

ADDRESS: 155-59 CECIL B MOORE AVE

Name of Resource: The Columbia Works (also known as The Eagle Bolt Works)

Proposed Action: Designation

Property Owner: Sharktown, Inc.

Nominator: The Keeping Society of Philadelphia

Staff Contact: Allyson Mehley, allyson.mehley@phila.gov, 215-686-7660

OVERVIEW: This nomination proposes to designate the property at 155-59 Cecil B. Moore Avenue and list it on the Philadelphia Register of Historic Places. The nomination contends that the building satisfies Criteria for Designation A, C, D and J.

Under Criterion A, the nomination argues that the property is significant for its association with William P. Uhlinger, an inventor, machinist, industrialist, and the first manufacturer of the Jacquard Loom in the United States. The introduction of the Jacquard Loom represented an important technological advance during a time when Philadelphia was a national and international center for the textile industry. Under Criteria C, the nomination contends the complex, most notably Building 1, reflects an era when industrial architecture was characterized by the use of pilaster and arcades as a distinctive architectural treatment for brick factory buildings. Under Criteria D, the nomination states that Building 5 embodies distinguishing characteristics of the Art Deco style as communicated through its parapet and brick detailing on an otherwise largely utilitarian building. Finally, the nomination asserts that under Criteria J, the property exemplifies the cultural, economic, and historical heritage of the industrial age in Kensington in the 19th and early 20th centuries.

STAFF RECOMMENDATION: The staff recommends that the nomination demonstrates that the property at 155-59 Cecil B. Moore Avenue satisfies Criteria for Designation A, C, D and J. The staff recommends that the non-historic 1-story structures along N. Mascher Street, in between Buildings 1 and 5, be considered non-contributing resources.

<https://www.phila.gov/historical/Documents/155-59-Cecil-B-Moore-Ave-nomination.pdf>



**NOMINATION OF HISTORIC BUILDING, STRUCTURE, SITE, OR OBJECT
PHILADELPHIA REGISTER OF HISTORIC PLACES
PHILADELPHIA HISTORICAL COMMISSION**

SUBMIT ALL ATTACHED MATERIALS ON PAPER AND IN ELECTRONIC FORM (CD, EMAIL, FLASH DRIVE)
ELECTRONIC FILES MUST BE WORD OR WORD COMPATIBLE

1. ADDRESS OF HISTORIC RESOURCE (must comply with an Office of Property Assessment address)

Street address: 155-59 Cecil B. Moore Avenue

Postal code: 19122 Councilmanic District: District 7

2. NAME OF HISTORIC RESOURCE

Historic Name: The Columbia Works (later known as The Eagle Bolt Works)

Current/Common Name: Unknown

3. TYPE OF HISTORIC RESOURCE

Building Structure Site Object

4. PROPERTY INFORMATION

Condition: excellent good fair poor ruins
Occupancy: occupied vacant under construction unknown

Current use: Various

5. BOUNDARY DESCRIPTION

Please attach

6. DESCRIPTION

Please attach

7. SIGNIFICANCE

Please attach the Statement of Significance.

Period of Significance (from year to year): from 1866-67 to 1955

Date(s) of construction and/or alteration: Buildings Nos. 1 (1866-67), 2-4 (c. 1875), & 5 (1930)

Architect, engineer, and/or designer: Building No. 5 (J. Fletcher Street)

Builder, contractor, and/or artisan: Building No. 5 (Haverstick-Borthwick Company)

Original owner: William P. Uhlinger (1823-1898)

Other significant persons: Unknown

CRITERIA FOR DESIGNATION:

The historic resource satisfies the following criteria for designation (check all that apply):

- (a) Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past; or,
- (b) Is associated with an event of importance to the history of the City, Commonwealth or Nation; or,
- (c) Reflects the environment in an era characterized by a distinctive architectural style; or,
- (d) Embodies distinguishing characteristics of an architectural style or engineering specimen; or,
- (e) Is the work of a designer, architect, landscape architect or designer, or engineer whose work has significantly influenced the historical, architectural, economic, social, or cultural development of the City, Commonwealth or Nation; or,
- (f) Contains elements of design, detail, materials or craftsmanship which represent a significant innovation; or,
- (g) Is part of or related to a square, park or other distinctive area which should be preserved according to an historic, cultural or architectural motif; or,
- (h) Owing to its unique location or singular physical characteristic, represents an established and familiar visual feature of the neighborhood, community or City; or,
- (i) Has yielded, or may be likely to yield, information important in pre-history or history; or
- (j) Exemplifies the cultural, political, economic, social or historical heritage of the community.

8. MAJOR BIBLIOGRAPHICAL REFERENCES

Please attach

9. NOMINATOR

Organization The Keeping Society of Philadelphia Date January 1, 2019

Name with Title Oscar Beisert, Architectural Historian Email Keeper@keepingphiladelphia.org

Street Address 1315 Walnut Street, Suite 320 Telephone 717.602.5002

City, State, and Postal Code Philadelphia, PA 19107

Nominator is is not the property owner.

PHC USE ONLY

Date of Receipt: 1/2/2019

Correct-Complete Incorrect-Incomplete Date: 8 February 2019

Date of Notice Issuance: 8 February 2019

Property Owner at Time of Notice

Name: Sharktown, Inc.

Address: 1714 N. Mascher Street

City: Philadelphia State: PA Postal Code: 19122

Date(s) Reviewed by the Committee on Historic Designation: _____

Date(s) Reviewed by the Historical Commission: _____

Date of Final Action: _____

Designated Rejected

NOMINATION

FOR THE

PHILADELPHIA REGISTER OF HISTORIC PLACES



Looking northwest at the subject property. Source: Oscar Beisert, 2018.

THE COLUMBIA WORKS

ERECTED 1866-67

—

LATER KNOWN AS

THE EAGLE BOLT WORKS

—

**155-59 CECIL B. MOORE AVENUE
(FORMERLY 155-59 WEST COLUMBIA AVENUE)**

KENSINGTON

PHILADELPHIA, PENNSYLVANIA

*Nomination to the Philadelphia Register of Historic Places, Fall 2018 – Page 1
155-59 Cecil B. Moore Avenue, Kensington, Philadelphia, Pennsylvania*



The boundary for the proposed designation is delineated in blue.
Source: Philadelphia Water.

5. BOUNDARY DESCRIPTION

The boundary for the designation of the subject property is as follows:

Beginning at the northwest corner of Columbia Avenue and Mascher Street; thence extending Northward along the West side of the said Mascher Street 207 feet, 11-3/4 inches, thence extending Westward parallel with Montgomery Avenue and along ground now or large of George W. Harris, 210 feet to the East side of Hancock Street; thence Southward along the East side of said Hancock Street 175 feet to the North side of Columbia Avenue; thence extending Eastward along the North side of said Columbia Avenue 119 feet, 5 inches and thence Southeastward still along said Columbia Avenue 96 feet, 6 inches to the West side of Mascher Street and place of beginning.

OPA Account Number 884589900

Deed Registry Plot Number 013N23-0066

6. PHYSICAL DESCRIPTION



View of the Columbia Works complex at the corner of Cecil B. Moore Avenue and N. Mascher Street. Building 1, the earliest building of the complex is highlighted in yellow.

Source: Pictometry, Atlas, City of Philadelphia, 2018.

Originally known as the Columbia Works and later the Eagle Bolt Works, the subject property is an unusually intact example of a small, but densely-built industrial complex in the Kensington neighborhood of Philadelphia. The five buildings are all of red brick construction: 1. Columbia Works (1866–67), 2. Machine Shop (1875), 3. Hammer Shop (1875), 4. Oliver Shop, and 5. John Crompton Adelpia Corporation Plant (1930).

1. Columbia Works (1866–67)

Standing at the corner of West Cecil B. Moore Avenue and Mascher Street for more than 150 years, Building 1: Columbia Works (Building 1) is a three-story brick building with a relatively flat roof. The distinctive brick factory building is of a long and narrow, rectangular form. The primary (south) elevation spans sixteen bays along West Cecil B. Moore Avenue with four bays facing east on Mascher Street.

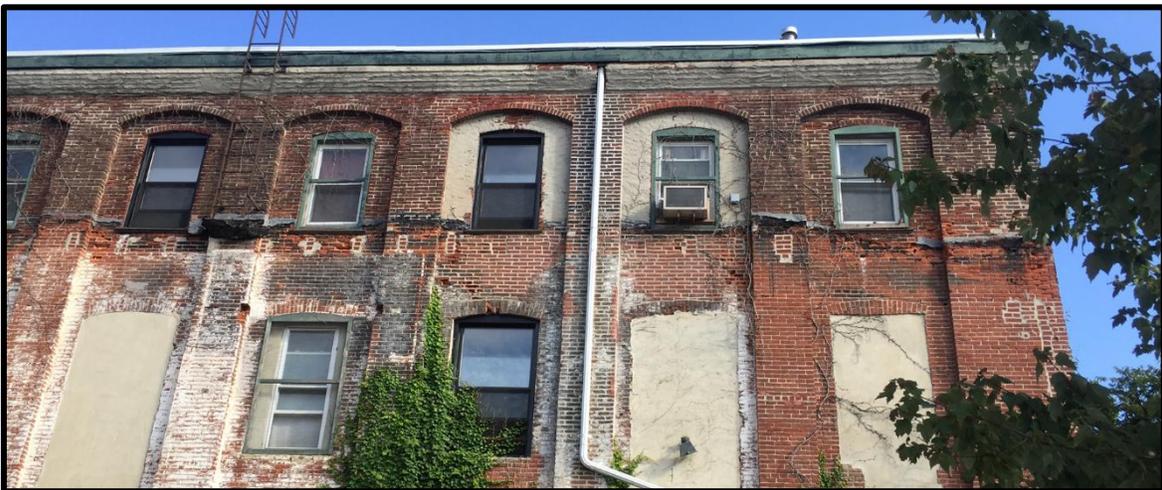


View of the south and east elevations of Building 1. Source: Oscar Beisert, 2018.



South elevation of Building 1. Source: Oscar Beisert, 2018.

Both the south and east elevations of Building 1 include defined brick pilasters that are united at the top to form brick arcades that emphasize the strength of the masonry walls. All of the openings within both facades are symmetrically placed within the arcade with one window per floor. The openings are defined by segmental arched, brick lintels. The arcades on both the south and east elevations are beneath a projecting corbeled cornice of five tiers. The cornice terminates with a simple section of wooden, metal or iron trim. Most of the windows and doors within both elevations have been replaced. The north and west elevations are of a similar design, but largely obscured from public view.



Windows and cornice on the south elevation of Building 1.
Source: Oscar Beisert, 2018.



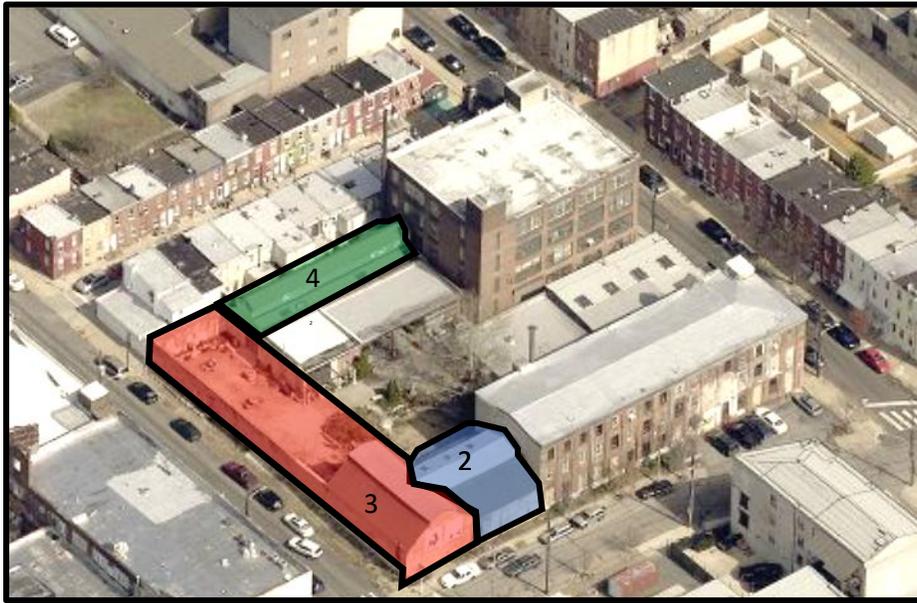
The south elevation of Building 1 includes arcaded brickwork.
Source: Oscar Beisert, 2018.



