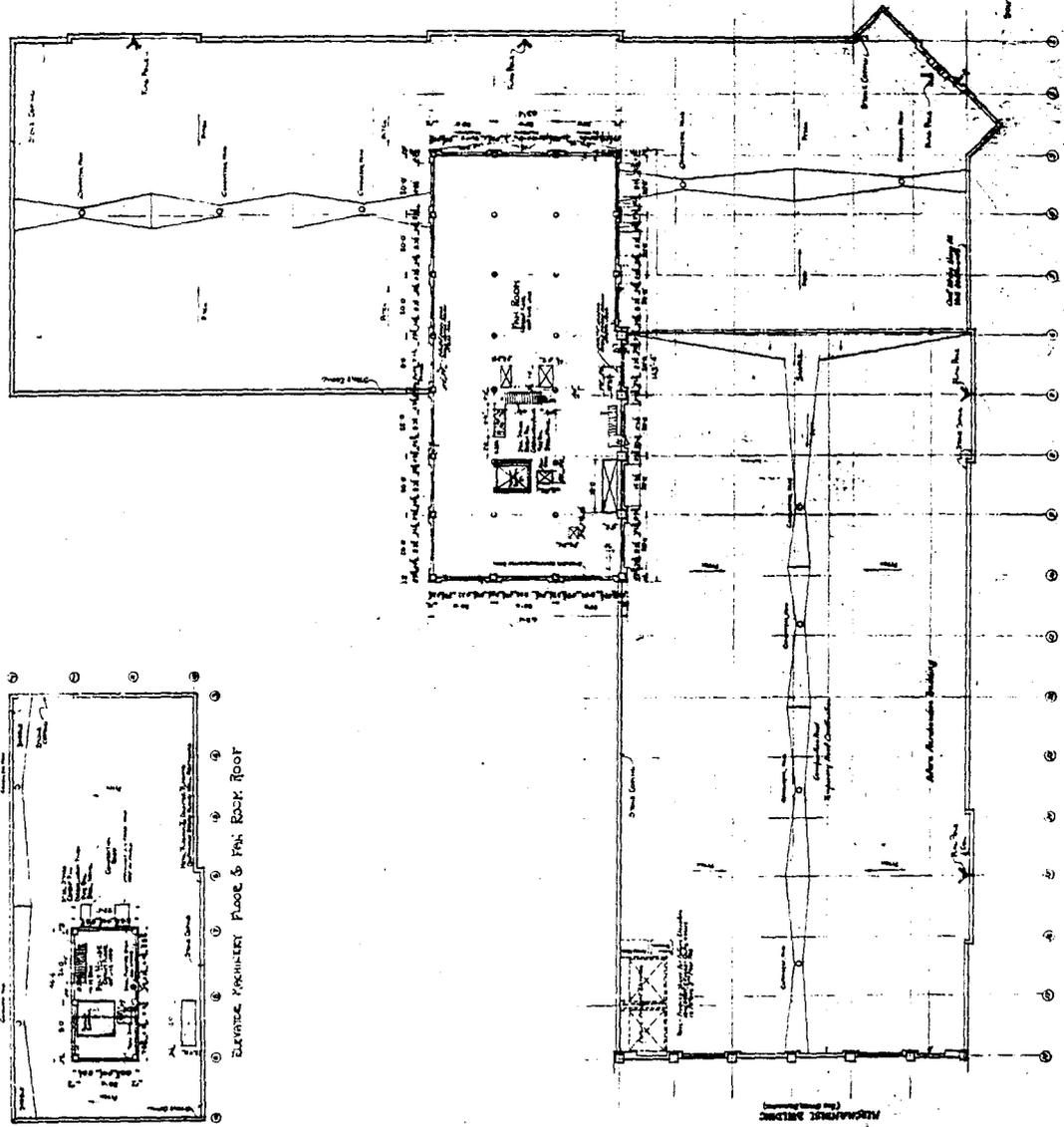
FIFTEENTH STREET

SEARS, ROEBUCK & COMPANY
KANSAS CITY, MISSOURI
ARCHITECTS

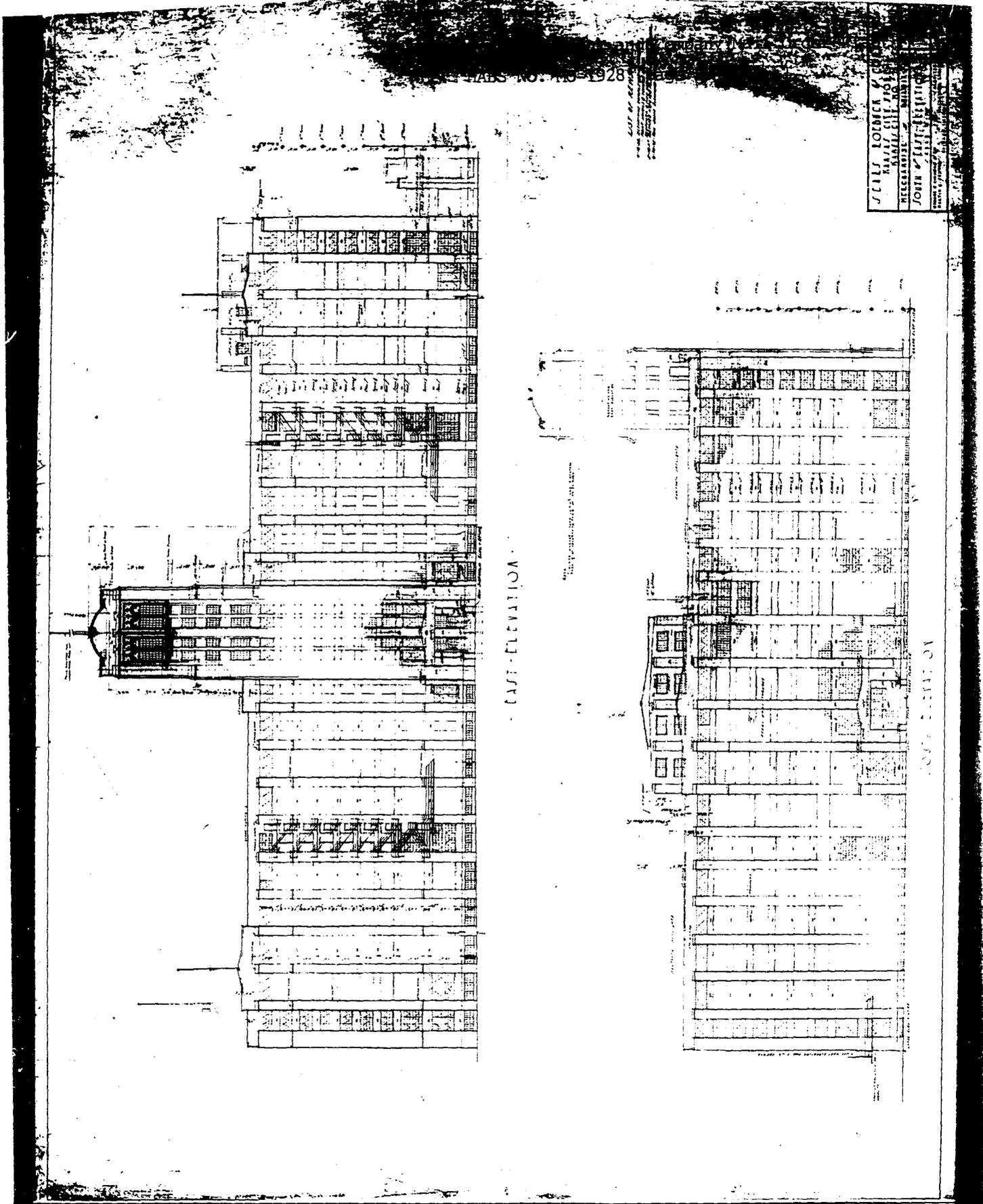
ROOF PLAN

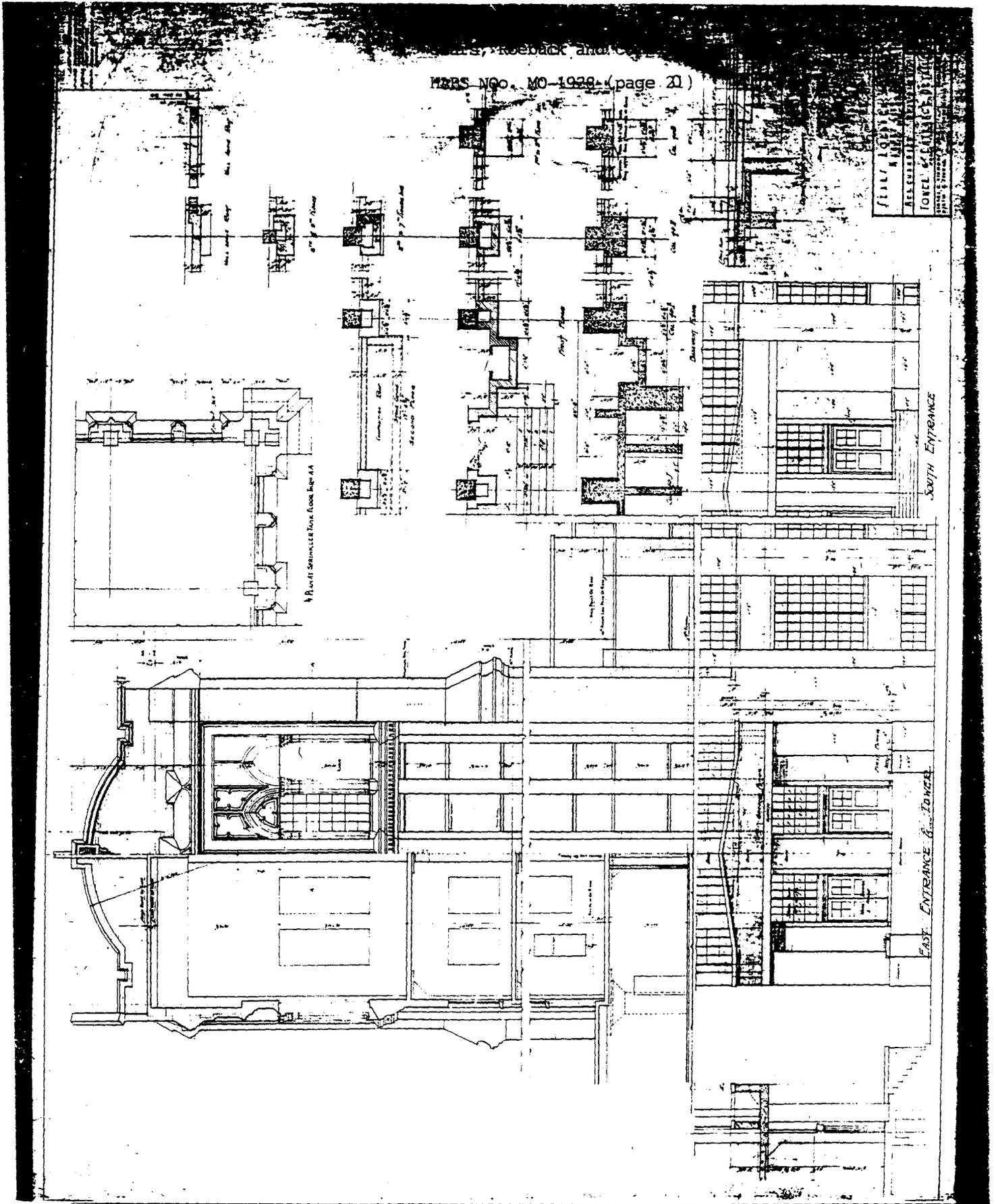
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1928



