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Preliminary Summary of Information

Submitted to the Commission on Chicago Landmarks in December 2021

Ludlow Typograph Company Building

2028-2062 North Clybourn Avenue

CITY OF CHICAGO
Lori E. Lightfoot, Mayor

Department of Planning and Development
Maurice D. Cox, Commissioner

The Commission on Chicago Landmarks, whose nine members are appointed by the Mayor and City Council, was established in 1968 by city ordinance. The Commission is responsible for recommending to the City Council which individual buildings, sites, objects, or districts should be designated as Chicago Landmarks, which protects them by law.

The landmark designation process begins with a staff study and a preliminary summary of information related to the potential designation criteria. The next step is a preliminary vote by the landmarks commission as to whether the proposed landmark is worthy of consideration. This vote not only initiates the formal designation process, but it places the review of city permits for the property under the jurisdiction of the Commission until a final landmark recommendation is acted on by the City Council.

This Landmark Designation Report is subject to possible revision and amendment during the designation process. Only language contained within the designation ordinance adopted by the City Council should be regarded as final.

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Ludlow Typograph Company Building

2028-2062 North Clybourn Avenue

Built: 1913 (Additions: 1918, 1922, 1928, 1948)

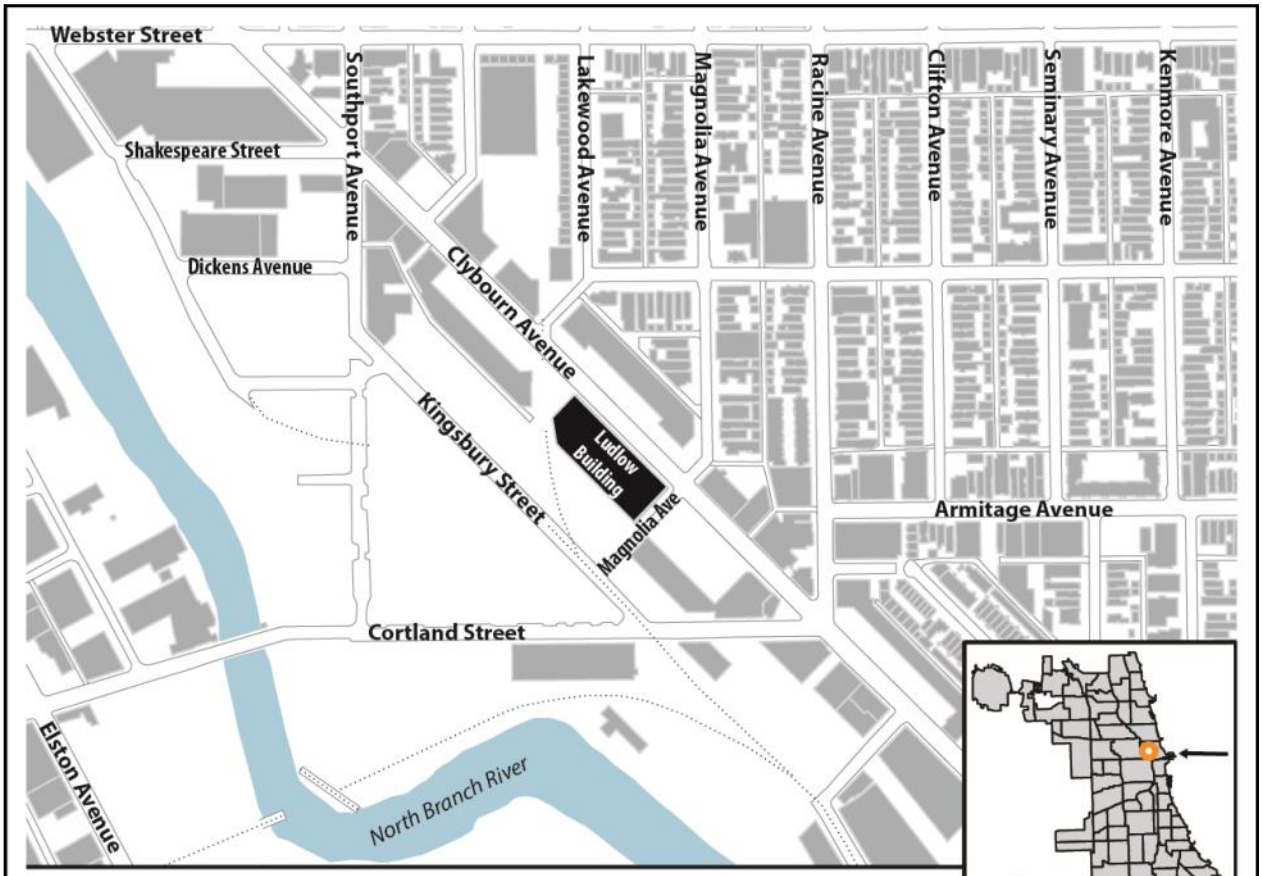
Architect: Alfred S. Alschuler *(1913 portion)*
William C. Jones *(1918 and 1922 additions)*
Edward A. Nitsche *(1928 and 1948 additions)*