A cast iron sign within the façade of Building 1, showing the name of the original owner: "W.P. Uhlinger."
Source: Workshop of the World.



Looking southwest along N. Mascher Street with Building 1 visible on left side of photograph. The structures in the foreground are more recent additions (constructed of concrete block and corrugated metal) to the complex. These structures are considered non-contributing as they fall outside the period of significance for 155-59 Cecil B. Moore Avenue.
Source: Oscar Beisert, 2018.



Looking west at the subject property, outlining Buildings 2, 3, and 4.
Source: Pictometry, Atlas, City of Philadelphia, 2018.

2. Machine Shop (c. 1875)

Building No. 2: Machine Shop (Building 2) is a small one-story, stuccoed brick building that appends the west elevation of Building 1. The building features a one-story shed with a gabled roof and clerestory above that is sheathed in rolled asphalt and asphalt shingle.

3. Hammer Shop (c. 1875)

Building No. 3: Hammer Shop (Building 3) is a long and narrow, one-story stuccoed brick building that appends the west elevation of Building No. 2. The intact portion of the building, about one-third of the total length, features a one-story shed with a gabled roof and clerestory above that is sheathed in rolled asphalt and asphalt shingle. The gable end facing Cecil B. Moore Avenue originally featured a large central entrance and other apertures that appear to be sheathed by the stucco finish.

4. Oliver Shop (c. 1875)

Building No. 4: Oliver Shop (Building 4) is a long and narrow, one-story stuccoed brick building that appends the east elevation of Building 3. The building is a one-story shed with a gabled roof and clerestory above that is sheathed in rolling asphalt. One-story, brick additions append the south elevation. The additions have flat roofs.



Top: Looking northwest at the south elevation of Building 2 and the gable end of Building No. 3. The clerestory is sheathed in asphalt roofing but visible on both buildings. **Middle:** West and south elevations of Building 3. **Bottom:** West elevation of Building 3. A portion of Building 3 is a ruin with only this wall intact.
Source: Oscar Beisert, 2018.



Aerial view of Columbia Works complex along N. Mascher Street.

Building 5 is highlighted in light purple.

Source: Pictometry, Atlas, City of Philadelphia, 2018.

5. John Crompton Adelpia Corporation Manufacturing Building (1930).

Building 5: Built in 1930 of brick and steel with Art Deco and Modernist stylistic overtones, the John Crompton Adelpia Corporation Manufacturing Building is a paper box factory that stands four stories with a basement at the northeast corner of the subject property near the southwest corner of N. Mascher and Palmer Streets. The building was designed by architect J. Fletcher Street and constructed by the Haverstick-Borthwick Company at a cost of roughly \$32,000.



View along N. Mascher Street. Photograph shows the east and south elevations of Building 5. Source: Oscar Beisert, 2018.



East elevation of Building 5 along N. Mascher Street
Source: Oscar Beisert, 2018.

The east elevation of Building 5 is defined by a red brick façade and large multi-pane steel windows, a standard feature of factory buildings of this era. The east façade's fenestration is defined by four bays created by brick pilasters and spandrels. Representing the steel frame construction, the brick pilasters start at the ground floor and terminate in low Art Deco style parapets that rise above the roofline. Also emblematic of the structural frame of the building, the spandrels are recessed from the pilasters beneath each opening, and, aesthetically, are comprised of various bond motifs within the brickwork. Three of the bays, comprised of large rectangular openings of equal size, define the primary interior loft space, while the fourth, most northerly bay, represents a shaft way, stair tower or interior, open balcony. The three primary bays feature three openings per floor. The ground floor features the primary entrance in the southern most bay, which features double steel doors that are stylistically akin to the multi-light steel windows. The other two bays within the ground floor are large multi-pane steel windows with a central awning sash. The second and third floors feature the same three openings with large multi-pane steel windows with a central awning sash. The spandrels within the second floor feature a single basket weave bond. The spandrels in the third and fourth floors are simpler, featuring a running bond set within rectangular frames created by brick coursing. The fourth and northern most bay

features a single opening per floor defined by segmental arched lintels. The first floor features a doorway that is defined by a round arch lintel. This doorway appears to lead to a shaft way or freight elevator.

The south elevation of Building 5 is defined by five bays created by brick pilasters and spandrels, which are recessed from the pilasters beneath each opening. The spandrels on the second, third and fourth floors feature a simple running bond set within rectangular frames created by brick coursing. Four of the bays, comprised of large rectangular openings of equal size, define the primary interior loft space, while the fourth, represents a shaft way, stair or elevator tower. The four primary bays feature four openings per floor, featuring large multi-pane steel windows with a central awning sash. The fifth and westernmost bay features a single, narrow opening per floor defined by segmental arched lintels. This bay includes a fifth-story egress tower with a single metal door facing east.



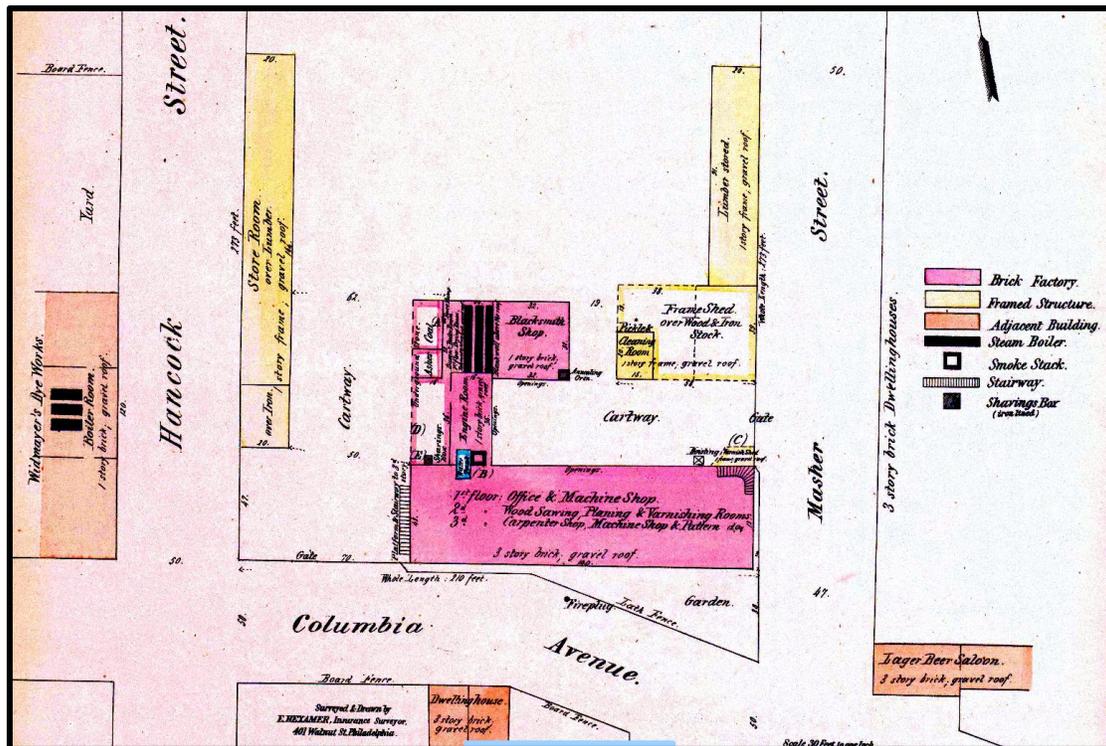
Aerial view looking northwest at the subject property, the west elevation of Building 5 is outlined, as the details of this façade are not discernable from a public right-of-way. Source: Pictometry, Atlas, City of Philadelphia, 2018.

7. STATEMENT OF SIGNIFICANCE

Known by the names of the many businesses that occupied the premises over time, the subject property at 155-59 Cecil B. Moore Avenue is a significant historic resource that merits designation by the Philadelphia Historical Commission and inclusion on the Philadelphia Register of Historic Places. The subject property, including five of its buildings, satisfies the following Criteria for Designation, as enumerated in Section 14-1004 of the Philadelphia Code:

- (a) Has significant character, interest or value as part of the development, heritage or cultural characteristics of the City, Commonwealth or Nation or is associated with the life of a person significant in the past;
- (c) Reflects the environment in an era characterized by a distinctive architectural style;
- (d) Embodies distinguishing characteristics of an architectural style or engineering specimen; and
- (j) Exemplifies the cultural, political, economic, social or historical heritage of the community.

The period of significance dates from the time Building one was constructed in 1866-67 to when the last paper box factory closed in 1955.



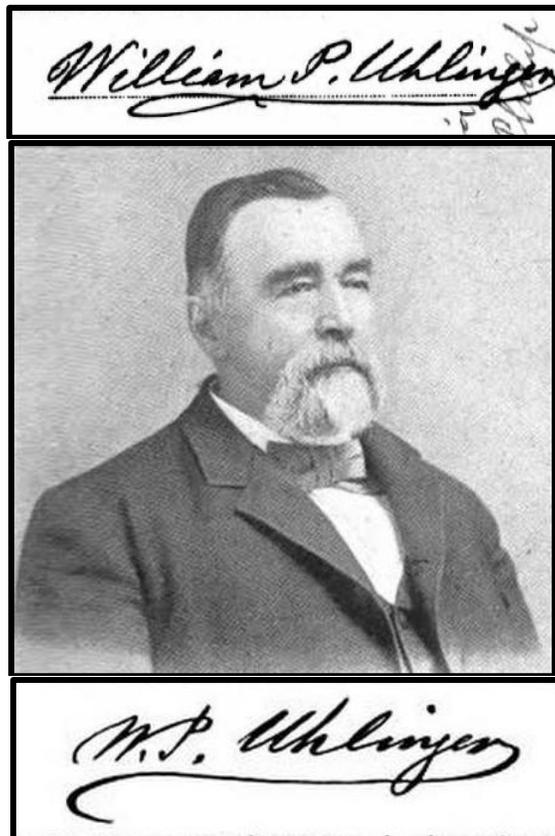
Detail of "Plate 304: Columbia Works, W.P. Uhlinger"

Source: 1866-1867: Hexamer General Surveys, Volume 4, Plates 261-356.

Criterion A

William P. Uhlinger, Inventor, Machinist, & Manufacturer (Building 1)

A native of Switzerland, William P. Uhlinger (1823–1898), an inventor, machinist, and industrialist, is a significant person of the past, being the first manufacturer of Jacquard loom in the United States. The invention of the Jacquard forever changed the production of textiles worldwide. Thus, Uhlinger’s choice to manufacture the Jacquard Loom and Machine in Philadelphia represents the introduction of these epic inventions as an American-made product, increasing accessibility to this equipment at a time when the city was at the very center of the American and international textile industry. Along with the Jacquard Loom and Machine, the following products were also manufactured in Building 1—ribbon, suspender and tape looms; carpet and coverlid looms; spooling and warping machines for silk, wool and cotton; and machinery for dress trimmings.¹



Top: Signature of William P. Uhlinger.