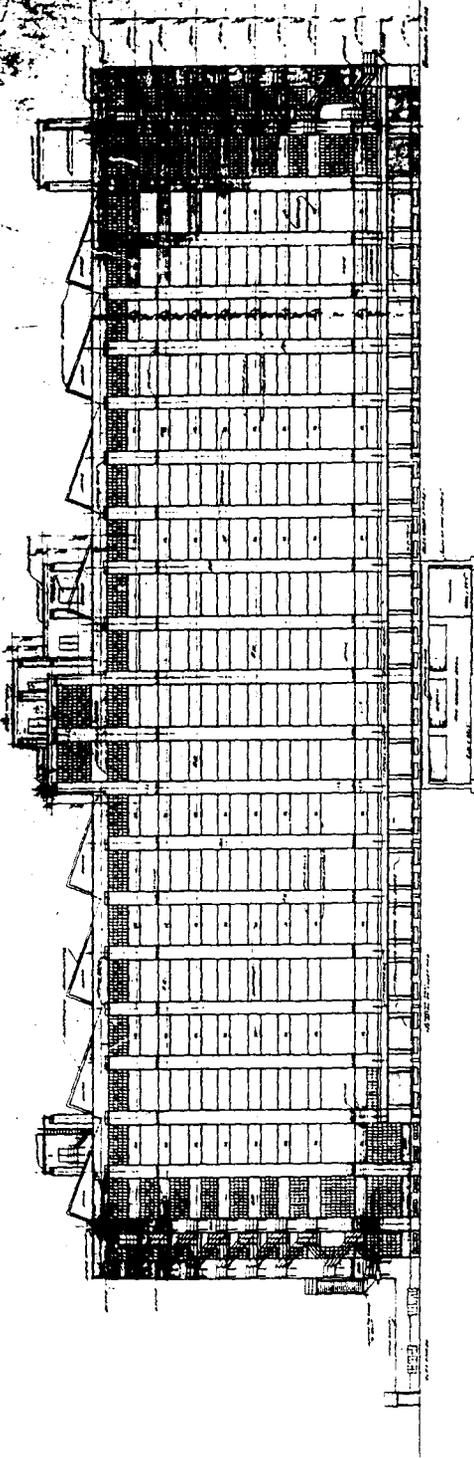
CLEVELAND AVENUE
PLAN OF FIFTH ROOF FLOOR & SECOND FLOOR ROOF



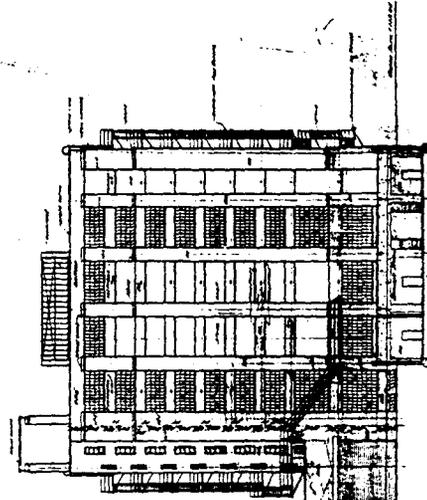


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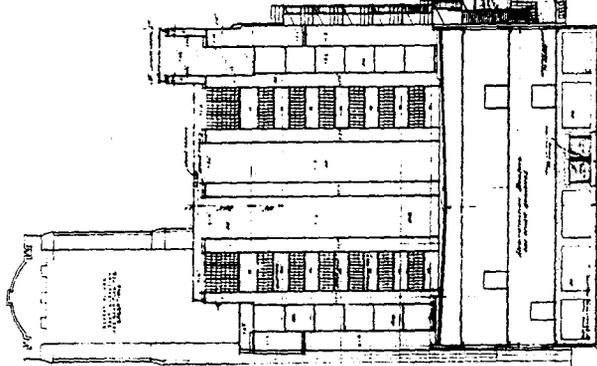
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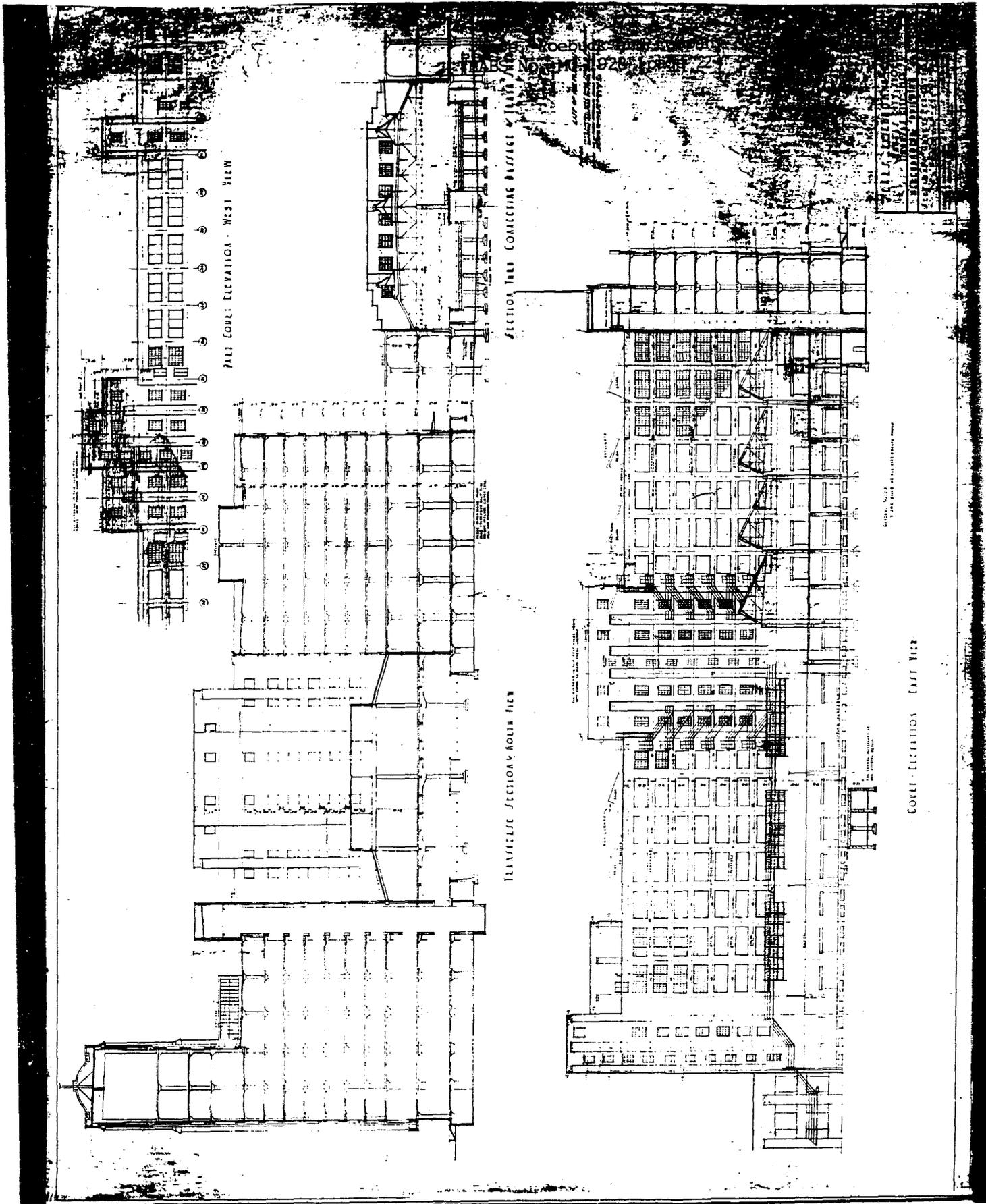


