

H-O OATS ELEVATOR
(Hecker H-O Elevator)
54 Fulton Street
Buffalo
Erie County
New York

HAER No. NY-257

HAER
NY
15-BUF
34-

PHOTOGRAPHS
WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
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HISTORIC AMERICAN ENGINEERING RECORD

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(Hecker H-O Elevator)
HAER No. NY-257

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Location: 54 Fulton St., Buffalo, Erie County, New York

Date: Mainhouse: building permit issued August 11, 1914;
Extension: building permit issued April 2, 1931;
completed fall, 1931

Designer: Mainhouse: A. E. Baxter Engineering Co.
Extension: H. R. Wait

Builder: Mainhouse: unknown
Extension: Monarch Engineering

Status: Derelict

Significance: The grain elevators of Buffalo comprise the most outstanding collection of extant grain elevators in the United States, and collectively represent the variety of construction materials, building forms, and technological innovations that revolutionized the handling of grain in this country.

Project Information: The documentation of Buffalo's grain elevators was prepared by the Historic American Engineering Record (HAER), National Park Service, in 1990 and 1991. The project was co-sponsored by the Industrial Heritage Committee, Inc., of Buffalo, Lorraine Pierro, President, with the cooperation of The Pillsbury Company, Mark Norton, Plant Manager, Walter Dutka, Senior Mechanical Engineer, and with the valuable assistance of Henry Baxter, Henry Wollenberg, and Jerry Malloy. The HAER documentation was prepared under the supervision of Robert Kapsch, Chief, HABS/HAER, and Eric DeLony, Chief and Principal Architect, HAER. The project was managed by Robbyn Jackson, Architect, HAER, and the team consisted of: Craig Strong, Supervising Architect; Todd Croteau, Christopher Payne, Patricia Reese, architects; Thomas Leary, Supervising Historian; John Healey, and Elizabeth Sholes, historians. Large-format photography was done by Jet Lowe, HAER photographer.

Historians: Thomas E. Leary, John R. Healey, Elizabeth C. Sholes, 1990-1991

This is one in a series of HAER reports for the Buffalo Grain Elevator Project. HAER No. NY-239, "Buffalo Grain Elevators," contains an overview history of the elevators. The following elevators have separate reports:

NY-240 Great Northern Elevator
NY-241 Standard Elevator
NY-242 Wollenberg Grain & Seed Elevator
NY-243 Concrete-Central Elevator
NY-244 Washburn Crosby Elevator
NY-245 Connecting Terminal Elevator
NY-246 Spencer Kellogg Elevator
NY-247 Cooperative Grange League Federation
NY-248 Electric Elevator
NY-249 American Elevator
NY-250 Perot Elevator
NY-251 Lake & Rail Elevator
NY-252 Marine "A" Elevator
NY-253 Superior Elevator
NY-254 Saskatchewan Cooperative Elevator
NY-256 Urban Elevator
NY-257 H-O Oats Elevator
NY-258 Kreiner Malting Elevator
NY-259 Meyer Malting Elevator
NY-260 Eastern States Elevator

In addition, the Appendix of HAER No. NY-239 contains brief notations on the following elevators:

Buffalo Cereal Elevator
Cloverleaf Milling Co. Elevator
Dakota Elevator
Dellwood Elevator
Great Eastern Elevator
Iron Elevator
John Kam Malting Elevator
Monarch Elevator
Pratt Foods Elevator
Ralston Purina Elevator
Riverside Malting Elevator

Developments at the H-O Oats site began in 1893 with the construction of a wood-framed food mill, and a wood-framed feed mill for E. Ellsworth. These developments took place along what was to become the northern side of the site. The building permit for the construction of both mills was issued in 1893. The feed mill measured 75' x 80' and the food mill to the west 100' x 60'. A building permit was issued September 28, 1893, for the construction of an elevator to the east of the mill. The elevator measured 85' x 40' and was of wood crib-binned construction with exterior brick walling and a high cupola extending the length of the building. The original complex survived until recently, when the site was abandoned and the buildings burned. Both subsequent elevators were supplied by overhead conveyor gantries from the railroad unloading facilities provided by this elevator.¹

The next major additions to the site came in 1912, with a four-story "brick factory" and a brick addition to the elevator. The five-story extension measuring 120' x 80' occupies the southwest corner of the site. The building, which served as a mixing and packaging facility, is concrete-framed and floored with brick wall panelling. The total capacity of the elevator became 105,000 bushels. A 70' high oat drier house was added to the south of the original elevator at an unknown date.