The Ludlow Typograph Company Building (hereinafter the Ludlow Building) on Clybourn Avenue is part of the rich industrial history that characterizes the area along the North Branch of the Chicago River. This utilitarian Prairie School-influenced Commercial Style manufacturing building was built and expanded over time to house the growing operations of the Ludlow Typograph Company, a prominent manufacturer of printing equipment and nationally-significant designer of new typefaces. From 1918 to 1974, the Ludlow Typograph Company maintained its headquarters, typeface design department, and manufacturing plant in the building. During this period, the company became a primary producer of equipment for casting lines of metal type. Their machines, the Ludlow Typograph and the Elrod Rule Caster, were essential parts of the printing process and were the mainstay of newspaper and magazine printing departments across the United States and around the world.

Ludlow's Clybourn Avenue building exemplifies the importance of the printing industry in Chicago's history, and is significant for its influential role in the printing industry in Chicago and the United States. Printing equipment manufacturers and typeface designers, such as the Ludlow Typograph Company, supplied equipment to a variety of printers and publishers located within Chicago, across the country, and around the world. The building is significant within the context of Chicago's greater North Branch Industrial Corridor, which developed along the Chicago River beginning in the late 19th century. The Ludlow Typograph Company Building is also significant for its contributions to the typographic arts, specifically through the creative genius of two of its longtime typeface designers, Douglas C. McMurtrie and Robert H. Middleton. McMurtrie and Middleton significantly influenced graphic design in advertising and within the overall publishing industry by developing new typefaces, such as Ultra-Modern, Umbra, Tempo, Ludlow Garamond, Stellar, Radiant and hundreds of other typefaces, which were adopted by major newspapers, magazines, publishing houses, and advertisers to make their messages stand out to the public.

The notable Chicago architect Alfred S. Alschuler designed the initial block of the Ludlow Building in 1913, which served as a model for the overall design and form of the building's several later additions.

The Ludlow Typograph Company Building is a brick manufacturing building that was completed between 1913 and 1948 for the production of printing equipment. It served as the headquarters of the Ludlow Typograph Company until the 1970s. The building faces northeast onto Clybourn Avenue and southeast onto Magnolia Avenue.