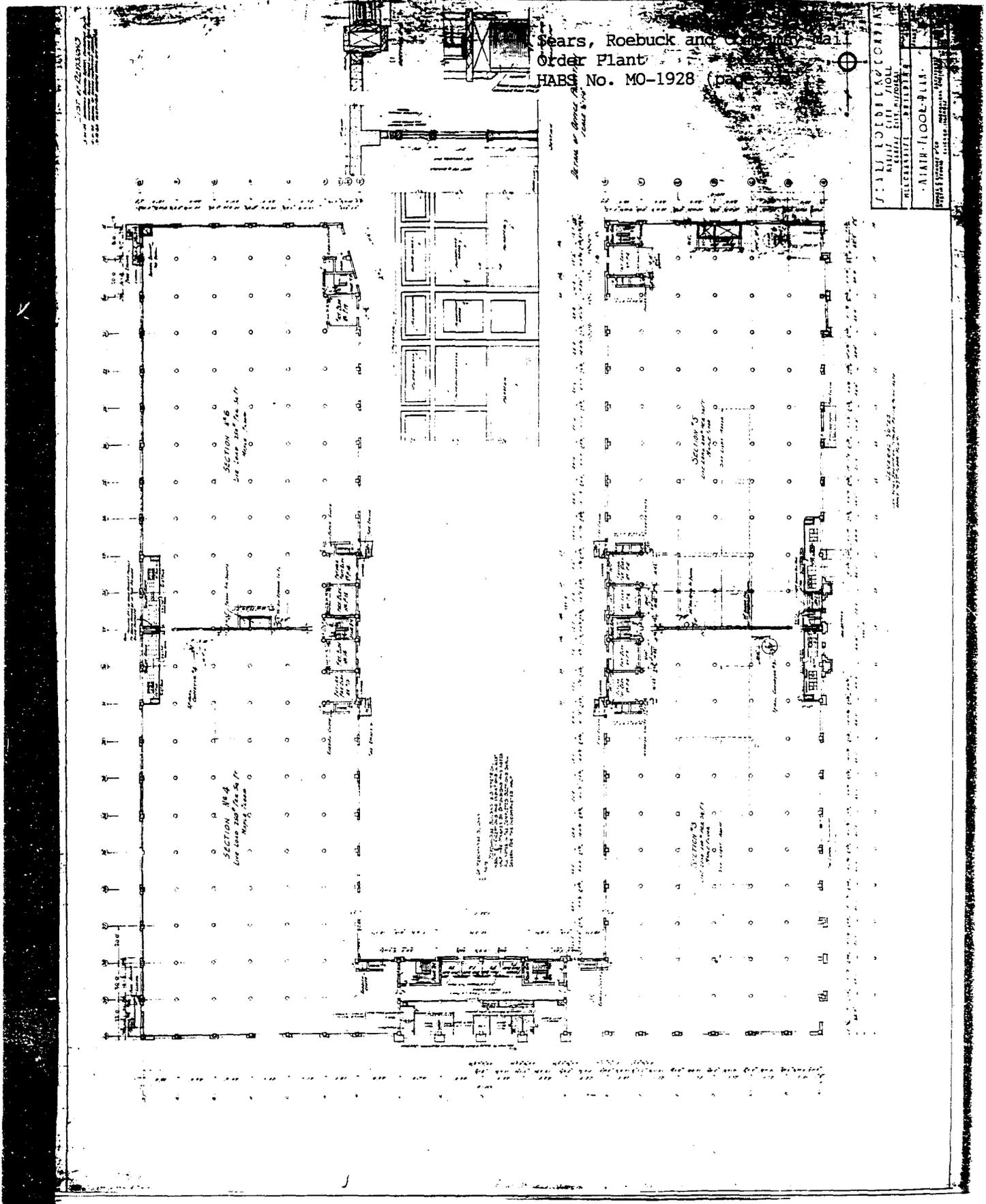
PLAN OF BUILDING SECTION



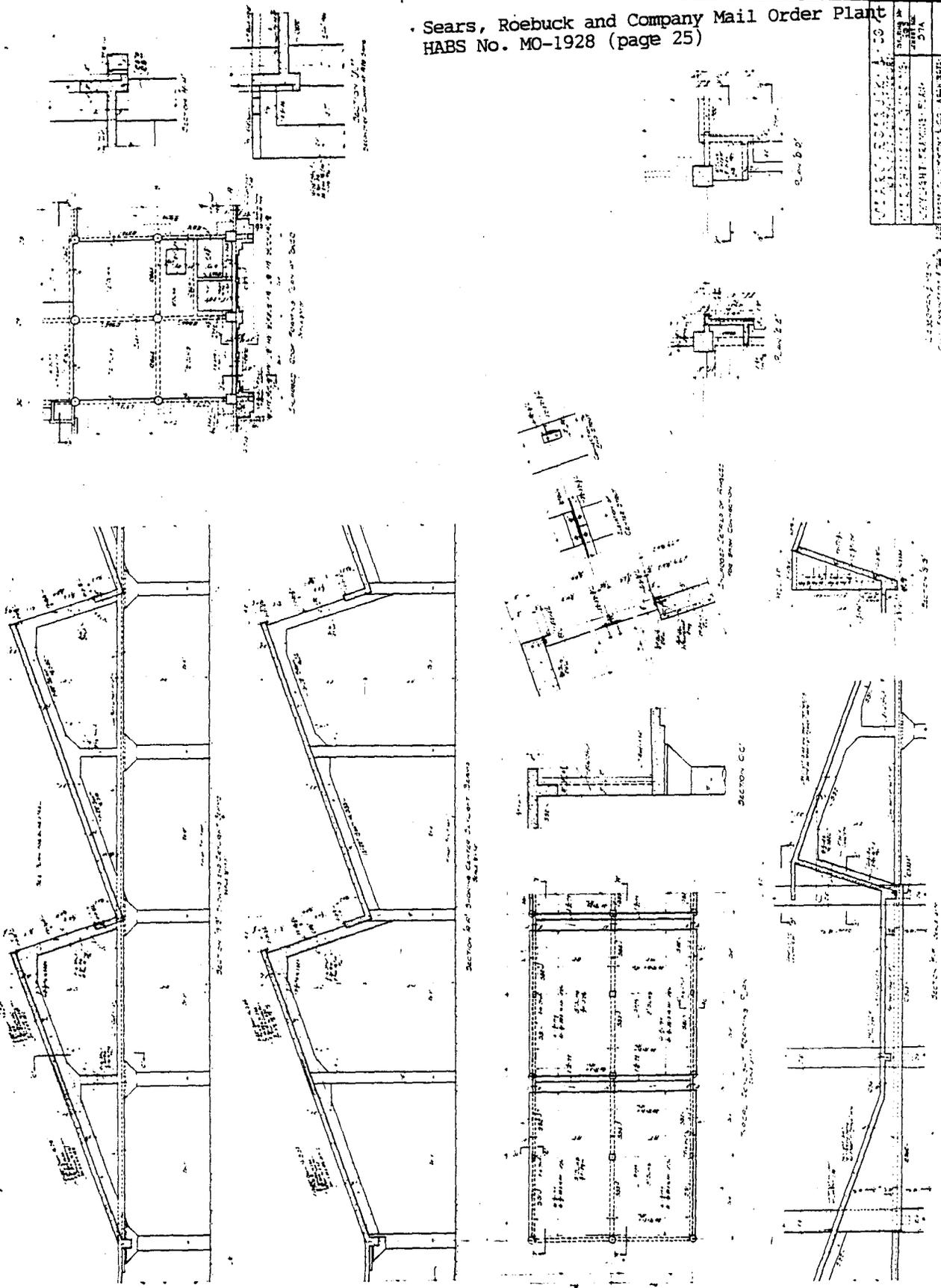
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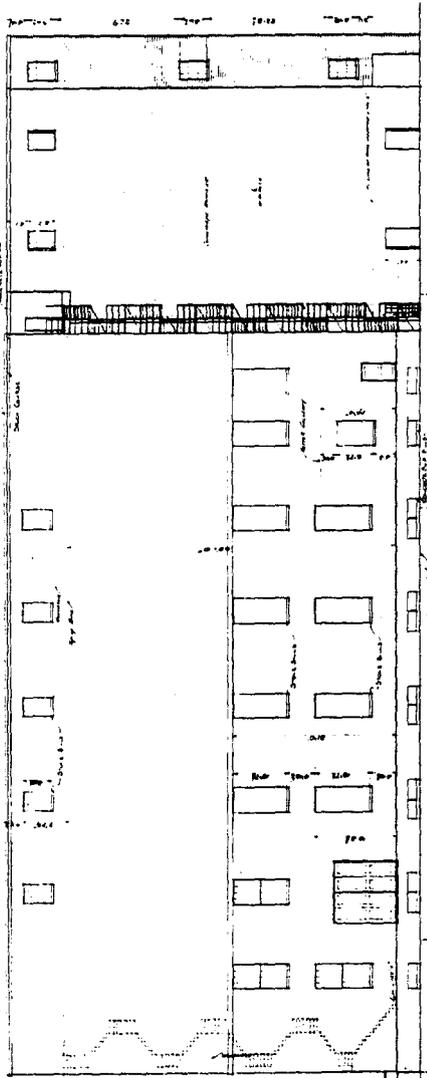
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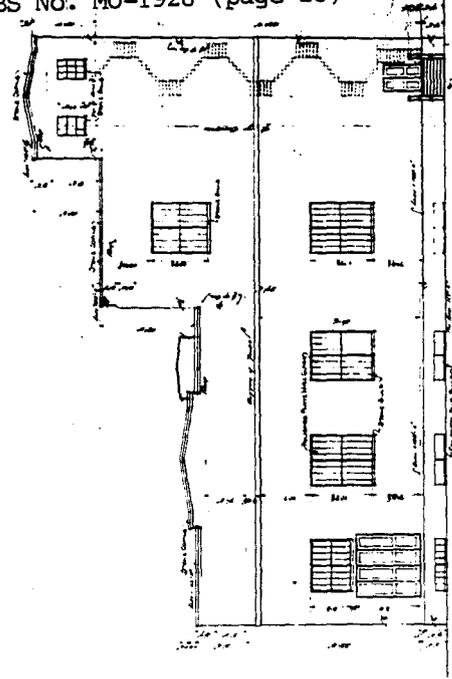