Source: Ancestry.com Center

Bottom: Photograph of William P. Uhlinger accompanied by his signature. Source: "W.P. Uhlinger Dead," *Fibre and Fabric* 27 (1898): 133.

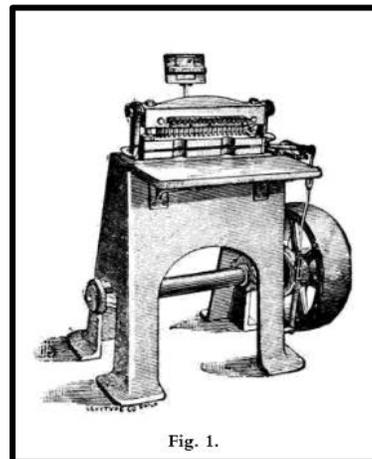
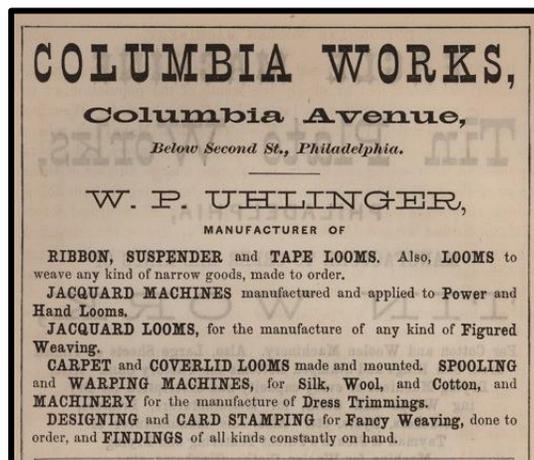
¹ "W.P. Uhlinger Dead," *Fibre and Fabric: A Record of the American Textile Industries in the Cotton and Woolen Trade* 27 (7 May 1898): 133.

Aside from being one of the oldest extant factory buildings in Kensington and the perhaps oldest known factory related to the manufacture of textile machinery in Kensington, Building 1 also represents Uhlinger's success as one of the most important manufacturers of American textile machinery in Philadelphia history, an enterprise that he conducted in this building from 1866–67 to 1874.

Historic Context

Officially recorded in a deed dated December 4, 1866, Abraham Coates, a tanner, and his wife Anna conveyed the subject property to William Philip Uhlinger (1823–1898), an inventor, machinist, and “the pioneer jacquard machine and ribbon loom manufacturer of this country.”² In a featured section on the evolution of Uhlinger's company, *Philadelphia and Popular Philadelphians* describe the importance of the Jacquard Loom and Machine, amplifying the importance of not only the inventor, but the significance of the machinery being made in the United States and, specifically, in Philadelphia, as one of the great textile centers of the world:

To give such of our readers as many may not be familiar with the art of weaving, an intelligent idea of immense value of the Jacquard machine, it is but proper to state here that every piece of figured goods, no matter where and how made, is woven by the aid of a Jacquard machine, without which all fabrics would have to be confined to plain weaves, such as plaids, checks, stripes, etc., etc. Previous to the invention of this machine the work was done by a number of boys, who each pulled a series of cords according to a set pattern. This of course was so laborious and costly, that it is very easy to perceive at once what an indispensable thing a Jacquard machine is at the present day, enabling us to enjoy the finest designed goods and elegant color effects at a cost which would not have been dreamed of one hundred years ago.³

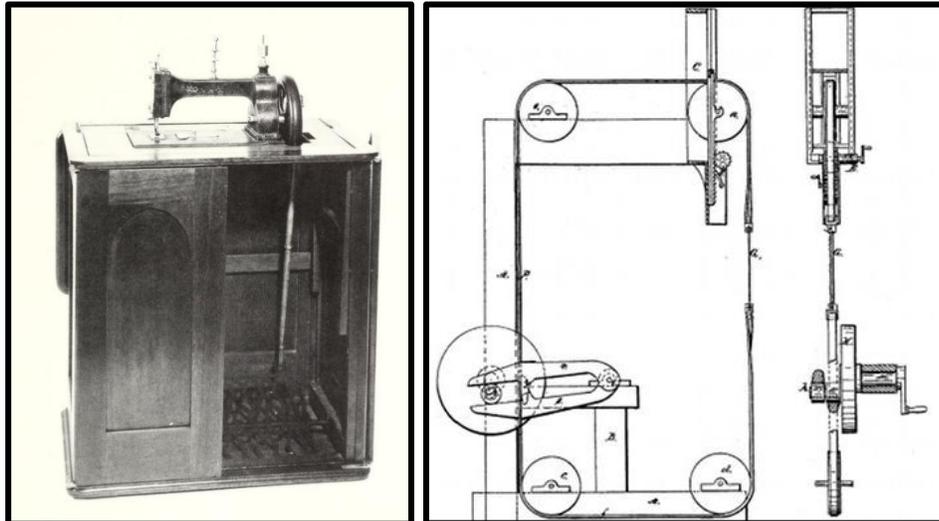


An illustration of textile machinery based on Uhlinger's patent.
Source: E.A. Posselt, *The Jacquard Machine Analyzed and Explained*
(Philadelphia, 1888), 11.

² Ancestry.com. *U.S., Find A Grave Index, 1600s–Current* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2012.

³ *Philadelphia and Popular Philadelphians* (Philadelphia: The North American, 1891), 108.

Educated in Schaffhausen, Switzerland, Uhlinger's primary claim to fame was likely related to the work of his father, "who was a jacquard machine manufacturer and had known and worked with J.M. Jacquard, the original inventor of the celebrated machine which now bears his name."⁴ After leaving home in the 1840s, Uhlinger gained experience with the manufacture of ribbon looms at Basel, Switzerland and the manufacture of "jacquard machines" in Lyons, France.



Left: "Quaker City Sewing Machine," the product of a company that purchased William P. Uhlinger's "mechanical patent for a double chain stitch machine on August 17, 1858 (antedated May 8), and a patent for the casing on December 28, 1858." Source: Grace Rogers Cooper, *The Sewing Machine: Its Invention and Development* (Washington, D.C.: Smithsonian Institution Press, 1968), 108. **Right:** William P. Uhlinger's U.S. Patent No. 91,185: Improvement in Sewing-Machine, Granted 8 June 1869. Source: <http://www.datamp.org/patents/search/advance.php?pn=91185&id=6789&set=1>.

The Swiss immigrant stood about five foot, five-and-a-half inches with jet black hair and a beard, when he arrived in Philadelphia on June 22, 1848 at approximately twenty-five years old.⁵ He soon secured an important position as the head machinist for the William H. Horstmann Company in Philadelphia. In this position he "constructed a number of fringe and trimming looms and the jacquard machines necessary for that business."⁶ After roughly two years with Horstmann, Uhlinger started his own firm in Kensington:

In the latter part of 1850 he launched out into business for himself in a very modest little factory on Master Street between Fifth and Sixth Streets, in the city of Philadelphia, in a room about 25 x 60 feet, all on one floor, with a blacksmith forge in the cellar. His force at the start consisted of three men, and a two horse power engine was sufficient to operate the entire establishment, which was composed chiefly of an engine lathe, a drill press and a circular saw. In his

⁴ "W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133.

⁵ Filby, P. William, ed. *Passenger and Immigration Lists Index, 1500s–1900s*. Farmington Hills, MI, USA: Gale Research, 2012; and Ancestry.com. *U.S. Passport Applications, 1795–1925* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2007.

⁶ W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133.

modest establishment was made the first iron jacquard machine ever built in this country, as the old Swiss and French machines which had been in use previous to the time were made entirely of wood, even using wooden hooks, etc. Here also were constructed the first fringe and ribbon looms made in the country, some of which have not yet outlived their usefulness, but are in active operation today [in 1898].⁷

While Uhlinger was the first manufacturer of the Jacquard Loom and Machine, earlier American machinists made and sold less advanced textile machinery earlier in our industrial history. Alfred Jenks founded the first manufactory of textile machinery in the Commonwealth of Pennsylvania about 1810 at Holmesburg, Philadelphia County. Other early manufacturers of textile machinery were J&T Wood, Hindle & Sons, and James Smith & Company.⁸ Of these and other firms in Philadelphia, Uhlinger's was the first to manufacture fringe and trimming looms, jacquard machines, and knitting machinery.⁹ *Fibre and Fabric: A Record of the American Textile Industries—In The Cotton and Woolen Trade* would later summarize his various manufactories:

In 1853, the quarters then occupied becoming too small, the place was shifted to Cadwalader Street above Oxford, the force at that time comparing from 20 to 25 men. It was here that Mr. Uhlinger added knitting machines to his output, and of these he constructed a very large number. In 1856 the building on Cadwalader Street was struck with a windstorm and the plant almost entirely destroyed. Nothing daunted, however, Mr. Uhlinger transferred his business to 1619–21 North Second Street and made a new start. During the war he made a large number of brass cannons for the government, also manufactured quantities of pistols, drums and war supplies of various kinds, as well as carrying on his regular line of business.¹⁰

In the 1857 directory *Philadelphia and Its Manufacturers*, there were three manufacturers of Sewing Machines in Philadelphia: Parham's Manufactory on George Street below Tenth; George S. Sloat & Co. at 1229 Beach Street; and Uhlinger's.¹¹ After purchasing the subject property in 1866, "a larger shop was built on Columbia Avenue, near Mascher Street," where he produced textile machinery, including fringe and trimming looms, jacquard machines, and knitting machinery.¹²

⁷ W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133; "Obituary, W.P. Uhlinger," *The Iron Age* 61 (12 May 1898): 28.

⁸ Joseph Wickham Roe, *English and American Tool Builders* (New Haven: Yale University Press, 1916), 246–47.

⁹ W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133.

¹⁰ W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133.

¹¹ Edwin T. Freedley, *Philadelphia and Its Manufacturers* (Philadelphia: E. Young, 1858), 496.

¹² W.P. Uhlinger Dead," *Fibre and Fabric* (1898): 133.

School Desks & Power Looms manufactured at present. — Buildings erected in 1867. — Cornices of Brick & Wood. — No Ladders. — Lightning Rods on Smoke Stack & on Main Building. — Steamboilers enclosed by Brickwalls in proper distance of Woodwork. — Boiler Chimney of Brick plastered inside. — Rooms warmed by Cast Iron Steampipes, resting on Iron. — No Store in the Premises. — Glue warmed by Steam. — Rooms lighted by Gas. — Wood Sharings made in 2^d & 3^d story of Main Building. — Chiefly Hard Wood worked. — Steamboilers supplied by City Water Works. — Large Waterwell under Steamboiler Room in connection with a small forcing Pump (A) in Boiler Room & with a Water Tank (B) in 3^d story of Mainbuilding supplying 1 inch Hydrants in every story with Water. — 60 Firebuckets distributed over the Premises. — Water Cask in every floor of Mainbuilding. — Night & Sunday Watchman at the Premises. — No Watchclock. — No Base. — Fire Plug on Street in front of the Mainbuilding. — City Steam Fire Engine within ¼ square. — No Benzine kept. — Keep one Barrel of Varnish & Turpentine outside of the Mainbuilding in Shed (C). — Small Lumber Drying Room above the Steamboiler Room. — Iron lined Sharings Box (E) in 1st & 3^d floor of Mainbuilding with Iron doors leading to the underground Sharings Box. — Wood Sharings & Coal used for Steamboilers. —

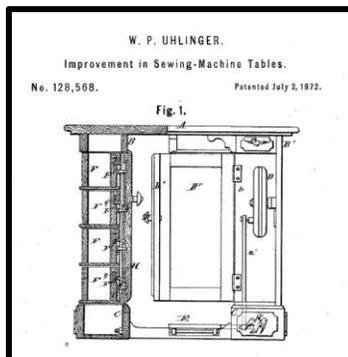
Detail of "Plate 304: Columbia Works," c. 1867, Hexamer General Surveys, Volume 4.