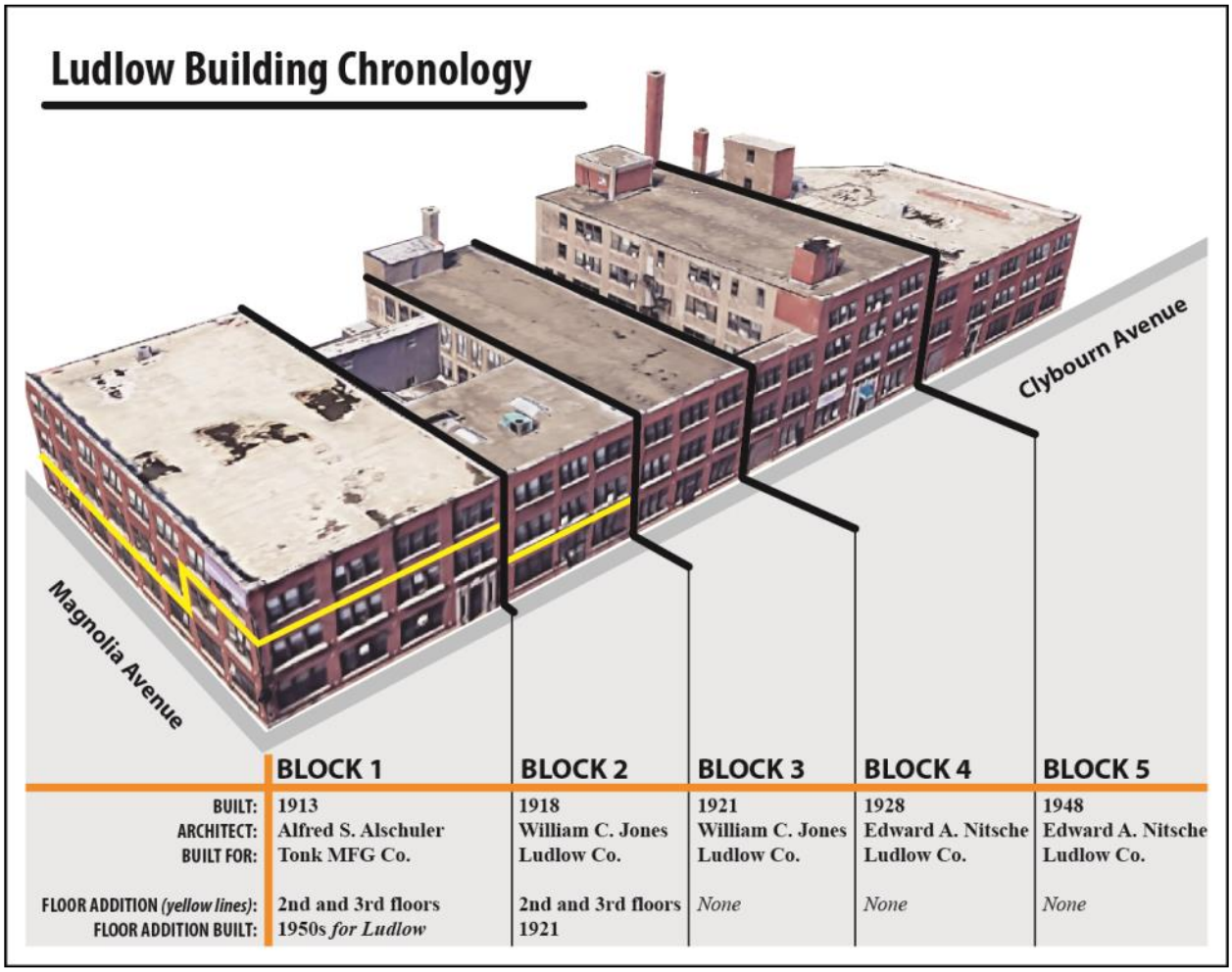


The Ludlow Typograph Company Building (in black above) is located in Chicago's Lincoln Park Community Area at 2028 to 2062 North Clybourn Avenue.

Location, Description, and Construction of the Ludlow Typograph Company Building

Location

The Ludlow Typograph Company Building is located in Chicago's Lincoln Park community area at 2028 to 2062 North Clybourn Avenue. The Ludlow Building is set within a historically industrialized area along the banks of the North Branch of the Chicago River, known as the North Branch Industrial Corridor. It faces northeast onto Clybourn Avenue and is bounded by Magnolia Street on the southeast and a private driveway and parking lot to the southwest, and a private parking lot to the northwest. The surrounding neighborhood consists of tree-lined blocks of two- and three-story late 19th century residential buildings to the north and east, while to the west and south there is a large vacant plot of land that was occupied until 2015 by foundry and steel processing buildings. Within the greater area, the Ludlow Building is part of a narrow strip of industrial and commercial uses along Clybourn Avenue.