SEARS, ROEBUCK AND COMPANY	MAIL ORDER PLANT
ARCHITECT	ENGINEER
100 N. WABASH ST. CHICAGO, ILL.	100 N. WABASH ST. CHICAGO, ILL.
57A	57A

REPRODUCED FROM THE ORIGINAL DRAWINGS BY THE ARCHITECTURAL RECORD COMPANY

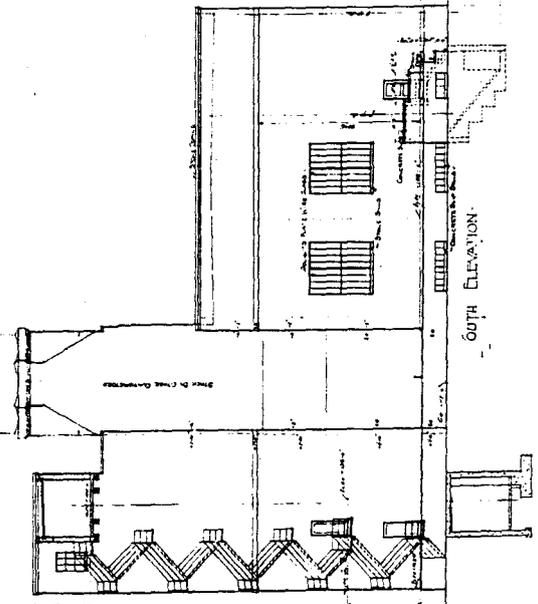
Sears, Roebuck and Company Mail Order Bldg
 HABS No. MO-1928 (page 26)