From 1867 until 1874, the Columbia Works served as one of the first textile machinery manufactures in America.

Uhlinger also partnered with George W. Harris, establishing a company that manufactured and sold "school furniture and desks. Like previous enterprises of the Swiss immigrant, the company was to be called W.P. Uhlinger.¹³ Along with textile machinery, this new product was also manufactured at the Columbia Works. Between 1867 and 1874, there were roughly 120 employees that occupied the subject property.¹⁴

During this time Uhlinger filed a patent application for "School Desk and Seat," which resulted in U.S. Patent No. 3,297, issued on December 22, 1868. The product was described as follows:

This desk is attached to the back of the seat, and the desktop does not lift up. There is ironwork on the side of the desk, as well as a shelf underneath the desk for storage. There is also a place for an inkwell. The backrest and seat are flat and have no curves. The metal work is green with metal hinges.¹⁵



W.P. Uhlinger. "U.S. Patent No. 128,568: Improvement in Sewing-Machine Tables," issued 1872.

Source: <https://patents.google.com/patent/US128568A/en>.

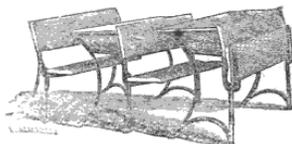
Accessed on 18 November 2018

¹³ "Special Partnership," *Legal Intelligencer*. 19 February 1869, 63.

¹⁴ "Obituary: W.P. Uhlinger.," *Textile Colorist: A Monthly Journal Devoted to Practical Dyeing, Bleaching, Printing and Finishing, Dyes, Dyestuffs and Chemicals as Applied to Dyeing* 20 (1898): 147.

¹⁵ William P. Uhlinger's 1868 School Desk and Seat Patent Model, National Museum of American History, Smithsonian, Catalog No. 65.0364, https://www.si.edu/object/nmah_679716.

SCHOOL FURNITURE.



W. P. UHLINGER,

Patentee and Manufacturer of School Furniture,

Offers his latest Improved School-desk at reduced prices. Having twenty years' experience in business, and unequalled facilities for manufacturing, he can defy competition. This furniture is recommended as the best now in use; and will be warranted to last twenty years with proper care. It is built of well-seasoned lumber, with cast-iron frames, sufficiently stiff and strong, requiring no braces like other desks of flimsy structure, made for show rather than service. No slat seats to give children opportunity to break their fingers, pencils, or pens through the openings; no gimcracks of any kind to mar the beauty of the design, nor unnecessary ornaments to catch the dust. For comfort, the new desk is all that can be desired. It has a rounded back to suit the curve of the spine, and a noiseless hinged seat, hollowed out.

The desks are shipped in pieces to save freight, and experienced men sent to put up and finish them in the Schoolhouses, without charge for time, and no trouble to the purchaser. In filling orders from distant parts, full directions are furnished for putting together and setting the desks.

TEACHERS' DESKS and Book Cases, Chairs, Settees, School Umbrella and Bible Stands, School Clocks, and music-boards.

SCHOOL SLATES and Slate Blackboards of all sizes constantly on hand.

REVERSIBLE AND SEMICIRCULAR SETTEES for Sunday-Schools, Pew ends of various designs, Rustic Settees for Parks and country places, furnished to order.

Illustrated Circulars and Price Lists sent by addressing W. P. UHLINGER, 921 Chestnut Street, or Columbia Works, Columbia Avenue, below Second Street, Philadelphia, Pa.

Sadliers' Catholic Directory, Almanac and Ordo (D. & J. Sadlier & Company, 1872), 22.

REVERSIBLE SETTEE,
Specially adapted for
Churches,
Lecture and
Sunday-school Rooms.
Address,
W. P. UHLINGER,
MANUFACTURER OF
PATENT SCHOOL DESKS, &c.,
COLUMBIA WORKS,
COLUMBIA AVENUE, BELOW SECOND STREET, PHILADELPHIA.

To reduce cost of freight these Settees are shipped in sections to any part of the country.

Advertisement for W.P. Uhlinger's furniture, published in The Presbyterian Monthly in 1869.

Source: *The Presbyterian Monthly* (January-December 1869), 24.



William P. Uhlinger's 1868 School Desk and Seat Patent Model, which was the model used for U.S. Patent No. 3,297, issued on 22 December 1868.

Source: National Museum of American History, Smithsonian,
https://www.si.edu/object/nmah_679716.

“Owing to unfortunate business ventures in 1874 he failed but started up again in a very small way in 1875 in the old Disston saw works, on Canal Street above Front.”¹⁶ Uhlinger would go on to reinvent himself, which his biographers described in his obituary:

From this time on until his retirement from active business he enjoyed unusual prosperity, building up his works from almost nothing, until he had a plant with a capacity 200 employees. In 1876 he invented and put on the market the first of his direct acting engine driven hydro extractors, and the success of this machine was at once so apparent that he was awarded a medal and diploma by the Centennial Exposition held in Philadelphia in that year. These machines are now widely known and extensively used, not only in this country, but also abroad. His improved jacquard machines, manufactured at that time, also contributed largely to his success, and even today are the standard machines of their kind in this country.

Uhlinger’s Jacquard machines were made for many years after his own retirement in 1889, and the successor firm was known as Schaum & Uhlinger, as “successors to W.P. Uhlinger.”¹⁷

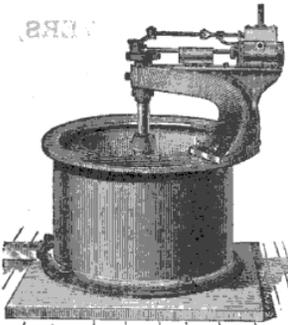
¹⁶ “Obituary: W.P. Uhlinger,” *Textile Colorist* (1898): 147.

¹⁷ “Obituary: W.P. Uhlinger,” *Textile Colorist* (1898): 147; and Schaum & Uhlinger, successors to W.P. Uhlinger, Glenwood Ave. and Second St., Philadelphia, U.S.A. [graphic]: Jacquard Machines, for every variety of fancy weaving. World’s fair, Machinery Hall (1893), Column O, 49. Source: Library Company of Philadelphia.

Nomination to the Philadelphia Register of Historic Places, Fall 2018 – Page 18
 155-59 Cecil B. Moore Avenue, Kensington, Philadelphia, Pennsylvania

NEW PATENT
Centrifugal Hydro-Extractor,

With Steam Engine attached and no Belts used.



For drying Woollen and Cotton Fabrics, Silks, Laundry Work, Hair, Barks, Brewers' Grains, &c., &c.

A Medal and special Diploma were awarded by the Centennial Commission to this Machine for its efficiency, simplicity, economy of steam and cheapness.

W. P. UHLINGER,
 22 & 24 Canal Street,
 PHILADELPHIA, PA.

Steam engines applied to old Machines at small cost.

JACQUARD MACHINES

AND THEIR APPURTENANCES FOR

FANCY WEAVING,

ON THE MOST APPROVED PRINCIPLES,

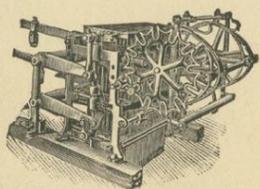
Manufactured and applied to Power and Hand Looms by

W. P. UHLINGER,
 22 and 24 East Canal Street, Philadelphia, Pa.

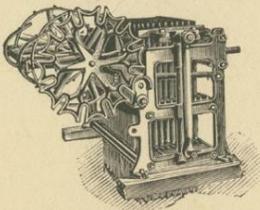
Advertisement for Uhlinger's products in the Bulletin of the National Association of Wool Manufacturers. Source: National Association of Wool Manufacturers, *Bulletin* (1877), 59.

Jacquard Machines

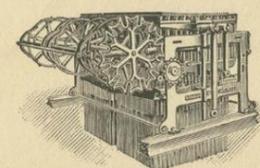
FOR EVERY VARIETY OF FANCY WEAVING.



ROTARY CYLINDER 624h.
RISE AND FALL JACQUARD.



ROTARY CYLINDER 624h.
SINGLE LIFT JACQUARD.



ROTARY CYLINDER 1248h.
DOUBLE LIFT JACQUARD.

SCHAUM & UHLINGER,

Successors to W. P. UHLINGER,

Glenwood Ave. and Second St., Philadelphia, U. S. A.

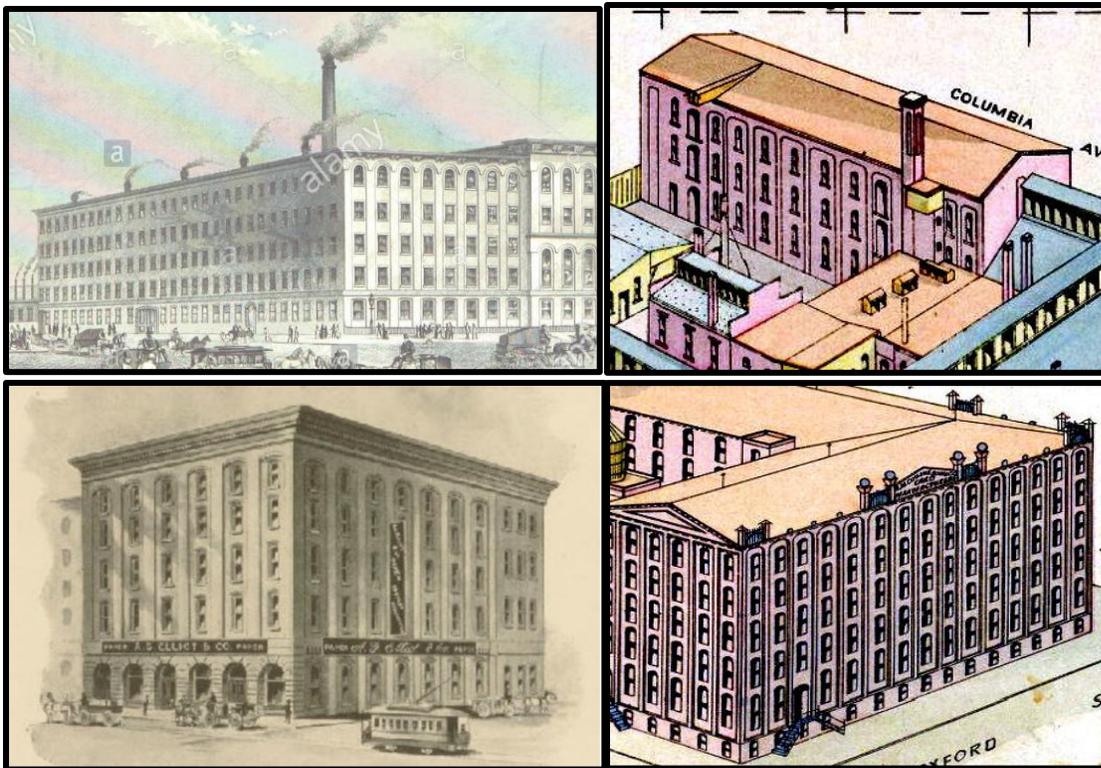
WORLD'S FAIR, MACHINERY HALL, COLUMN O 49.

Advertisement for Schaum & Uhlinger, successors to W.P. Uhlinger, Glenwood Ave. and Second St., Philadelphia, U.S.A. [graphic]: Jacquard Machines, for every variety of fancy weaving. World's fair, Machinery Hall (1893), Column O, 49. Source: Library Company of Philadelphia.