Description

The Ludlow Building is utilitarian in form and was designed in the Commercial Style with Prairie School details. The flat roofed building is uniformly clad in red pressed brick with limestone trim. All secondary elevations are common brick laid up within the exposed concrete structural frame. Overall, the building is comprised of five rectilinear blocks, ranging in height from three- to four-stories, that form a row in chronological order of construction, marching along Clybourn Avenue from southeast to northwest.

Although the Ludlow Typograph Company Building was significantly expanded over a forty-year period with blocks designed by three different architects, the overall building is uniform in its form, design, and materials. Architect Alfred S. Alschuler's 1913 utilitarian design for the Ludlow Building's original southeastern Block 1 set the tone for later blocks. His design for the Clybourn and Magnolia elevations were rendered in the Prairie School influenced Commercial Style, which was very popular at the time. The style is defined by the use of patterned masonry wall surfaces and shaped parapets at the roofline. Vertical piers separate repeating groups of large sash windows and terminate uninterrupted above the roofline. Overall, the Commercial Style during the early 20th century and was influenced by movements that developed in Chicago, such as the Prairie School. The later named Chicago School parallels the Commercial Style but is most notably defined by the use of Chicago Style windows that consist of a large fixed middle pane flanked by narrow double hung windows.

Alschuler's design for Block 1 consists of vertical bays of windows that feature triple sets of double-hung windows per floor. According to original plans, the windows originally featured double-hung wood sash windows with an upper sash holding three vertical panes and a single-pane lower sash. Along the ground floor, the windows have a continuous steel lintel faced with a soldier course of brick; square limestone blocks are set into the course between windows. The upper floors of the bays are divided by shallow projecting vertical brick piers that terminate

View of the Ludlow Typograph Company Building looking southeast along Clybourn Avenue. The nearest portion of the building is Block 5, which was completed in 1948.

Block 1
2028 to 2032 N. Clybourn Ave.

The earliest portion is Block 1, which comprises the southeast end of the building. This block fronts on both Clybourn and Magnolia Avenues. The three-story block was built in 1913 for the Tonk Manufacturing Company and was designed by architect Alfred S. Alschuler. Originally built with a two-story office portion fronting on Clybourn Avenue and with a rear one-story portion, Block 1 was enlarged with a second and third floor addition sometime during the late-1950s.

Block 2
2034 to 2038 N. Clybourn Ave.

Block 2 has a three-story and basement front portion and rear single-story portion. The first story was built in 1918 and was designed by architect William C. Jones for the Ludlow Typograph Company. Two upper floors were added for Ludlow around the time that the adjoining Block 3 to the northwest was built in 1922.

Block 3
2040 to 2042 N. Clybourn Ave.

Block 3 was also designed by architect William C. Jones, who built it as the first three-story and basement block in the building. Block 3 was completed in 1922 for Ludlow. Following its completion, Jones designed matching upper floor additions for Block 2 from 1918.

<u>Block 4</u>
2044 to 2052 N. Clybourn Ave.