WEST ELEVATION



NORTH ELEVATION

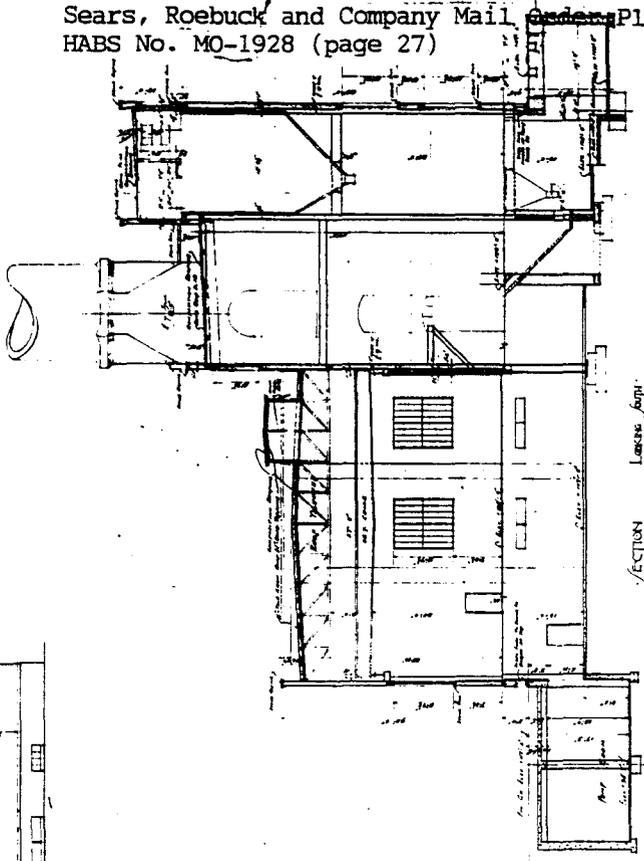
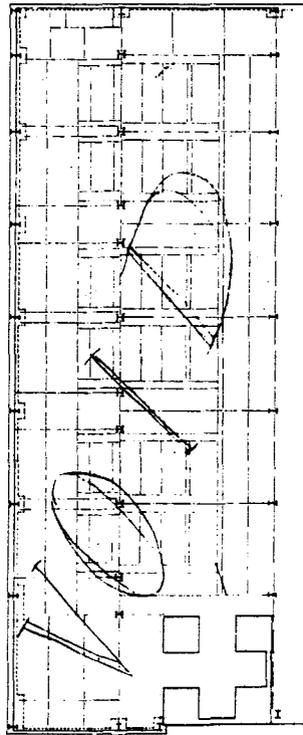
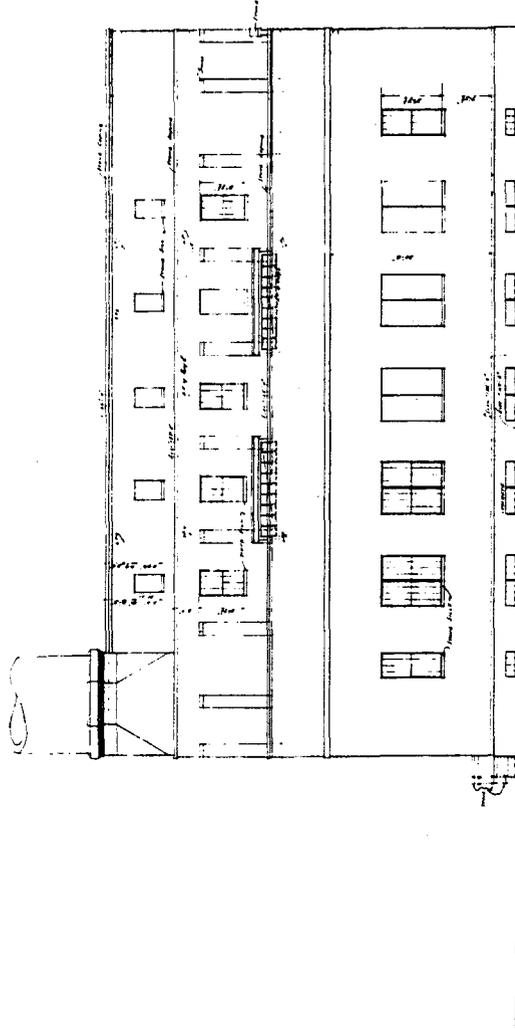


SOUTH ELEVATION

SEARS, ROEBUCK & COMPANY	ARCHITECT
1117 N. 1ST ST. ST. LOUIS, MO.	
JOSEPH BOYD	ENGINEER
1015 LEXINGTON	
WHITE ENGINEERING COMPANY	ENGINEER

List of Rooms
 as shown on the floor plan

Sears, Roebuck and Company Mail Order Plant
HABS No. MO-1928 (page 27)



FELIX LOEBICK & COMPANY
ARCHITECTS
100 WALL STREET
NEW YORK, N. Y.

ENGINEER
JOSEPH W. MOHR
100 WALL STREET
NEW YORK, N. Y.

SECTION

LIST - REVISIONS
NO. 1
DATE

facade of the merchandise wing. It is connected to the main plant via a tunnel.

Additions/alterations to the administrative and retail unit of the Sears, Roebuck and Company Mail Order Plant occurred from c. 1940s to 1983. Entrances at the east facade were altered with concrete panels and aluminum framed canopies in the early 1950s. The main entrance, which appears in its original state in a 1961 photograph, was modified in 1983 when the retail store was closed and a surplus outlet was opened. Brick infill of the east and north facades was completed between 1963-1965 when a credit bureau was established on the first floor.³³

Plans for a long anticipated expansion to the merchandise unit of the Kansas City Sears plant were initially announced in March, 1974. The 6 1/2-story brick addition extending from the south end to 17th Street and east to west from Cleveland to Askew Avenues was designed by the architectural firm of Gordon Siebeck and Associates, Inc., Dallas, Texas. The proposed 720,000-square-foot addition, which would have expanded the shipping and receiving areas to 34 new truck bays and provide additional warehouse space serving the eight state Kansas City region,³⁴ was never implemented.

In 1978, an alternative expansion plan was finalized. Completed in 1979, the three-story reinforced concrete and steel paneled addition constructed by J. E. Dunn Construction Company, Kansas City, Missouri has obscured the majority of the south elevation of the historic merchandise wing.³⁵ During the construction of the modern addition, the power house, which had generated its last electricity in 1958, was razed.

The Architects, Engineers and Builders

George C. Nimmons, Architect

Born in Wooster, Ohio in 1867, George Croll Nimmons, FAIA, was a prominent Chicago architect, mostly known for his innovative industrial designs. After graduating from the local academy, Nimmons traveled to Europe where he began his study of architecture. In 1885, he returned to the United States and entered the firm of Burnham & Root, where he was employed as a draftsman for ten years. In 1897, Nimmons formed a partnership with William K. Fellows.³⁶ During this thirteen-year association, the firm became best known for their large commercial and industrial designs, most notably the mail order plant headquarters for Sears, Roebuck and Company (1905-06, with several additions). One of their most successful works, this commission led the firm to

³³Don Higgins, interview with author, 2 October 1995.

³⁴*News and Views*, Vol. 30, No. 3 (April, 1974): 1.

³⁵Kansas City CMC-481 A Unit of SLS, 2.

³⁶Henry F. Withey and Elsie Rathburn Withey, *Biographical Dictionary of American Architects* (Los Angeles: Hennessey & Ingalls, Inc, 1970), 442.

design several more warehouses, mail order plants, and retail stores for the company throughout the United States. Residential designs from that period included the R. W. Sears home located in Grayslake, Illinois (1906), and the twenty-room Prairie-style mansion built for Sears, Roebuck and Company president Julius Rosenwald in Chicago (1903).

After leaving Nimmons and Fellows, Nimmons practiced alone from 1910-1917 (George C. Nimmons & Company); subsequently, he continued his practice as principal of his firm, Nimmons & Company, until 1933.³⁷ Some of the projects from these two periods include The Sears, Roebuck and Company building, North Kansas City, Missouri (1912-13) and several works in Chicago including the Franklin Building (1912), the C. P. Kimball & Company Building (1913), the Reid, Murdoch & Company Building (1913), the Adams Schaaf Building (1916), the Union Special Machines Company Building (1918), the Kelley Building (1921) and the American Furniture Mart (1923, 1926).