Criteria C and J

Columbia Works (Building 1) and 19th century industrial development in Kensington

Built in 1866–67 as the Columbia Works, Building 1 is a three-story manufactory of load bearing, red brick masonry construction that is defined by an ordinary symmetrical fenestration delineated into bays by brick pilasters that extend from the first floor to the third where they unite to form a brick arcade at each elevation. The pilasters and the brick arcades define the south, east, and north elevations, giving the building a distinctive feeling of strength and architectural identity. Though simple in architectural style and form, Building 1 is an important surviving specimen of the employment of both brick pilasters and arcades, which were features that once characterized the industrial built environment of Philadelphia and other industrial centers in the United States.



Top left: Detail of the Chickering & Sons Piano Forte Works in Boston. Note that the building features brick pilasters that divide the fenestration into distinctive bays that unite at the top floor to form an arcade at the primary elevation. Source: Almay. **Top right:** Detail of Plate 891 Eagle Bolt Works, Hexamer General Surveys, Volume 10. **Bottom left:** A. G. Elliot & Co., Paper Manufacturers and Dealers (demolished), 30 S. Sixth Street, Philadelphia. This building features the same type of pilasters that unite at the top floor to form arcades at both the primary and side elevations, separating the fenestration into distinctive bays. **Bottom right:** A.M. Collins Manufacturing Company (demolished) at Oxford and American Streets, the Oxford Street (south) elevation featuring brick pilasters that unite that the top floor to form arcades much like the subject property. Source: Hexamer General Surveys, Volume 21, Plate 1956 (1885).

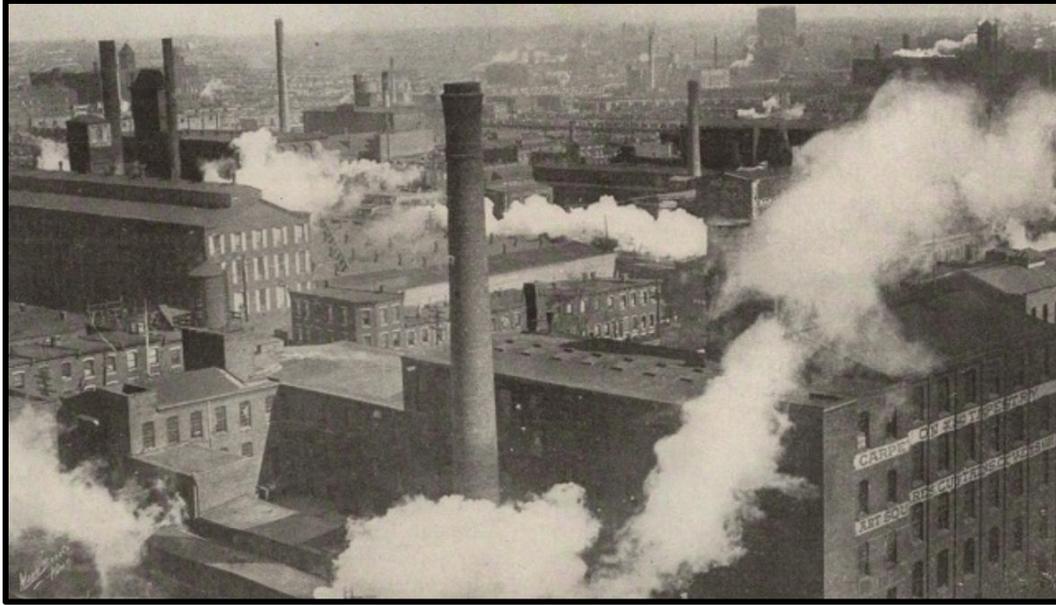


Left: The Howard Foundry & Machine Works (demolished), established 1839, 1759 Ludlow Street, Philadelphia. This building too featured a fenestration divided into distinctive bays by brick pilasters that were united at the top of the third floor to form an arcade much like the subject property. Source: George Washington Engelhardt, *Philadelphia Pennsylvania, The Book of Its Bourse & Co-operating Bodies* (1898), 362. **Center:** A. Falkenau Machine Works (demolished or altered beyond recognition), 109–115 N. 22nd Street, Philadelphia. The primary elevation of this building featured a fenestration that was divided into distinctive bays by brick pilasters that united at the top of the third floor to form an arcade much like the subject property. Source: Engelhardt, *The Book of Its Bourse* (1898), 367. **Right:** Ivins, Dietz, & Metzger Co., Carpet Manufacturers, Lehigh Avenue, Kensington, Philadelphia.

This detail of the industrial complex shows the primary and side elevations of two components that feature fenestrations that were divided into distinctive bays by brick pilasters that terminated to the cornice. This example of the employment of the brick pilaster in factory facades was the most common, while the use of the arcade was far more unusual. Source: Moses King, *Philadelphia and Notable Philadelphians* (1901), 44.

In most cases the surviving factory buildings that represent designs defined by bricks pilasters feature vertical piers that span from the first to the top floor terminating in a corbeled cornice. This treatment is shown in the above-referenced example of Ivins, Dietz, & Metzger Co. on Lehigh Avenue. While the use of the arcade in Building 1 of the subject property is less commonly seen in surviving industrial buildings, the examples shown above illustrate that this was an established architectural treatment. As a result, Building 1 reflects the built environment of Philadelphia in an era when industrial architecture was characterized by the use of pilasters and arcades that comprised a distinctive architectural treatment for brick factory buildings.

Within the larger context of Philadelphia as the former “Workshop of the World,” Kensington was one of the primary neighborhoods of working class Philadelphia, home to both native and immigrant laborers and workers residing in close proximity to their work sites. The industrial history of Kensington no doubt has its roots in some eighteenth-century enterprises, but its primary period of development was in the nineteenth century. The first of Kensington’s industries were chemical works, glass factories, machine shops, potteries, and wagon manufactories. While much of the city’s nearby industrial development began closer to water, near the Delaware River, the Canal, and Pegg’s Run, Kensington hosted some of these early enterprises west of North Front Street in the area north of Girard Avenue and south of Lehigh. However, no industry would come to define the industrial history of Kensington like that of textiles.



The Industrial District of Kensington, c. 1900.

Source: Kensington." <http://www.workshopoftheworld.com/kensington/kensington.html>.

Accessed on 17 December 2011.

While the manufacture of textiles was a known and viable industry dating back to the colonial period, Philadelphia's greatest period of development and productivity as a textile powerhouse took place in the nineteenth century, when Kensington continued to evolve as one of the city's most important industrial neighborhoods. Located on the cusp of Northern Liberties and Kensington, "the first mill of any considerable size to engage in textile manufacture" was the Globe Mill, which was established in 1804 by Seth Craige at Germantown and West Girard Avenues.¹⁸ By the late 1820s, there were approximately 104 textile firms in Philadelphia, employing about 9,500 people.¹⁹ The population of Kensington at that time was approximately 7,259, a population statistic that would double to approximately 16,000 in 1830.²⁰ This population boom is invariably linked to the advent of Kensington's "specialized cottage industry" for the production of textiles, a system where each part or step of the manufacturing process was completed by "independent, partial-process" component entities and firms.²¹ This great period of industrial progress led to the establishment of Philadelphia's first hosiery factory by Martin Landenberg in 1843. The first patents for knitting machinery in the United States followed in 1850, issued in Philadelphia.²² Incidentally, it was Philadelphia's position as a manufacturer of textile machinery that led to the construction of Building 1 of the subject property in 1867.

¹⁸ Ellis Paxson Oberholtzer, *Philadelphia: A History of the City and Its People* (Philadelphia: S.J. Clarke Publishing Company, 1912) 1; 441.

¹⁹ Russell F. Weigley, ed. *Philadelphia, A 300-Year History* (New York: W.W. Norton & Company, 1982), 275, 488.

²⁰ *Kensington: A City within a City* (Philadelphia: Keighton Printing House, 1891), ix.

²¹ Philip B. Scranton, *The Philadelphia System of Textile Manufacture, 1884–1984* (Philadelphia: Philadelphia College of Textiles & Science, 1984), 28.

²² J. Thomas Scharf and Thompson Westcott, *History of Philadelphia: 1609–1884* (Philadelphia: L.H. Everts and Co., 1884), 2306–07.

As part of the National Register of Historic Places Multiple Property Documentation Form: *Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia*, completed in 2012, Logan I. Ferguson, of Powers & Company, Inc., summarized the city's position as a textile manufacturing center:

By the mid-19th century, the textile industry in greater Philadelphia achieved an unprecedented level of prominence and its title as the "world largest and most diversified textile center."²³

In 1850, Kensington was home to approximately 126 textile firms, which represented roughly thirty-nine percent of the larger \$65 million industry in Philadelphia, then employing a reported 12,369 people.²⁴ Five years later in 1855, "the value of the textile fabric in Philadelphia was more than all of the city and state of New York and more fabric was produced than in any other city in the United States." Textile production had also become one of the city's top five industries, valued at roughly \$23.5 million, with steel production trailing behind at approximately \$14.7 million. Another comparison was the manufacture of clothing and apparel, valued at \$21.4 million, while wood and publishing and bookbinding were valued at \$6.1 million and \$6.4 million respectively.²⁵ It was during this period, between 1850 and 1855, specifically in October 1852, that William P. Uhlinger and John Mayer formed the co-partnership of Uhlinger & Mayer for the manufacture of the Jacquard Loom and the Swivel Loom at 249 Master Street.²⁶ Apparently this partnership was short-lived, as the William P. Uhlinger & Co. announced itself as manufacturers of "Circular Knitting Machines" in October 1854, allowing inspection of the machinery in operation at "Germantown Road and Oxford St."²⁷

According to the 1860 Federal Census, the value of Philadelphia's "textile manufacture had grown to \$135 million with 464 firms and 18,521 employees."²⁸ This also reflects the largest increase in Philadelphia's population, growing from 121,376 in 1850 to 565,529 in 1860, representing a 365 percent boom. In the decades to follow between 1860 and 1920, the population continued to grow with a rate that fluctuated between seventeen to twenty-five percent.

In the book *Workshop of the World*, the neighborhood and its industrial establishments are described in detail:

The textile trades came to dominate Kensington by the mid-nineteenth century. The genesis of the ingrain carpet industry was centered around Oxford and Howard Streets in West Kensington, where some mills still stand. Other early carpet mills in this area are now gone, but they included James Gay's Park Carpet

²³ Logan I. Ferguson. National Register of Historic Places Multiple Property Documentation Form: Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia. (Philadelphia: Powers & Company, Inc., 2012).

²⁴ Scranton, *Proprietary Capitalism*, 182.

²⁵ Philadelphia Board of Trade, 15–20.

²⁶ "Co-Partnership." *Public Ledger*, 1 October 1852, 4.

²⁷ "To The Manufacturers of Hosiery," *Public Ledger*, 20 October 1854, 1.

²⁸ *Philadelphia Board of Trade*, 15–20.

Mill, the Dornan Brothers' Monitor Carpet Mill, William J. Hogg's Oxford Carpet Mill, the Stinson Brothers' Columbia Carpet Mill, and the carpet mills of Horner Brothers, and Ivins, Dietz, and Magee (later of Hardwick and Magee). The earliest carpet factories operated mainly through "outwork" the owners providing yarns to workers who hand loomed the goods in their homes. As these small textile concerns grew, their owners built small factories in East Kensington. Associated textile trades, such as dye works, yarn factories, woolen and worsted mills, cotton mills, and even textile machinery factories were often located in the same building or complex. After the 1860s, Kensington was filled with two story brick rowhouses and steam powered mills. In 1883, Lorin Blodget described the northward expansion of the area as having had rapid and successful development from vacant fields a few years ago, to a densely built up city, all of which is recent, and most of it within ten or twelve years.²⁹

The National Register of Historic Places Multiple Property Documentation Form: *Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia* provided an inventory of forty-four of the most notable surviving properties as of 2012. Among the properties listed, only one building pre-dated the American Civil War, which was the Hosiery Knitters Union Club at 2530–2532 N. 4th Street, which was built circa 1825 as a social club. The inventory listed two buildings from the 1860s, which appear to be the two oldest manufacturing buildings related to the textile industry that survive in Kensington—Building 1 of Columbia Works and the Keystone Spinning/Weaving Mills at 1627 N. 2nd Street (built in 1861 by Thomas Dolan for the manufacture of textiles).