The earliest surviving grain bins on the site date from 1914. This "concrete and steel grain storage" consists of four free-standing steel bins rising from a concrete foundation slab. The bins are approximately 23' in diameter and 60' tall with a capacity of 20,000 bushels each. They are located to the south of the original elevator beyond the oat drier house. In 1928 another large addition was made to the east of the 1912 structure. The seven-story concrete-framed, brick-panelled building measuring 80' x 70' served as a store and warehouse.

In 1931 a building permit was issued for the construction of the concrete elevator on the southeast corner of the site that would come to dominate the complex. The elevator was built by the Monarch Engineering Company of Buffalo to the in-house design of H. R. Wait. In basic concept, it is typical of his work and features a full basement with spread bins rising from an overall bin slab. The high, 125' bins are also characteristic of his later designs, although they are unusually narrow. The building is L-shaped in plan, as the 1914 steel bins lie immediately to the northwest of the elevator and fit between its two wings. The eastern elevation is 82' long and the southern elevation 110'. This is the only Buffalo example of a Wait-designed elevator with interlocking bin rows. The basement works were completed using conventional form work, and the bins were slip formed, probably using the threaded jacking rod method favored by the Monarch

Company. The structure was complete and operational by the fall of 1931.

The elevator has a capacity of 580,000 bushels. The storage is provided in eighteen main bins, six interspace bins, nine outerspace bins, and two corner bins two-thirds the circumference of the main bins. The main bins are 15' in inner diameter and arranged on 26'-6" centers in interlocking rows. The easterly wing of bins consists of four interlocking rows of three whole bins and the southerly wing of three interlocking rows of two bins. The alignment and spacing of bins is maintained between the two wings. The main bins are spread diagonally and joined by diagonal link walls. This geometry determines that the outerspace bins are of large volume and extend back to the wall of the inner rows of main bins, where they interlock with the outer rows of main bins. The northeast and southwest corner bins of the east wing are incomplete cylinders, effectively corner outerspaces occupying the area between two whole bins. The interspace bins are of conventional form, although the diagonal link walls result in the axis of their plan being rotated through 45'. The bins rise to 125' above the bin slab, and the wall thickness is 6-1/2" in the bin walls and 9" in the link walls. The reinforcing details are not known.

The bin hopping is provided by mortar-faced slag concrete laid to form a cone above the bin slab. The spouting is via centrally located conical steel hoppers set into the bin slab. The basement provides full headroom. The bin slab is supported by mushroom-headed columns arranged in three rows of five below the east wing, and two rows of three below the south wing. All are equidistantly spaced and located beneath every link wall. Rectangular wall pillars are incorporated into the inner face of the basement exterior wall and are located below the intersection of main and outerspace bin walls. The concrete basement wall is pierced by elongated windows between every pillar. The elevator is built on a foundation of wood piles capped by a reinforced concrete foundation slab. The bin floor is of reinforced concrete on I-beams and extends beyond the bin line to form wide straight eaves. The bin floor is protected by an overall single-story gallery of structural steel clad in gypsum boarding and roofed with a concrete slab. The 24' x 28' workhouse extending above the gallery of the southern wing to a height of 186' resembles the gallery in construction.

BUSINESS HISTORY

The H-O Company Elevator on Perry and Fulton streets on the south side of downtown Buffalo has a long history of operation, both in terms of the site and of the companies that founded and

ran the elevator and cereal production facility. The original grain elevator and mill belonged to Edward Ellsworth & Company. In 1896, Ellsworth added a brick and frame elevator to his typical wood cereal mill. Between 1896 and 1908 Ellsworth appended incidental buildings for storage, laboratory facilities, and office space. The operation remained relatively small but reasonably prosperous.²

Ellsworth entered the cereal and flour trade as an important brand-name manufacturer through the acquisition of another well-known producer, H-O Oats. Alexander Hornsby established H-O (Hornsby's Oatmeal) in Craigville, New York, in the 1870s. At the founder's death, Ellsworth bought his mill and, in 1890, relocated the business to Lockport, Illinois. The new location on the Chicago & Michigan Canal was closer to raw grain suppliers and transport access to Lake Michigan. In 1892-1893 Ellsworth moved to Buffalo in the hope of capturing the east coast markets. His business began under his own company name; the cereal was once again marketed under the familiar H-O label.³ H-O was a pioneer in the manufacture of prepared breakfast food. Under Ellsworth's control, the company diversified to manufacture both flour and feed and to expand the consumer line. In addition to H-O Oats, Ellsworth developed Force Toasted Wheat Flakes and Presto Self-Rising Flour.⁴