In the final phase of his career, Nimmons continued practice as senior partner of the firm of Nimmons, Carr & Wright from 1933-1945, where their work in designing buildings for Sears, Roebuck and Company continued. Nimmons, who married Justine V. Wheeler in 1898 (they had three children), retired in 1945. After being active in practice for nearly half a century, Nimmons died on June 17, 1947.³⁸

In addition to his architectural practice, Nimmons also published extensively. He was the author of articles on several of the Sears, Roebuck buildings which he or his firm designed. He also wrote essays on the future of concrete and an introduction to a college textbook entitled "The Significance of the Fine Arts."³⁹ Quite possibly, his most important writing---a series of well-illustrated articles on "Modern Industrial Plants"---appeared in *Architectural Record* from 1918-1919. In these articles, Nimmons outlined and discussed the various types of industrial plants, the essentials of securing the best location, and factors to consider in the overall planning and design.⁴⁰

³⁷Ibid.

³⁸Deborah Slaton, Jeffrey Koerber and Harry J. Hunderman, Sears, Roebuck and Company Mail Order Plant, Chicago, Cook County, Illinois, (Historic American Buildings Survey, April 20, 1994), 20.

³⁹Ibid., 21.

⁴⁰George C. Nimmons, "Modern Industrial Plants: Part I," *Architectural Record*, Vol. XLIV, No. 5 (November, 1918), 414-421; "Modern Industrial Plants: Part II," *Architectural Record*, Vol. XLIV, No. 6 (December, 1918), 531-550; "Modern Industrial Plants: Part III Plans and Designs," *Architectural Record*, Vol XLV, No. 1 (January, 1919), 27-44; "Modern Industrial Plants: Part IV Discussion of the Various Types of Windows for Industrial Buildings," *Architectural Record*, Vol XLV, No. 2 (February, 1919), 148-168; "Modern Industrial Plants: Part V Discussion of the Various Types of Windows for Industrial Buildings," *Architectural Record*, Vol XLV, No. 3 (March, 1919), 262-282; "Modern Industrial Plants: Part VIa The Excessive Turnover of Labor and the Influence of Employe's (sic) Welfare Work in Reducing It," Vol. XLV, No. 4

Martin C. Schwab, Mechanical Engineer

Born in Baltimore, Maryland in 1880, Martin Constan Schwab attended the local Polytechnic Institute and in 1896 was graduated from Johns Hopkins University with a degree in engineering. One of his first jobs was as a consulting engineer in the electrification of the Baltimore and Ohio Railroad. He was later appointed consulting engineer for the Maryland Electric Company and was instrumental in the rebuilding of Baltimore after the fire of 1904. That same year, Schwab married Besse Wiesel. While a principle in the firm of Adams and Schwab, Baltimore, he served as consulting engineer for building projects in Washington, Philadelphia and New York.

Schwab left Baltimore in 1904 and moved to Chicago where he established the firm of Martin C. Schwab. In 1905-1906, he served as consulting engineer for the Sears, Roebuck and Company Mail Order Plant in Chicago, where his work included the design of extensive conveyance systems. In Chicago in 1913, Schwab served as consulting engineer for the electrification of Drainage canals for the Illinois State Board of Administration. Schwab, who held several patents for various devices developed for building construction, served as consulting engineer for the the following Chicago structures: the Bell Building, Michigan Square Building, Adler Planetarium, Harris Trust and Savings Building, Mallers Building, Corn Exchange National Bank, Hotel Sherman, Rothschild's Store and various Yellow Cab properties to name a few. He also worked on Union Station, Kansas City, Missouri a 1914 Beaux-Arts building designed by Chicago architect Jarvis Hunt and served as mechanical engineer for the Sears, Roebuck and Company Building in the same city. After a very active career, Schwab died on January 2, 1947.⁴¹

B-W Construction Company

The B-W Construction Company, Chicago, was established in 1910 by brothers Joseph Henry, John W., and Paul H. Buttas. Joseph Henry Buttas, the president of the company, was born in Vienna, Austria on December 4, 1886 and was educated in public schools and the Technological Institute of Vienna. He came to the United States in 1903 and became a naturalized citizen in 1907. Some of the more notable projects include the Illinois Central Railroad underground railroad station (under Michigan Avenue at Van Buren Street, Chicago); the Peabody Hotel, Memphis Tennessee; and the Sears, Roebuck and Company Mail Order Plant in Kansas City, Missouri.⁴²

(April, 1919), 343-355; "Modern Industrial Plants: Part VIb The Excessive Turnover of Labor and the Influence of Employee's Welfare Work in Reducing It," *Architectural Record*, Vol. XLV, No. 5 (May, 1919), 450-470; "Modern Industrial Plants: Part VII Sears, Roebuck & Co.'s Plant, Chicago," *Architectural Record*, Vol XLV, No. 6 (June, 1919), 506-524.

⁴¹Slaton, et al., Sears, Roebuck and Company Mail Order Plant, Chicago, 24.

⁴²Albert Nelson Marquis, ed., *Who's Who in Chicago: The Book of Chicagoans* (Chicago: A. N. Marquis & company, 1926), 149.

Historic Architectural Context and Significance

The design of the Kansas City, Missouri Sears, Roebuck and Company Mail Order Plant by George C. Nimmons and Company has its roots in the Chicago School of Architecture and can be placed among the best of the industrial designs of the first decades of the twentieth century. Furthermore, the overall arrangement and design of the Kansas City, Missouri Sears complex, along with other mail order house plants, demonstrates the efficiency of what has been called the American Industrial Style of architecture.

According to Carl W. Condit in his book *The Chicago School of Architecture*, "the adaptation of the Chicago office building to industrial purposes was a logical consequence of opening the wall to the maximum extent allowable with wide bayed steel framing."⁴³ The evolution of the buildings of the Chicago School, with their cellular facades, continuous piers and wide fenestration can be traced to the work of William Le Baron Jenney (1832-1907), who has been called the founder of the Chicago School of Architecture.⁴⁴ Jenney, an engineer who studied at Harvard University and the Ecole Centrale des Arts et Manufactures in Paris, was an innovator in building technology; he was the first to arrive at iron skeletal construction. Also a park and town planner, Jenney's "fame rests mainly on his commercial buildings in Chicago."⁴⁵

Although the Home Insurance Building (1883-1885) is undoubtedly the principal monument of Jenny's work as it was the first completely metal-framed building, it was the design for the second Leiter Building (1889-1891), exhibiting wide corner piers, continuous wide banks of fenestration, and generous storefront windows, that has been noted as one of the important, initial ventures of the Chicago School.

Other late nineteenth century designs of the Chicago School (i. e. the Tacoma Building, Holabird & Roche, 1886-1889; and The Gage Group, Holabird & Roche and Louis Sullivan, 1898-1899) also paved the way for industrial design of the 20th century, yet quite possibly the one building to have the most influence on George C. Nimmons was the Reliance Building (1893-1895). Designed by Burnham & Root in 1893-1895, the elegant Reliance Building "is considered by many to be the masterpiece of the Chicago School and certainly its most germinal building."⁴⁶ It was during Nimmons' employment with the firm of Burnham & Root that this building was designed.

⁴³Carl W. Condit, *The Chicago School of Architecture* (Chicago: The University of Chicago Press, 1964), 178.

⁴⁴Diane Maddex, ed., *Master Builders A Guide to Famous American Architects* (Washington, D. C.: The Preservation Press, 1985), 99.

⁴⁵Ibid.

⁴⁶Milton W. Brown, Sam Hunter, John Jacobus, et al., *American Art* (New York: Harry N. Abrams, Inc., 1979), 258.

One other building from the Chicago School that should be mentioned here is the Carson, Pirie, Scott Store, Louis Sullivan's last major work (1899, additions 1903-04, 1906). Here Sullivan, a former student of Jenney, juxtaposed a vertical element with the overall horizontality of the cage-like main block. Like his Wainwright Building (1890-91), the form of the Carson Pirie Scott Store expresses its utilitarian and structural function.