Building 1 is a significant building related to the history of the textile industry and the early production of textile machinery in Kensington from 1866–67 to 1874, exemplifying the economic and historical heritage of the community. By 1850, Philadelphia was the world's leading manufacturer of textiles with a total product value of \$65 million, being created by 326 textile firms and a total of 12,369 employees. Kensington was home to 126 of these firms, which accounted for 39% of the local industry.³⁰ That same year "the first patents for knitting machines in the United States were issued in Philadelphia."³¹ It was during this period that William P. Uhlinger began manufacturing textile machinery in Kensington, establishing a co-partnership in 1852 and his own company in 1854. According to the 1860 Federal Census, the value of Philadelphia's "textile manufacture had grown to \$135 million with 464 firms and 18,521 employees."³² After the close of the American Civil War, Kensington continued to develop and grow as a center of the textile industry. In 1866–67, Uhlinger constructed the subject property, which he named the "Columbia Works" and it was here he manufactured textile machinery, including knitting machines that were related to and/or in competition with the first

²⁹ *Workshop of the World: A Selective Guide to the Industrial Archeology of Philadelphia* (Wallingford, PA: Oliver Evans Press, 1990), 233.

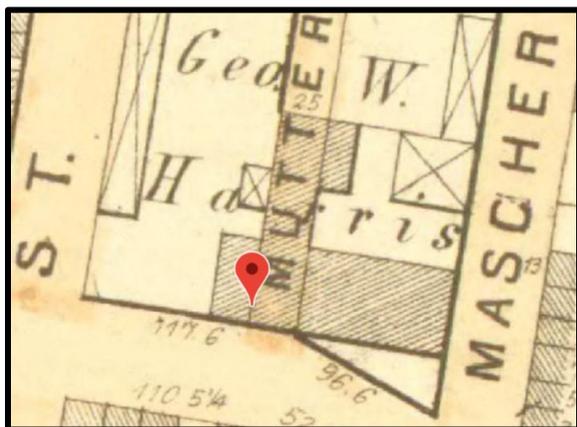
³⁰ Logan I. Ferguson. National Register of Historic Places Multiple Property Documentation Form: Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia. (Philadelphia: Powers & Company, Inc., 2012).

³¹ Philip Scranton, *Proprietary Capitalism: The Textile Manufacture at Philadelphia, 1800–1885* (New York: Cambridge University Press, 1983), 182.

³² *Philadelphia Board of Trade*, 15–20.

manufacturers of such machinery to be patented in the United States seventeen years earlier. Uhlinger operated Columbia Works in the subject building until 1874.

In 2012, the National Register of Historic Places Multiple Property Documentation Form: *Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia* provided an inventory of forty-four of the most notable surviving properties of this type, in which the subject property proves to be the oldest known building related to the production of textile machinery and the third oldest related to the larger textile industry in Kensington. Additionally, the subject property appears to be the only building in Kensington that relates to the mid-19th century period immediately following the issuance of the first patents for knitting machines in the United States, which occurred in Philadelphia.



Left: Hopkins Philadelphia Atlas, 1875. Source: Greater Philadelphia GeoHistory Network.

Right: Looking west at the subject property with Buildings 1, 2, 3, 4, and 5 labeled.

Source: Pictometry, Atlas, City of Philadelphia, 2018.

While William Uhlinger had lost his business by 1874, this did not terminate Building 1's use as a manufactory related to the textile industry. From at least 1875 until 1891, John Scanlin & Son lease space in Building 1 for the production of woven cotton and woolen goods. The company employed 50 hands, operating 60 power looms. By 1891 Scanlin's was replaced by Vaughn & Bower, manufacturers of hosiery.³³

³³ Eagle Bolt Works, Hexamer General Surveys, Volume 10, plate 891, 7 June 1875.

The Eagle Bolt Works, 1875-1891 (Buildings 1, 2, 3, and 4)

Established by Keim & Welsh in 1875, the subject property served as the Eagle Bolt Works, manufacturing bolts, nuts and other allied products from 1875 through 1891. It appears that upon purchasing the subject property, Keim & Welsh constructed three production sheds—Buildings 2, 3, and 4. Almost immediately the firm was reconfigured from Keim & Welsh to Welsh & Lea. The company became one of the most important and productive manufacturers of bolts and nuts used for vehicles in the United States.

The company's eminence was shown through their exhibit in the Centennial Exhibition in 1876 at Philadelphia, where they won the "Only Medal" for their product type. Becoming the Coleman Eagle Bolt Works by 1878, the firm, selling "very handsome plain bolts, all sizes, competed with other hardware giants like Hoopes and Townsend of Philadelphia."³⁴ In 1878, the company exhibited their products at a show in Paris, where they won another medal for their product type. Employing between 175 and 225 people during their tenure at the subject property, the Eagle Bolt Works was one of the largest businesses of its kind in Philadelphia, and represents the cultural, economic and social history of Kensington and the larger Workshop of the World that defines so much of the city's heritage in the nineteenth century.

Despite owning the entire complex the primary components of the Eagle Bolt Works were built new for the manufacture of these products—Buildings 2, 3, and 4. These new buildings were built as production sheds and represent a building type well-known to the industrial complexes of Philadelphia. Betsy Hunter Bradley discusses "The Production Shed" as a building type in her book, *The Works*:

Production sheds were built of various materials, though structures with an interior frame of wood, iron, or steel and exterior walls of brick were most common. In these structures, the strength and stability of the loadbearing walls were evident in pilaster wall construction and relatively small window openings.³⁵

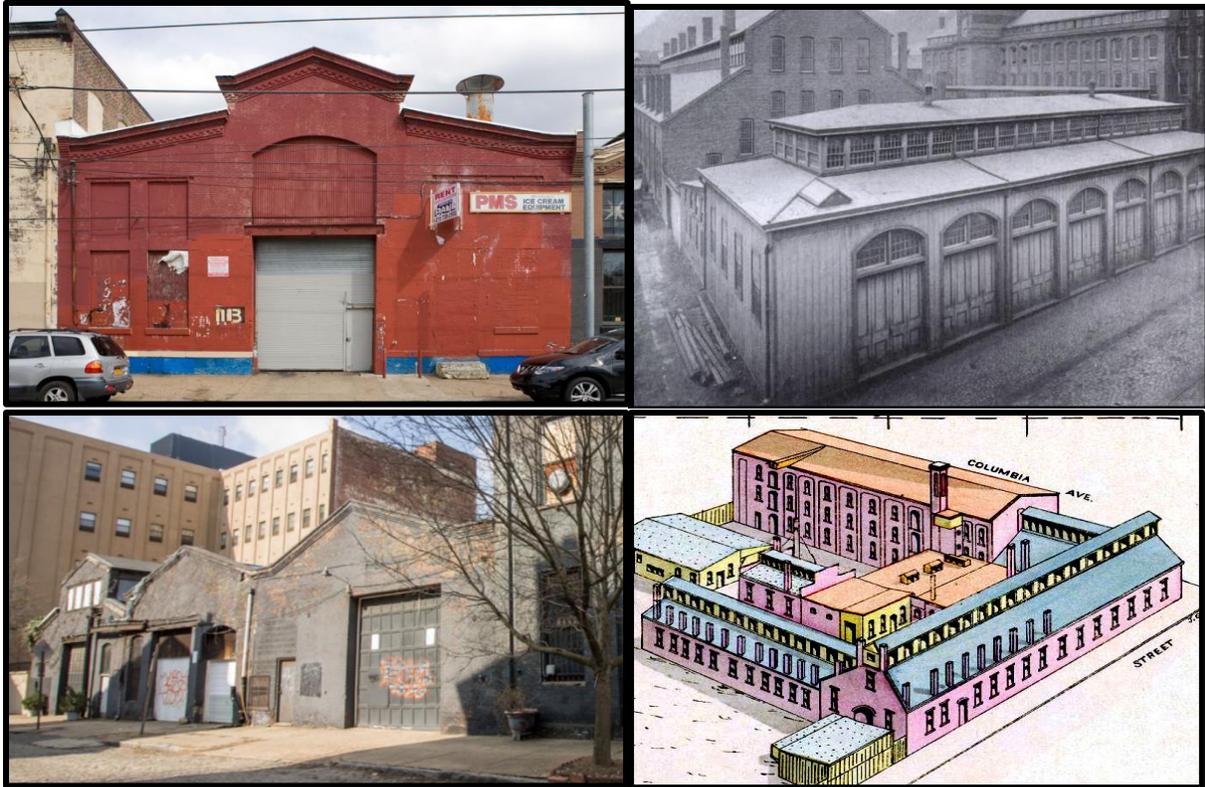
On January 3, 1875, George W. Harris, the former partner of William P. Uhlinger, and his wife, Ellen, officially conveyed the subject property, formerly known as the Columbia Works, to George de Benneville Keim and Frank H. Welsh for \$29,000.³⁶ It appears that between January 3 and June 7, 1875 Keim & Welsh established the Eagle Bolt Works after purchasing the property, which included the original building of Columbia Works and three one-story, brick production sheds: a Machine Shop; a Hammer Shop, and an Oliver Shop, that were built circa 1875.³⁷ The Eagle Bolt Works manufactured bolts and nuts, employing 225 hands.

³⁴ Samuel J. Burr and S. De Vere Burr. *Memorial of the International Exhibition: Being a Description Written Up by Buildings by Nationalities, by Classes* (Philadelphia: L. Stebbins, 1877), 498.

³⁵ Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (New York: Oxford University Press, 1999), 39.

³⁶ Deed: George W. Harris to George de Benneville Keim and Frank H. Welsh. 1875. Philadelphia Deed Book F.T.W., No. 179, 288.

³⁷ Eagle Bolt Works, Hexamer General Surveys, Volume 10, plate 891, 7 June 1875.



Top left: a production shed of the Morse Elevator Works at 1113 Frankford Avenue, a low-slung, single story building with a clerestory. Its central entrance, low-slung appearance, and the clerestory are all features that defined the production shed in the nineteenth and early twentieth century built environment of Philadelphia. Source: Oscar Beisert, 2016. **Top right:** “Roger Locomotive and Machine Works in Patterson, New Jersey,” is Figure 8.8 in Betsy Hunter Bradley’s *The Works*. The building too features “a monitor roof and transom lights above sets of wide doors that could be open for light.” The monitor is typical of the production sheds, also known as machine shops, that characterized Buildings 2, 3, and 4, and the industrial complexes of Philadelphia. **Bottom left:** production sheds of the Creswell Iron Works at 23rd and Cherry Streets (demolished), the building on the far left being similar in form to Buildings 2, 3, and 4 of the subject property. The site included other building types, much like the subject property. Source: Hidden City Philadelphia, 2018. **Bottom right:** Buildings 2, 3, and 4 of the subject property, detail of “Plate 891: Eagle Bolt Works,” Hexamer General Surveys, Volume 10 (1875).