In 1907 Ellsworth restructured the company, changing the name from Edward Ellsworth & Co. to Edward Ellsworth Company. The slight name change reflected his consolidation of ownership. The latter company "bought" the assets of the first company for \$2 million. By this date, Ellsworth had operations in Buffalo and Cedar Rapids, Iowa where he manufactured Pawnee Cereal. The expanded company was to be financed by a bond issue backed by a mortgage on the property secured from Fidelity Trust Company which thereby acquired two seats on Ellsworth's board of directors. The company lasted only two years before it was bought by Hecker, an offshoot of a New York City milling company briefly based in Buffalo.⁵

In 1920 Buffalonian H. P. Werner, Hecker H-O president, renamed the local operation The H-O Company. It operated as the H-O Mill until 1925, when it was bought out by Standard Milling Company and renamed Hecker H-O once again. Standard Milling was a financial holding company established in 1900 after the collapse of United States Flour Milling Company. At its inception, the new firm subsumed several key milling companies and began acquiring others, including H-O Cereal Company. The purchase was effected through Standard's Hecker-Jones-Jewell subsidiary which had designs on other Buffalo properties. The acquisition was predicted to make Buffalo a leading cereal producer since Standard's marketing operations were vastly more

extensive than Ellsworth's. Further, the machinery located in Hecker's New York City plant was to be moved to the mill with the Hecker sales offices relocating as well.

The H-O Mill had been enlarged over the previous decade, and Hecker planned to expand still further. H-O had added a four-story milling area in 1912 and a modern concrete and steel grain elevator two years later. Storage areas and office space were also enlarged. Once Hecker took control, it moved all of the office operations off site to a commercial building, thereby expanding actual production space.⁶

In 1929 the "silent partners" behind Standard Milling acquired dominant control. The Gold Dust Company took active ownership of Standard, Hecker, and H-O, three among several subsidiaries. In 1929 Gold Dust built a mammoth grain elevator for Standard. Two years later it planned a 600,000-bushel elevator addition to H-O (still known locally as Hecker H-O) that would substantially increase the mill's capacity.⁷ From the time Gold Dust took active control of H-O until 1983, the elevator was essentially owned and operated by the same company. However, the company name was changed every few years as corporate mergers, divestitures, and reorganizations altered the focus of production and identity. Regardless of owner, Buffalo residents stubbornly continued to refer to the cereal mill and elevator simply as the "H-O". No one could keep up with the otherwise confusing corporate identities.

In 1931, the same year the company built the 600,000-bushel addition, Gold Dust merged with General Foods and adopted the name of one of Gold Dust's main proprietary lines, Best Foods, Inc. Five years later, in 1936, the Hecker name was once again raised to corporate prominence. In 1942 Hecker acquired the remaining 29 percent portion of Best Foods that was owned by General Foods, and in December of that year the company was once again named Best Foods. In 1945 the Best Foods corporation split in two and a large portion of the milling operations was acquired by a new spin-off called, predictably, Standard Milling Co. Standard's headquarters was located in Chicago until 1952, when it moved to Kansas City, Missouri. Standard Milling took over Buffalo's large Standard Elevator but left the H-O Elevator and cereal/flour mill to Best Foods.⁸

In 1969 Best Foods merged with Corn Products Company, a producer of corn syrups and "wet milled" corn commodities such as dextrose and other corn derivatives. Although the company always located production in areas close to the source of supply, the headquarters was in New Jersey and the dominant control was held by Wall Street financial interests. The merger with Best Foods

was a common procedure since Corn Products' growth was always obtained through acquisition rather than actual investment in new facilities or processes. Best Foods was one of Corn Products' major additions and gave Corn Products Company an infusion of branded products including H-O cereal.⁹ The Buffalo elevator and mill continued to produce the same line of cereals and other items as it had for decades under Hecker and Standard. The focus of production remained varieties of oat cereals and Presto Self-Rising Cake Flour. Quick Oats comprised 49 percent of output, with old-fashioned oats adding another 9 percent. As a railroad-based elevator, H-O bought raw oats from other Buffalo elevators and transhipped the raw commodities to its own elevator and mill.¹⁰

CPC International, as it came to be called, owned and operated the Buffalo elevator until the company's shift away from milling to processed consumer food lines made cereal operation a less attractive part of the company. In 1983, CPC ended eighty-eight years of H-O oat production at the site, nearly sixty years under the same company. The H-O facility was sold to Gary Rammacher, whose forebears had been part of several prosperous waterfront elevator operations at Concrete-Central. Two years after Rammacher began his tenure as a miller, the elevator was sold to All Star Tire Warehouse for tire storage. The next year H-O burned in a catastrophic fire that left only the massive storage tanks and a portion of the milling area relatively intact. The site is now abandoned and derelict.¹¹