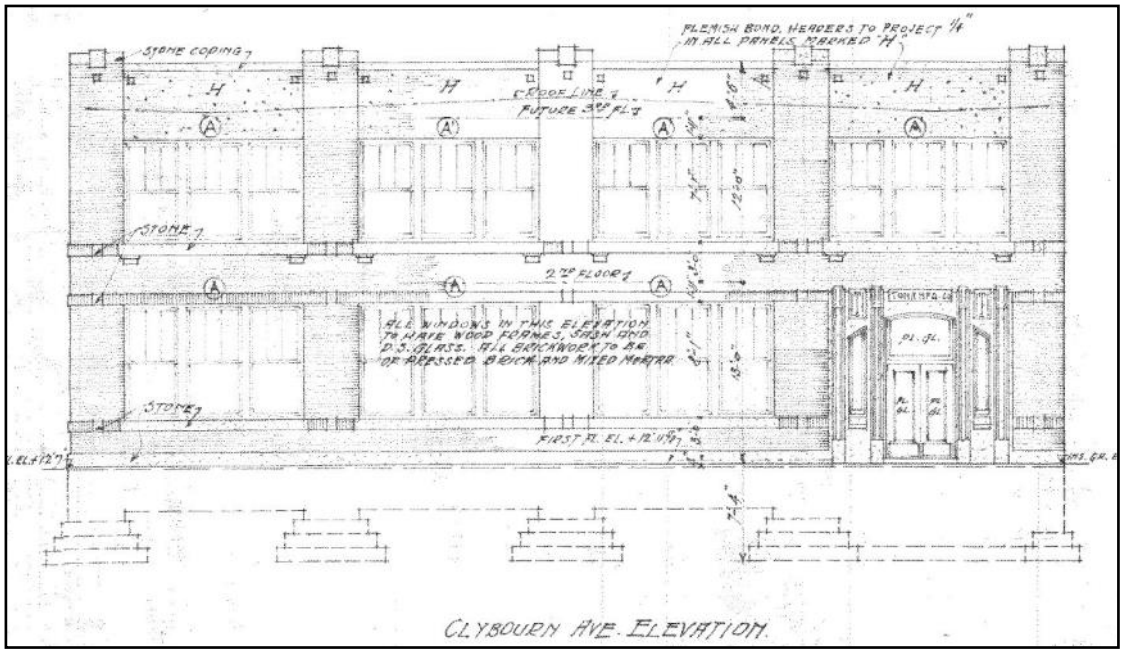
Block 4 has four-stories and a basement and was designed by architect Edward A. Nitsche in 1928. The block features a courtyard along its southeast elevation that separates it from Block 3 to the southeast. A three-story connecting wing along Clybourn Avenue links Block 4 with Block 3 (left). At the southwest end of Block 4 there are two single-story wings that were completed in 1928. To the southeast is a narrow connecting corridor that links Block 3, and to the northwest is a loading dock with an overhead door.

<u>Block 5</u>
2054 to 2062 N. Clybourn Ave.

Block 5 was the final block and was completed in 1948. The three-story and basement block was designed by architect Edward A. Nitsche and has a trapezoidal footprint due to the presence of a railroad spur track that clips the west corner of the block. Similar to Block 4, Block 5 has a courtyard along its southeast elevation, which separates it from Block 4. A three-story connecting wing along the northeast elevation connects the block to Block 4. A covered truck loading dock was built on the northwest elevation of Block 5 sometime during the late-1950s.

above the parapet and are capped by limestone blocks. Windows at the second floor are similar in design to the ground floor but have limestone sills that are supported by pairs of square brackets. Spandrel panels between the second and third floors are comprised of matching red pressed face brick set in a Flemish bond pattern with shallow projecting headers. The overall elevation has a plain limestone water table and a limestone parapet cap.

The northeast elevation along Clybourn Avenue presents a uniform appearance, but a closer look at its three main doorways details reveals some individuality amongst the building's individual blocks. Block 1 is the earliest part of the Ludlow Building. Its first two floor were originally built in 1913 as a stand-alone office and manufacturing building for the Tonk Manufacturing Company, which had a large manufacturing plant to the west. As part of Block 1's design, it featured a main entrance doorway on Clybourn Avenue that was framed by carved limestone. According to architect Alfred S. Alschuler's original plans, the doorway featured the name "Tonk MFG Co." carved above the doorway. In 1918, when the Ludlow Typograph Company moved into Block 1 the stone was replaced with the plain limestone block that remains today. The extant doorway is reminiscent of the Prairie School style of architecture. It is framed by limestone pilasters topped by limestone blocks with carved geometric designs. Within the rigid geometry of the doorway there is a subtle rounded arch that is defined by a transom window above the door and two flanking sidelight windows. Block 2 was designed without a main doorway because it was designed simply as an addition to Block 1. A large new doorway with slightly recessed double doors was included in the design for Block 4, which was designed with new company offices on its top floors. The doorway is similar to the doorway in Block 1, but it is more rigidly geometric and is topped by a triangular limestone panel that resembles a pediment with a keystone. Finally, Block 5 has the most refined doorway. Limestone pilasters frame the doorway and transom, which is flanked by sidelights with brick surrounds. The doorways share attributes, such as materials and geometric Prairie School-influenced design, but each is unique.