The first floor of the original Columbia Works buildings was used by Keim & Welsh, while the second and third floors were rented by John Scanlin & Son. The tenants manufactured cotton and woolen goods, employing fifty hands and sixty power looms for weaving. There was said to be no spinning on the premises.³⁸ Nearly a year later, on December 18, 1875, Keim, conveyed the subject property to George H. Lea, an engineer of Philadelphia for one dollar.³⁹

³⁸ Eagle Bolt Works, Hexamer General Surveys, Volume 10, plate 891, 7 June 1875.

³⁹ Deed: George de Benneville Keim and his wife Sarah to George H. Lea. 18 December 1875. Philadelphia Deed Book D.H.L., No. 13, 179.

While Keim may have remained involved with the Eagle Bolt Works, the company name changed from Keim & Welsh to Welsh & Lea. The new partnership showed bolts and nuts at the Centennial Exhibition in 1876 at Philadelphia.⁴⁰ Welsh & Lea won the “Only Medal,” in Philadelphia in 1876, for their product type, which included Iron Carriage Bolts. At some point between 1876 and 1878, the Eagle Bolt Works, owned by Welsh & Lea, became the Coleman Eagle Bolt Works, selling “very handsome plain bolts, all sizes.”⁴¹ The company was in competition with firms like Hoopes and Townsend of Philadelphia. The company also won the “Only Medal” at Paris in 1878, again for their quality product.



Advertisement for the “Coleman Eagle Bolt Works, Welsh & Lea,” after the Paris Exhibition in 1878, showing the three one-story, brick production sheds.

Source: Gettyimages.

The bolts and nuts made by the company were largely manufactured in the one-story, brick production sheds (Buildings 2,3, 4). The hammer shop features a clerestory, occupying 175 feet along Hancock Street. In addition, the Oliver Shop is where “an old type of smith’s hammer” was used, operated by a treadle, all of which was supplemented by various ancillary buildings and frame sheds. The company would continue at the subject site until 1891.

Buildings 1, 2, 3, and 4 are representative of the type of industrial complex that served the purposes of multiple industries and tenants, ultimately subsidizing the production and work of a primary tenant and/or property owner. From the time of its construction in 1866–67, the subject property served both a primary tenant/owner and various tenants, including the manufacture of products related to various industries once prominent in the Quaker City such as bolts and nuts; paper boxes and products, soap, textile machinery, woolen goods, etc. The amalgamation of these varied industrial uses exemplifies and is representative of the cultural, economic, political, social, and historical heritage of Kensington’s role in the larger “Workshop of the World.”

⁴⁰ *Official Catalogue: Complete in One Volume, I, Main Building, II. Department of Art, III. Department of Machinery, IV. Departments of Agriculture and Horticulture* (Philadelphia: Centennial Catalogue Company, 1876), 380.

⁴¹ Burr, *Memorial of the International Exhibition*, 498.

Charles & Margaret I. Illingsworth's Eagle Calf-Kid Works, 1891-1910/11 (Buildings 1, 2, 3, and 4)

From 1891 to 1910/11, the subject property was owned by Charles Illingsworth (1846–1919) and Margaret Ingersoll Whiteman (1849–1919). The Illingsworth family operated what was first known as the Eagle Calf-Kid Works and later the Eagle Glazed Kid Company at the subject property. Building 1 was used for the manufacture of glazed kid, a factory building representative of the period and type of manufactory that characterized Philadelphia's built environment and, specifically, Kensington. During this period Buildings 2, 3, and 4 were leased for the continual purposes of a bolt works, and these industrial shed type buildings are representative of a period where such buildings characterized industrial complexes and the built environment of Kensington and Philadelphia at-large.



"Pair of infant kidskin boots, 1890. [LACMA](#), M.54.21.4a"

Source: Wikipedia.

According to Mary Brooks Picken's *Dictionary of Costume and Fashion: Historic and Modern*, the term "glazed kid" refers to a "Chrome-tanned goatskin finished for use as shoe leather; glossy, but not actually glazed."⁴² While the identifying terms for this manufacturing industry sounds foreign in the context of Philadelphia today, Kensington and the larger city was home to a number of such establishments in the nineteenth and early twentieth centuries, then also identified as Morocco Leather Manufacturers. While the Illingsworths were not the premier manufacturers of this industry, the story of this business is part of the larger amalgamation that evidences the subject property's relationship to so many industries that were once prominent in the area, exemplifying further its embodiment of the cultural, economic, political, social and historical heritage of the community.

⁴² Mary Brooks Picken, *A Dictionary of Costume and Fashion: Historic and Modern* (Mineola, NY: Dover Publications, 1999), 209.



Left: 1895 Philadelphia Atlas by G.W. Bromley. **Right:** 1910 Philadelphia Atlas by G.W. Bromley.
 Source: Greater Philadelphia GeoHistory Network.

Historic Context

On September 23, 1891, Harriet de Benneville Keim, a descendant of the Keim branch of the firm of Keim & Welsh, sold the subject property to Margaret I. Whiteman Illingsworth (1849–1918), the wife of Charles Illingsworth (1846–1919), Morocco Manufacturer, for \$29,000.⁴³ Charles Illingsworth’s Morocco business was first known as the Eagle Calf-Kid Works and later the Eagle Glazed Kid Company. While the company’s financial health appears to have ebbed and flowed over the years, the subject property served as a manufactory a specific leather type which was most commonly used for the greater shoe manufacturing industry.⁴⁴ On December 4, 1911, the subject property was subject to Sheriff’s Sale.⁴⁵

⁴³ Deed: Harriet de Benneville Keim, a widow, to Margaret I. Illingsworth, wife of Charles Illingsworth, Morocco Manufacturer, 23 September 1891, Philadelphia Deed Book T.G., No. 82, p. 435.

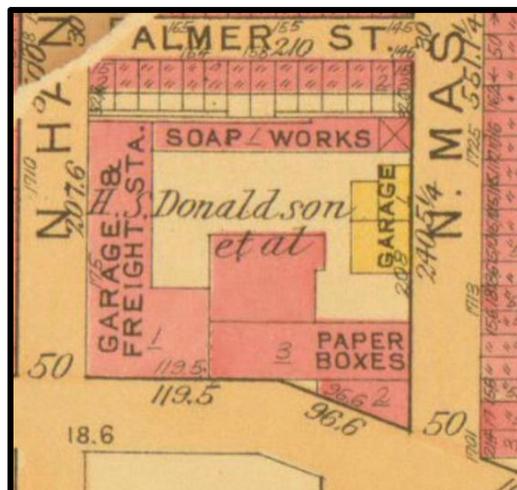
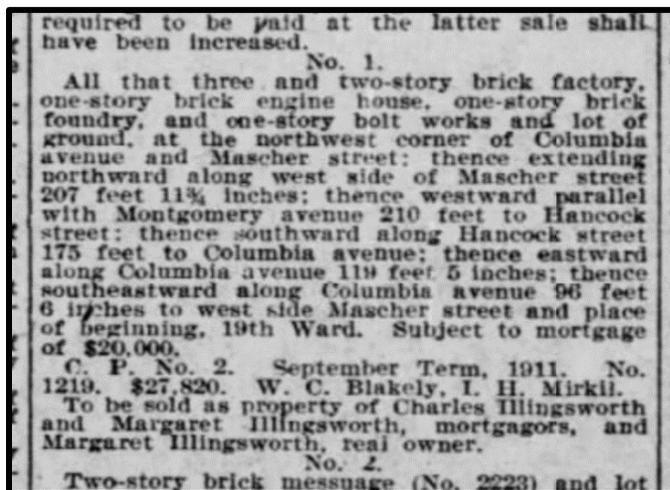
⁴⁴ “Suits on Promissory Notes,” *The Times* (Philadelphia), 26 April 1896 2.

⁴⁵ “Sheriff’s Sales,” *The Philadelphia Inquirer*, 27 November 1911, 13; Deed Poll: Joseph Gilfillan, sheriff, to A.S.L. Shields and Anna H.J. Taylor, surviving executors of the will of John F. Betz, 30 December 1911, Philadelphia Deed Book E.L.T., No. 28, p. 34.

The Manufacture of Paper Boxes and other Allied Paper Products, 1917-1955 (Buildings 1 and 5)

From 1917 to 1955, the subject property was owned by various parties and/or entities engaged in the manufacture of paper boxes and other allied paper products. According to the *Philadelphia Year Book of 1918*, “the last fifty years [prior to 1918] has seen the manufacture of paper boxes develop into a most important industry, particularly in Philadelphia.” During that period, society saw a major growth in private wealth and, in turn, a demand for products. As the economy transitioned from one where food products were purchased as needed at a market to a marketplace where “the customer buys with greater assurance of safety, sanitation, and consequent satisfaction,” purchasing goods in “the original package.”⁴⁶

As a result of this shift, the paper box industry expanded and evolved, becoming quite important in the industrial context of Philadelphia. The subject site was first home to H.S. Donaldson, a manufacturer of paper boxes, who operated on the site from 1917 until 1925. Afterwards, the property was purchased by the Adelpia Paper Box Company, which soon after became the John Crompton Adelpia Corporation. The subject property served the manufacture of paper boxes and other allied paper products from 1917 to 1955, during which time a modern manufactory was constructed on the site in 1930.⁴⁷ Despite the relative normalcy of Donaldson’s firm and the more successful business of the John Crompton Adelpia Corporation, the story of this business is part of the larger amalgamation that evidences the subject property’s relationship to so many industries that were once prominent in the area, exemplifying further its embodiment of the economic and historical heritage of the community.



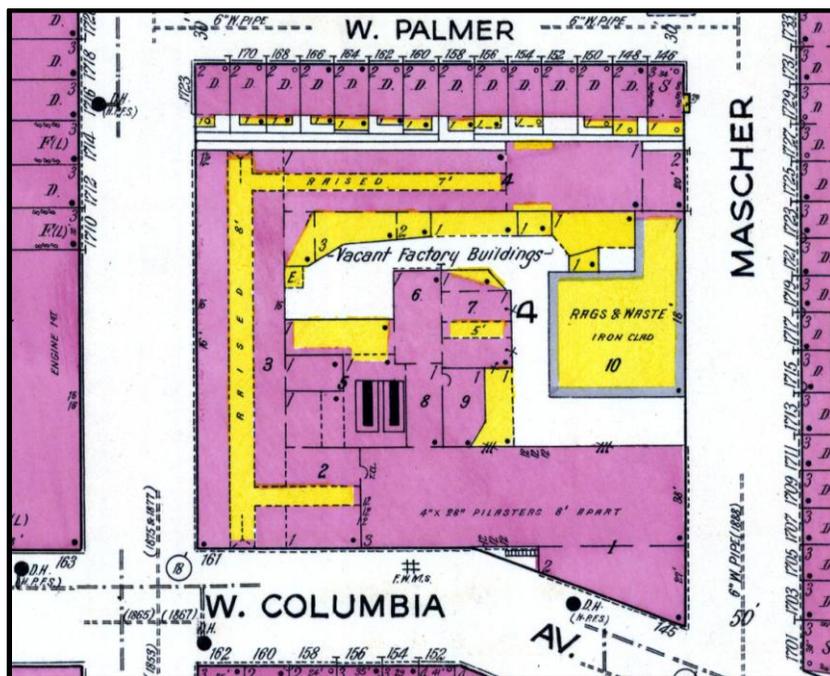
Left: A description of the property from the Sheriff’s Sale in 1911.
Source: “Sheriff’s Sales,” *The Philadelphia Inquirer*, 27 November 1911, 13.
Right: Atlas of the City of Philadelphia (Central), 1922, Plate 21.

⁴⁶ *Philadelphia Year Book* (Philadelphia Chamber of Commerce, 1918), A17.

⁴⁷ “Plant for Kensington,” *The Philadelphia Inquirer*, 7 September 1930, 17.