ENDNOTES

1. The following paragraphs are based on information from city building permits and plans housed in Buffalo City Hall and from Sanborn Fire Insurance maps.
2. Buffalo City Hall (BCH), Permits and Plan, Permit #4820, March 4, 1895 (food mill), Permit #7749, September 28, 1896; Permit #5711, August 8, 1895; Permit #1014, July 26, 1898, Permit #26062, February 13, 1908.
3. Buffalo and Erie County Public Library, Scrapbooks, "Industry," Vol. 8, 7-8.
4. Buffalo Live Wire, 11 (August 1920): 26; Illustrated Buffalo Express, 12 September 1897, p. 8; BCH, Permits and Plans, Permit #P20888 (H-O Company), September 20, 1905; Permit #P4664R6 (Edward Ellsworth Co.) July 31, 1908.

5. Erie County Clerk (ECC), Corporations, Hecker H-O, Certificate of Incorporation, November 15, 1909, Box 3890; Buffalo Commercial, 9 July 1907, p. 12. All Erie County Clerk documents are listed by date of document origin, not by date of filing, unless otherwise noted.
6. ECC, Corporations, H-O Company, Change of Office, March 20, 1925, Certificate of Name Change, June 25, 1925, Box 6875; BECPL, Scrapbooks, "Industry," Vol. 8, 7; Northwestern Miller (10 December 1924): 1044; BCH, Permits and Plans, Permit #P35816, April 19, 1912; Permit #42947, August 11, 1914.
7. Northwestern Miller (10 December 1924): 1044; Herman Steen, Flour Milling in America (Minneapolis: T. S. Denison & Co., 1963), 321-22.
8. Moody's Industrials, 1958; Steen, Flour Milling in America, 321-22.
9. Moody's Industrials, 1981; Milton Moskowitz, et al., eds., Everybody's Business (New York: Harper & Row, 1980), n.p.
10. BECPL, Scrapbooks, "Industry," Vol. 8, 7-8.
11. "How CPC is Getting Fat on Muffins and Mayonnaise," Business Week (16 April 1990): 46, 48; ECC, Deeds, Liber 9253, 18 August 1983, 285-6, Liber 9520, 11 December 1985, 306-7.

SOURCES

Buffalo & Erie County Public Library, scrapbooks, "Industry,"
Vols. 7 & 8.

Buffalo Live Wire, 11 (August 1920): 26.

Building Permits and Plans, 301 Buffalo City Hall.

#4820 (March 4, 1895)
#7749 (September 28, 1896)
#5711 (August 8, 1895)
#1014 (July 26, 1898)
#26062 (February 13, 1908)
#4664R6 (July 31, 1908)
#35816 (April 19, 1912)
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"How CPC is Getting Fat on Muffins and Mayonnaise," Business Week
(16 April 1990): 46, 48.

Illustrated Buffalo Express, 12 September 1897, p. 8.

Moody's Industrials, 1958, 1981.

Moskowitz, Milton, et al., eds., Everybody's Business. New York:
Harper & Row, 1980.

Northwestern Miller (10 December 1924): 1044.

Sanborn Fire Insurance maps.

Steen, Herman. Flour Milling in America. Minneapolis: T.S.
Denison & Co., 1963.

APPENDIX

Mainhouse

Bins: Capacity 80,000 bushels
4 freestanding bins approximately 23' in
diameter and 60' high

REFERENCES: The city building permit provides the date. All other
information is from Sanborn Fire Insurance maps.

Extension

Foundation: Concrete slab on wooden piles; L-shaped plan

Basement: Full height; mushroom-headed pillars in 3
rows of 5 and 2 rows of 2, all equidistant
and located beneath every link wall bin
contact Rectangular wall pillars located
below the intersection of main and outer bin
walls Basement wall concrete pierced by
elongated window between every pillar;
basement structure supports bin slab

Hoppers: Mortar slab on slag concrete; above bin slab;
spouted via conical steel hopper set into bin
slab

Bins: Capacity 580,000 bushels
15 interlocking main bins, cylindrical 15' in
diameter, 125' tall (from bin slab)
5 interspace bins of conventional form
10 outerspace bins of large form extending
back to the wall of the second row of bins;
Geometry determines that the NE & SW corner
bins are effectively outer bins as they are
incomplete cylinders
Non-tangential, contact by diagonal link
walls
Wall thickness 6-1/2", link walls 9"
Reinforcing details unknown

Bin Floor: Concrete on I-beams

Gallery &
Workhouse: Structural steel clad in gypsum boarding

REFERENCES: The original plans are housed in Buffalo City Hall.
City building permits provide the date.