Architect Alfred S. Alschuler's original 1913 plans for what became Block 1 consisted of a 1- to 2-story building for the Tonk MFG. Co. The doorway was originally carved with the Tonk name. ***Plans for the Tonk MFG. Co.*****, Anixter Center.**

Doorway designs of the Ludlow Building

Block 1

The doorway of Block 1 was completed in 1913 and originally featured the name Tonk MFG. Co. carved in the stone above the door. This was replaced with plain stone when Ludlow moved into the building in 1918.

The doorway is flanked by sidelights and features refined ornament, such as the geometric pilaster capitals. The details and overall form show the influence of the Prairie School.

Block 4

The doorway of Block 4 was completed in 1928. It is similar in form to the doorway of Block 1, but it is even more geometric. A stone pediment with a keystone is situated above the door.

Block 5

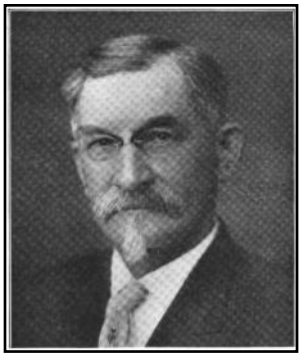
The doorway of Block 5 was completed in 1948. The overall design is highly refined and the use of stone is limited. The sidelights are framed only in brick, which visually emphasizes the door and its geometric surround. Although extra ornament is absent, the design still reflects the Prairie School.

The uniform Clybourn Avenue elevation hides two deep and narrow courtyards between Blocks 3 and 4 and Blocks 4 and 5. The courtyards are paved and served for loading and unloading goods carried by truck. Each courtyard is obscured from view along Clybourn Avenue by three-story connecting bridges that follow the form and design of the overall building. Both connecting bridges are only the depth of a single narrow corridor and have vehicular doorways with metal overhead doors at the ground level.

The History and Development of the Ludlow Typograph Building

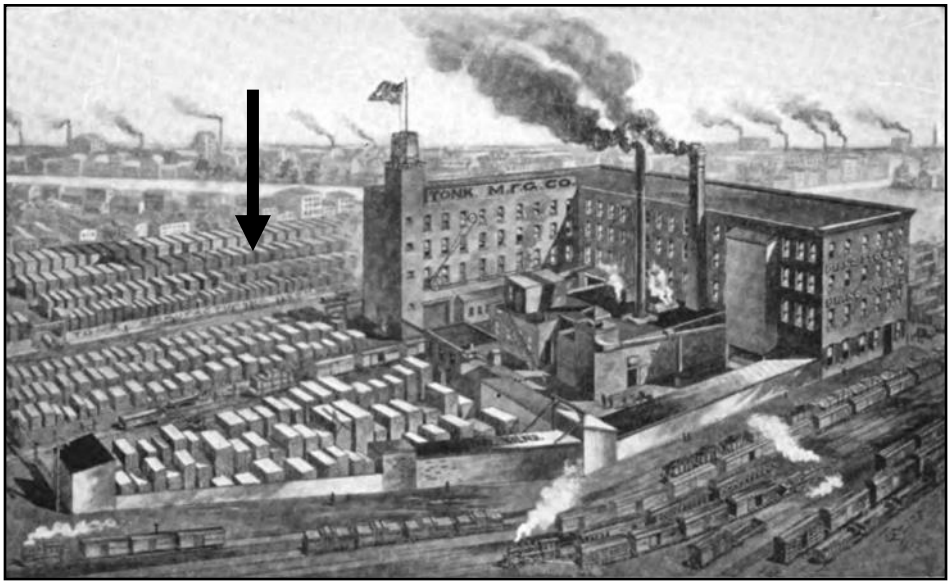
The Ludlow Typograph Company Building is located on a block of Clybourn Avenue near the North Branch of the Chicago River, which served as a primary transportation route for the heavily industrialized river corridor. In addition, rail lines of the Chicago, Milwaukee, St. Paul & Pacific Railroad served the area and connected to other rail lines.