In 1917, H.S. Donaldson purchased the subject property, using Building 1 for the manufacture of paper boxes and other allied products. Buildings 2 and 3 were used as garage facilities and Building 4 was used as a soap manufactory. In May 1925 H.S. Donaldson sold the subject property to the Adelpia Paper Box Company for \$42,500, \$30,000 of which was subject to a mortgage.⁴⁸ Nearly ten years earlier the Adelpia Paper Box Company of Philadelphia was formally issued a charter by the Commonwealth of Pennsylvania on January 18, 1915, at which time the company had a capital of \$25,000. Like Donaldson, this company manufactured paper boxes and other products.⁴⁹

The Adelpia Paper Box Company apparently evolved to become the John Crompton Adelpia Corporation by December 1927.⁵⁰ Known as the J.C. Adelpia Corp., the company commissioned the design of a new “manufacturing plant” by September 1930, when it was announced that the architect J. Fletcher Street had completed the designs, calling for construction bids.⁵¹ Ultimately construction was completed by the Haverstick-Borthwick Company, then of 1503 Race Street.⁵² Reports of the period projected a varied total cost from \$32,000 to \$50,000 (with equipment).⁵³



1918 Sanborn Atlas showing the site.

Source: *Insurance Maps of Philadelphia, Pennsylvania* 8 (New York: Sanborn Mapping Co., 1917), plate 739.

⁴⁸ “Columbia Avenue And Mascher Streets,” *The Philadelphia Inquirer*, 6 May 1925, 15.

⁴⁹ *Alphabetical List of Charters of Corporations Enrolled in the Office of the Secretary of the Commonwealth* (Harrisburg: William Stanley Ray, 1915), 4.

⁵⁰ “Columbia Avenue And Mascher Streets,” *The Philadelphia Inquirer*, 6 May 1925, 15.

⁵¹ “Plant for Kensington,” *The Philadelphia Inquirer*, 7 September 1930, 17.

⁵² “Plant Contract Let,” *The Philadelphia Inquirer*, 23 November 1930, 20.

⁵³ “Plant for Kensington,” *The Philadelphia Inquirer*, 7 September 1930, 17.

Criterion D

John Crompton Adelpia Corporation Manufacturing (Building 5)



Looking northwest at the side (south)
and primary (east) elevations of Building 5.
Source: Oscar Beisert, 2018.

Built in 1930 of brick and steel, Building 5: John Crompton Adelpia Corporation Manufacturing Building (Building 5) is a former paper box factory with subtle Art Deco and other Modernist overtones, standing four stories with a basement. The primary (east) and side (south) elevations are defined by facades of red brick with large multi-pane steel windows, which are standard features of factory buildings of this era. The fenestration is delineated by brick pilasters and spandrels. Representing the steel frame construction, the brick pilasters rise from the basement level and terminate in low Art Deco style parapets that rise above the roofline. Also emblematic of its structural frame, spandrels are recessed from the pilasters beneath each aperture. Aesthetically, the spandrels articulate the type of brickwork that decorated these otherwise utilitarian buildings. Three of the spandrels within the primary (east) elevation feature a single basket-weave bond, while the others employ a simple running bond set off by rectangular brick frames created by brick coursing.

Despite its understated and uncomplicated appearance, the design of Building 5 adheres to guiding principles of industrial design of second quarter of the twentieth century, wherein the aesthetics of utilitarian structures was guided by “simplicity, harmony, and propriety.”⁵⁴ In 1929 four fundamental principles were noted by civil engineer Charles Evan Fowler in the design of bridges and other structures:

⁵⁴ Bradley, *The Works*, 225–226.

Simplicity, to the engineer, connoted a “truth telling” in structural design and the absence contrivance and of frivolous or inappropriate details—not mere lack of complexity. It also meant basing a design strictly on functional factors. Through symmetry was a fundamental aspect of bridge forms, balance was often substituted in other types of structures designed by engineers. Harmony between the framing and exterior cladding of a structure and among the various components of a design was crucial to the engineering aesthetic. Fowler noted that his list was similar to a comparable group of ideas that guided the work of the architect: sincerity, propriety, style, and scale. A major difference between the approaches of the two professions was that engineers could seldom consider style as it was under in architecture.⁵⁵

Architects and engineers that designed manufacturing buildings in this period “sought to create a brick aesthetic” using new products that provided for simplified embellishment. Betsy Hunter Bradley, in her book *The Works*, describes some of these new materials and design motifs:

Iron-spot and blended shades of brick (sometimes called tapestry brick, for it displayed the natural range of colors produced in a kiln firing) were utilized in lieu of the standard red factory brick. Mortar was colored to blend or consist with brick. The use of extra-wide mortar joints also influenced the character of the brickwork and helped provide architectural character with little additional expense. Patterned brick and splayed (angled) and rounded units were incorporated into factory building as relatively economical and rational means of relieving plain brickwork.

Arched door and window openings in brick industrial buildings represented structural elements that added to the aesthetic character. All door and window openings were capped by relieving arches that transferred the weight of the wall above the openings to the wall area between them.⁵⁶

The characteristics of above are certainly definitive of Building 5. Perhaps the most distinctive feature described is the repeated use of brickwork to enliven utilitarian brick industrial buildings. J. Fletcher Street, the designer of the subject building, used brickwork to create spandrels beneath many of the windows. Several of the spandrels featured a single basket-weave bond, while the majority were comprised of a running bond set within a rectangular frame created by brick coursing. Perhaps the most definitive stylistic feature was the use of Art Deco-inspired parapets at the termination of pilaster. These simple features introduced a simplified, but distinctive architectural style and overall aesthetic into the equation of this largely utilitarian building.

⁵⁵ Bradley, *The Works*. chap.10, footnote 1.

⁵⁶ Bradley, *The Works*, 225–226.

8. BIBLIOGRAPHY

Through generous sponsorship of a friend, this nomination was completed by the Keeping Society of Philadelphia with the primary author as Oscar Beisert, Architectural Historian and Historic Preservationist with assistance from J.M. Duffin, Archivist and Historian, and Kelly E. Wiles, Architectural Historian.

The following sites were used to create the nomination:

Greater Philadelphia GeoHistory Network

Newspapers.com

Proquest Historical Newspapers

Major Bibliographic References

Alphabetical List of Charters of Corporations Enrolled in the Office of the Secretary of the Commonwealth. Harrisburg: William Stanley Ray, 1915.

Ancestry.com. *U.S., Find A Grave Index, 1600s–Current* [database on-line]. Provo, UT, USA: Ancestry.com Operations, Inc., 2012.

Bradley, Betsy Hunter, *The Works: The Industrial Architecture of the United States.* New York: Oxford University Press, 1999.

Burr, Samuel J. and S. De Vere Burr. *Memorial of the International Exhibition: Being a Description Written Up by Buildings by Nationalities, by Classes.* Philadelphia: L. Stebbins, 1877.

“Columbia Avenue And Mascher Streets,” *The Philadelphia Inquirer*, 6 May 1925, 15.

“Co-Partnership.” *Public Ledger*, 1 October 1852, 4.

Deed Poll: Joseph Gilfillan, sheriff, to A.S.L. Shields and Anna H.J. Taylor, surviving executors of the will of John F. Betz, 30 December 1911, Philadelphia Deed Book E.L.T., No. 28, p. 34.

Deed: George de Benneville Keim and his wife Sarah to George H. Lea. 18 December 1875. Philadelphia Deed Book D.H.L., No. 13, 179.

Deed: George W. Harris to George de Benneville Keim and Frank H. Welsh. 1875. Philadelphia Deed Book F.T.W., No. 179, 288.

Deed: Harriet de Benneville Keim, a widow, to Margaret I. Illingsworth, wife of Charles Illingsworth, Morocco Manufacturer, 23 September 1891, Philadelphia Deed Book T.G., No. 82, p. 435.

Eagle Bolt Works, Hexamer General Surveys, Volume 10, plate 891, 7 June 1875.

Ferguson, Logan I. National Register of Historic Places Multiple Property Documentation Form: Industrial and Commercial Buildings Related to the Textile Industry in the Kensington Neighborhood of Philadelphia. Philadelphia: Powers & Company, Inc., 2012.

Filby, P. William, ed. *Passenger and Immigration Lists Index, 1500s–1900s.* Farmington Hills, MI, USA: Gale Research, 2012; and Ancestry.com. *U.S. Passport Applications, 1795–1925* [database on-line]. Lehi, UT, USA: Ancestry.com Operations, Inc., 2007.

Freedley, Edwin T. *Philadelphia and Its Manufacturers.* Philadelphia: E. Young, 1858.

Kensington: A City within a City. Philadelphia: Keighton Printing House, 1891.

Oberholtzer, Ellis Paxson. *Philadelphia: A History of the City and Its People.* Philadelphia: S.J. Clarke Publishing Company, 1912.

- “Obituary, W.P. Uhlinger,” *The Iron Age* 61 (12 May 1898): 28.
- “Obituary: W.P. Uhlinger.,” *Textile Colorist: A Monthly Journal Devoted to Practical Dyeing, Bleaching, Printing and Finishing, Dyes, Dyestuffs and Chemicals as Applied to Dyeing* 20 (1898): 147.
- Official Catalogue: Complete in One Volume, I, Main Building, II. Department of Art, III. Department of Machinery, IV. Departments of Agriculture and Horticulture.* Philadelphia: Centennial Catalogue Company, 1876).
- Philadelphia and Popular Philadelphians.* Philadelphia: The North American, 1891.
- Philadelphia Board of Trade.*
- Philadelphia Year Book.* Philadelphia Chamber of Commerce, 1918.
- “Plant Contract Let,” *The Philadelphia Inquirer*, 23 November 1930, 20.
- “Plant for Kensington,” *The Philadelphia Inquirer*, 7 September 1930, 17.
- Picken, Mary Brooks *A Dictionary of Costume and Fashion: Historic and Modern.* Mineola, NY: Dover Publications, 1999.
- Roe, Joseph Wickham. *English and American Tool Builders.* New Haven: Yale University Press, 1916.
- Scharf, J. Thomas and Thompson Westcott. *History of Philadelphia: 1609–1884.* Philadelphia: L.H. Everts and Co., 1884.
- Schaum & Uhlinger, successors to W.P. Uhlinger, Glenwood Ave. and Second St., Philadelphia, U.S.A. [graphic]: Jacquard Machines, for every variety of fancy weaving. World's fair, Machinery Hall (1893), Column O, 49. Source: Library Company of Philadelphia.
- Scranton, Philip B. *The Philadelphia System of Textile Manufacture, 1884–1984.* Philadelphia: Philadelphia College of Textiles & Science, 1984.
- Scranton, Philip B. *Proprietary Capitalism: The Textile Manufacture at Philadelphia, 1800–1885.* New York: Cambridge University Press, 1983.
- “Sheriff’s Sales,” *The Philadelphia Inquirer*, 27 November 1911, 13.
- “Special Partnership,” *Legal Intelligencer.* 19 February 1869, 63.
- “Suits on Promissory Notes,” *The Times* (Philadelphia), 26 April 1896 2.
- “To The Manufacturers of Hosiery,” *Public Ledger*, 20 October 1854, 1.
- Weigley, Russell F., ed. *Philadelphia, A 300-Year History.* New York: W.W. Norton & Company, 1982.
- William P. Uhlinger's 1868 School Desk and Seat Patent Model, National Museum of American History, Smithsonian, Catalog No. 65.0364
- Workshop of the World: A Selective Guide to the Industrial Archeology of Philadelphia.* Wallingford, PA: Oliver Evans Press, 1990.
- “W.P. Uhlinger Dead.” *Fibre and Fabric: A Record of the American Textile Industries in the Cotton and Woolen Trade* 27 (7 May 1898): 133.