Springing from the Chicago School and the works of Jenney, Burhnam & Root and Sullivan was the 1905-06 design for the Sears, Roebuck and Company Plant, Chicago, Illinois, by Nimmons and Fellows. The Chicago architectural firm was awarded "what was very likely the largest single commission in the history of Chicago building up to that date."⁴⁷ Nothing better "demonstrated the power and efficiency of the building industry of [that city] than the construction of this immense complex."⁴⁸ Embracing the fundamental theme and defining principles conceived by the early works of the Chicago School, Nimmons and Fellows incorporated cellular groups of windows and spandrels and broad buttress-like piers into their design. The verticalism of the merchandise building, Condit suggests, bears a likeness to Sullivan's Garrick Theater Building (1891-1892). The complex also demonstrated what the salient characteristics of an industrial building should be.

Nimmons, in his series on "Modern Industrial Plants" cited the work of several architects whose innovative designs for industrial buildings were primarily derived from the Chicago School. It appears that many architects working in the early twentieth century including S. Scott Joy (Freight Station and Loft for Montgomery Ward & Company and the Chicago Junction Terminal Building), Alfred S. Alschuler (Chicago's John Sexton & Company Building and the Albert H. Loeb Building) and Albert Kahn (Ford Service Building, Omaha and the Goodrich Tire Service Building, Detroit) also were influenced by the work of their contemporaries.⁴⁹

The design for the Kansas City Sears, Roebuck and Company plant closely suggests the industrial designs of Chicago architects S. Scott Joy and Alfred S. Alschuler, and the work of Nimmons himself while he was practicing on his own. The form and vocabulary of the Sears building mirrors that of Alschuler's John Sexton & Company Building (1916-1917) and Joy's Montgomery Ward and Company Freight Station and Loft Building (date unknown). Both of these formidable structures, constructed of reinforced concrete with brick veneer, employ the use of enlarged piers and distinct spandrels which separate industrial sash fenestration. Stone detailing, shaped parapets and projecting bays which house the elevator and stairwell bays, add vigor to the vast exterior.

⁴⁷Condit, *The Chicago School of Architecture*, 179.

⁴⁸Ibid.

⁴⁹See Nimmons, "Modern Industrial Plants, Part II and III.

Also of influence was the Reid, Murdoch & Company Building (see above) by Nimmons, an office and warehouse structure that was planned to conform with Burnham's civic plan for Chicago. The scheme for this waterfront building, which called for a centrally placed tower at the main facade's central bay, the separation of the end bays, more emphatic piers and wider spans of fenestration, is more analogous to the design of the Kansas City, Missouri Sears plant. Overall ornamentation of the Reid, Murdoch & Company building, like that of the Sears plant, is mostly confined to the entrances and tower.

In the final form of the Kansas City, Missouri Sears, Roebuck and Company Mail Order Plant, the upper-level arcade and the wide cornice as featured on the Reid, Murdoch & Company building were abandoned. In addition, Gothic styled embellishment was now adhered to, instead of the Renaissance, which according to Nimmons, was more costly and more confining.

The Renaissance style often demands the use of projecting cornices, which when applied to some types of industrial buildings involve more expense than the Gothic. The characteristics of the style of treatment of industrial buildings that is mostly in favor now are Gothic in character and consist usually of piers marked on the exterior of the buildings, carried up only to the point where the concentrated loads disappear, similar to buttresses, and also walls continued up without projecting cornices and terminated with ornamental copings; the corners of the building are strengthened by the use of piers heavier than the intermediate ones, the entrances emphasized by the use of ornamental tracery and ornament, and the sprinkler tank inclosed in a tower often placed at the main entrance and including one of the principal stairways. While such designs are Gothic in character they are more and more exhibiting a freedom and originality that promise in time to develop into a well-defined architectural style for American industrial buildings.⁵⁰

Nimmons' progressive plan for the Kansas City, Missouri Sears plant, along with his other designs for Sears, is a representative example of American industrial design for the mail order trade. The form and grouping of the parts together express the function of the building and have secured the greatest convenience in the day-to-day operation of the company.

History of Sears, Roebuck and Company

The development of Sears, Roebuck and Company can best be traced by examining the careers of the principal founder, Richard Warren Sears, and executives Julius Rosenwald and Gen. Robert E. Wood "Each man made a vital contribution to the company at a critical juncture, and each left a lasting impact on its operations."⁵¹

⁵⁰Nimmons, "Modern Industrial Plants Part IV", AR, (February, 1919): 166, 168.

⁵¹Ralph J. Christian, Sears, Roebuck and Company Complex, (National Register of Historic Places Inventory--Nomination Form), Copy, n. d., item 8, p. 2.

Richard Warren Sears (1863-1914), born in Stewartville, Minnesota, was forced to leave high school after the collapse of his father's business. In 1878, shortly after his father's death, he learned telegraphy, and subsequently supported his mother, sisters and himself by combining this skill with that of railroad station agent. By the early 1880s, Sears was telegrapher and station agent in Redwood Falls, Minnesota, where he supplemented his income by exchanging lumber and coal for venison, blueberries, and other commodities.

In 1886, Sears unexpectedly began his career as a mail order entrepreneur when he purchased a shipment of watches for half-price that a Redwood Falls jeweler had refused. He was able to buy the watches for \$12.00 and sell them for just two dollars more rather than the retail price of \$25.00. Sears sent samples to other agents along the railroad and within six months, Sears cleared \$5,000. That same year, Sears quit railroading and moved to Minneapolis, where he founded the R. W. Sears Watch Company. During this venture, he continued to use express agents for selling as they were bonded, but he began to rely on advertising in national periodicals. One year later, Sears moved his business to Chicago and hired Alvah Curtis Roebuck (1864-1948), a native of Indiana, to assemble watches and furnish repairs.

In 1889, Sears sold his business for \$100,000 and moved to Iowa to become a country banker; within a year, he returned to Minneapolis and founded the Warren Company, a watch and jewelry business. "The faithful Roebuck returned to his employ, purchased the company from Sears for a brief period in 1891, and then promptly resold it to him when requested to do so a few weeks later."⁵² In 1892, the Warren Company became A. C. Roebuck, Inc.

On September 16, 1893, the company was renamed Sears, Roebuck and Company, with Richard Sears as president. The company began to offer a much wider range of merchandise than just watches and jewelry. A branch office and shipping depot was opened in Chicago and in 1895, the company permanently moved its operation to that location. "During the next five years, Sears, concentrating on the rural market, waged a whirlwind advertising and promotional campaign which enabled his company to surpass Montgomery Ward with sales of \$11 million by 1900."⁵³ Although Sears advertised widely in magazines and newspapers, his principal selling tool was his catalogue.

On August 17, 1895, Alvah Roebuck, feeling the strain of long hours, sold his shares in the company for \$25,000. Shortly thereafter, Richard Sears was introduced to Julius Rosenwald (1862-1932), a wholesale clothing entrepreneur from Springfield, Illinois. On August 23, 1895,⁵⁴ the firm was reincorporated

⁵²Ibid., item 8, p. 3.

⁵³Ibid.

⁵⁴The date of incorporation, as well as the date of Rosenwald's introduction to Sears was listed in error in the HABS report on the Chicago plant. See Boris

Sears, Roebuck and Company Mail Order Plant
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with Sears as president, Rosenwald as Vice-president and Aaron E. Nusbaum, Rosenwald's brother-in-law, as treasurer and general manager. Rosenwald quickly improved the manner of business and the quality of merchandise offered by Sears, Roebuck and Company. "Influenced by the success of Montgomery Ward and Company, Rosenwald encouraged the expansion of a range of merchandise carried by Sears."⁵⁵ By 1896, the Sears catalogue carried a wide range of general merchandise including harnesses, farm equipment, household furnishings, dishes, dry goods, firearms and musical instruments, etc. By 1900, Sears had surpassed Montgomery Ward and Company with more than \$10 million in sales.

By 1908, despite Rosenwald's endeavors, the company was in severe financial trouble due, in part to to Sears' "profit-sharing" plan where customers were given coupons which could be redeemed for expensive premiums---a scheme opposed by Rosenwald and the men he had personally trained. Subsequently, Sears resigned as president on November 21, 1908. After a brief tenure as chairman of the board, he withdrew from active involvement in the company and eventually sold his stock for \$10 million.

Julius Rosenwald succeeded Sears as president and the company once again prospered. By 1910, total sales rose to \$40 million. Branch offices had opened at Dallas, Seattle and Philadelphia and by 1914, the company's sales increased to \$100,000,000.

During World War I, Rosenwald entered government service, leaving the company in less capable hands. When the 1920-1921 depression severely reduced farm incomes, the company found itself overstocked and unable to dispose of its good. The company avoided collapse only because Rosenwald lent it \$20 million from his own fortune. By 1922, Sears, Roebuck and Company had recovered its financial status.

Another major change occurred in 1924 when Rosenwald selected Charles M. Kittle, executive vice president of the Illinois Central Railroad as the new president of the company. In addition, at a time when company officials became increasingly concerned with the threat to the mail order business because of the shift of population from the country to the city, the decline of farm incomes, and the spread of chain stores, Rosenwald also brought in General Robert E. Wood (1879-1969). Wood, a Kansas City, Missouri native and 1900 West Point graduate, had risen to the rank of brigadier general during WWI and had also assisted Goethals in constructing the Panama Canal.

Under the direction of Kittle and Wood, the first Sears retail store opened on February 2, 1925 in the Chicago mail order plant and openings in Seattle, Dallas, Kansas City, and Philadelphia followed. After the unexpected death of Kittle at the age of 46, Wood was named president; in 1939, he became chairman of the board, serving in this capacity until his retirement in 1954. By 1964,

Emmet and John C. Jueck, *Catalogs and Counters: A History of Sears, Roebuck and Company* (Chicago: The University of Chicago Press, 1950), 49.

⁵⁵Slaton, et al., *Sears, Roebuck and Company Mail Order Plant*, Chicago, 10.

Sears, Roebuck and Company Mail Order Plant
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Sears, Roebuck and Company had surpassed the A & P grocery chain as the world's largest retailer. In 1973, the company's 837 retail stores, 12 catalogue order plants and 2,647 catalogue and telephone sales offices reported total sales of approximately \$11 billion. In 1974, the company moved its headquarters from the historic plant on South Homan Avenue to the 100-story Sears Tower in downtown Chicago. In 1987, due to the decline in catalogue sales, and the relocation of the company's headquarters, the Merchandise Building closed---ending the mail order portion of the business at the Chicago plant.^{5 6}

⁵⁶Information regarding the history of Sears, Roebuck and Company was, in part, gleaned from two major sources previously cited: Slaton, et al., *Sears, Roebuck and Company Mail Order Plant, Chicago*, (HABS, 1994) and Christian, *Sears, Roebuck and Company Complex*, NR nomination form, n. d. See also Boris Emmet and John C. Jueck, *Catalogs and Counters* and Donald R. Katz, *The Big Store Inside the Crisis and Revolution at Sears* (New York: Viking Penguin Inc., 1987).

Bibliography

Books and Periodicals

Brown, Milton W., Sam Hunter, John Jacobus, et al. *American Art*. New York: Harry N. Abrams, Inc. 1979.

Condit, Carl W. *The Chicago School of Architecture: A History of Commercial and Public Building in the Chicago Area, 1875-1925*. Chicago: The University of Chicago Press, 1964.

de Wit, Wim, ed. *Louis Sullivan: The Function of Ornament*. New York: W. W. Norton & Company, 1986.

Dolke, W. Fred, Jr. "Some Essentials in the Construction of an Industrial Building." *The American Architect*, Vol, CXI, No. 2148, February 21, 1917.

Emmet, Boris and John E. Jeuck. *Catalogues and Counters: A History of Sears, Roebuck and Company*. Chicago: The University of Chicago Press, 1950.

Goldberger, Paul. *The Skyscraper*. New York: Alfred A. Knopf, 1982.

Katz, Donald R. *The Big Store: Inside the Crisis and Revolution at Sears*. New York: Viking Penguin Inc., 1987.

McLean, Robert Craik. "The Modern Factory As Illustrated in the Works of George C. Nimmons." *Western Architect*, Vol. XXIII, No. 1, January, 1916.

Marquis, Albert Nelson, ed. *Who's Who in Chicago*. Chicago: A. N. Marquis & Company, 1926.

News and Views, Vol. 29, No. 5, June-July, 1973.

News and Views, Vol. 30, No. 3, April, 1974.

Nimmons, George C. "Industrial Buildings Their Great Architectural Opportunities and an Appeal to the Architects to Help the American Industries Whose Buildings They Have Neglected in the Past." *The American Architect*, Vol. CXXIX, No. 2488, January 5, 1926.

_____. "Modern Industrial Plants: Part I." *The Architectural Record*, Vol. XLIV, No. 5, November, 1918.

_____. "Modern Industrial Plants: Part II." *The Architectural Record*, Vol. XLIV, No. 6, December, 1918.

_____. "Modern Industrial Plants: Part III Plans and Designs." *The Architectural Record*, Vol. XLV, No. 1, January 1919.

Sears, Roebuck and Company Mail Order Plant
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_____. "Modern Industrial Plants: Part IV Discussion of the Various Types of Windows for Industrial Buildings." *The Architectural Record*, Vol. XLV, No. 2, February, 1919.

_____. "Modern Industrial Plants: Part VII Sears, Roebuck & Co.'s Plant, Chicago." *The Architectural Record*, Vol. XLV, No. 6, June, 1919.

_____. "The New Renaissance in Architecture As Seen in the Design of Buildings for Mail Order Houses." *The American Architect*, Vol. CXXIV, No. 2550, August 5, 1928.

_____. "The Philadelphia Plant of Sears, Roebuck & Co." *The American Architect*, Vol. CXVII, No. 2298, February, 1918.

"Requirements for the Heating and Ventilation of Industrial Buildings." *The American Architect*, Vol. CXI, No. 2148, February 21, 1917.

Sanborn Map Company. *North Kansas City, Missouri*. New York: Sanborn Map Company, 1914.

"Some Industrial Designs by George C. Nimmons." *Architectural Record*, Vol. XXXVII, No. 2, August, 1915.

Western Contractor. March 4, 1924, 34.

Withey, Henry F. and Elsie Rathburn Withey. *Biographical Dictionary of American Architects*. Los Angeles: Hennessey & Ingalls, Inc., 1970.

Newspapers

Various newspaper articles from the Kansas City Star were cited in the footnotes. In some cases, page numbers were omitted. These articles, located in the mounted clipping file at the Special Collections, Missouri Valley Room, Kansas City Public Library, do not indicate page numbers.

Unpublished Materials

Christian, Ralph J. Sears, Roebuck and Company Complex (Chicago). National Register of Historic Places Inventory--Nomination, n.d. Copy.

Kansas City CMC-481 A Unit of SLS. Sears, Roebuck and Company Building. Typescript.

Slaton, Deborah, Jeffrey Koerber, and Harry J. Hunderman. Sears, Roebuck and Company Mail Order Plant, Chicago. HABS No. IL-1187. 1994. Copy.

Public Documents

Water Permits, 3801-05 Truman Road. Landmarks Commission, Kansas City, MO.

Architectural Drawings

Sears, Roebuck and Company, Kansas City, Missouri. Job No. 403, January 24, 1925. Nos. 50.22 7; 104.29 2-5, 7; 104.30 4, 5, 7-10; 104.5 3, 5, 6; 106.26. Western Historical Manuscript Collection, University of Missouri, Kansas City.

Historic Photographs

Sears, Roebuck and Company, Kansas City, Missouri. Special Collections, Missouri Valley Room, Kansas City, Missouri Public Library.

Sears, Roebuck and Company, Kansas City, Missouri. Archives, Public Affairs Department, Sears, Roebuck and Company, Hoffman Estates, Illinois.

Sears Roebuck and Company, Kansas City, Missouri. Files, 1650 Cleveland Avenue, Kansas City, Missouri.

Interviews

Gerber, Charles. Interview with author. Kansas City, Missouri, 2 October 1995.

Higgins, Don. Interview with author. Kansas City, Missouri, 2 October 1995.