In 1882, Max Tonk (1852-1914), president of the Tonk Manufacturing Company, makers of wood carvings and furniture specialties, opened a new factory on Lewis Street (now known as Magnolia Avenue) near Clybourn Avenue (this non-extant factory stood on the paved parking lot to the southwest of the Ludlow Building). Tonk was born in Berlin and moved to the United States with his family at age three. He was a founding partner in 1873 of the furniture specialties firm of Seavor, Tonk & Co., which opened a factory on Lake Street. Tonk later bought out the interests of his partners and established the Tonk MFG. Co. on Lewis Street, where the company then expanded to manufacture piano stools and benches. By 1910,



Max Tonk (1852-1914)

***Memoirs of a Manufacturer*, 74.**



***Above*, The non-extant furniture factory of the Tonk MFG Co. stood to the southwest of the current Ludlow Building. This view is looking southeast across the rail lines that served the area. Tonk maintained piles of lumber along Clybourn Avenue where the Ludlow Building was later built. In 1913, Tonk built an office building that became part of Block 1 of the Ludlow Building; this portion is obscured in the view above by the main Tonk factory building. The arrow indicates the present location of the Ludlow Building.**

William Tonk, *Memoirs of a Manufacturer* (New York: Presto Publishing Co., 1926) 75.

according to historic Sanborn maps, the company had its large brick Lewis Street factory, an office building on the corner of Lewis Street at 2028 North Clybourn Avenue, and a large lumber yard on Clybourn Avenue, roughly at the present location of Blocks 3 and 4. Tonk expanded their factory in 1913 by replacing their corner office with a one-story brick manufacturing space and 2-story office at 2028 to 2032 North Clybourn Avenue. According to historic building permits, this utilitarian building with Prairie School details was designed by architect Alfred S. Alschuler and forms part of Block 1 in the Ludlow Building.

The Ludlow Typograph Company opened a general sales office in downtown Chicago in 1917. The following year, the company acquired the Tonk Manufacturing Company's Alschuler-designed office and manufacturing building at 2028 to 2032 North Clybourn Avenue at Lewis Street (Block 1) and used the building to manufacturing the Ludlow Typograph and its brass typeface matrices (matrices are individual metal pieces with a negative mold of a single etched character. They are set by hand in a Ludlow machine to cast the positive impression of a line of type for printing). By June of 1918, Ludlow had moved its sales office from downtown Chicago and relocated its headquarters from Cleveland, Ohio to the building on Clybourn Avenue. Within months, Ludlow commissioned architect William C. Jones to design Block 2, a 50-foot-wide by 135-foot-deep single-story factory building to adjoin the northwest side of Block 1. The Schmidt Brothers Construction Company served as the main contractors for the block's construction and returned to build later Blocks 3 and 4. This new factory building is part of Block 2 and stands at 2034 to 2038 North Clybourn Avenue. It cost approximately $20,000 and was built with a heavy timber frame and masonry exterior walls known as fire-resistant mill construction, which is similar to Alschuler's design for Block 1. Additionally, Jones's design also set a design precedent for future expansion by repeating the materials and form of Alschuler's Block 1design.

During the 1920s, Ludlow continued to expand its factory space as demand for the Ludlow Typograph and its typeface collections increased. Ludlow again commissioned Jones, this time to design a third block for its factory at 2040 to 2042 North Clybourn Avenue. Jones designed a three-story factory that cost $70,000. It departed from earlier construction methods by employing a fireproof concrete frame. The same exterior cladding material and design of Blocks 1 and 2 were applied to Block 3. Once work was well underway on Block 3, a permit was issued for the construction of two upper floors on Block 2, which was at the time only a single-story in height. This addition made the height of Block 2 even with Block 3.

In 1928, Ludlow completed an even larger expansion with the construction of Block 4 at 2044 to 2052 North Clybourn Avenue. The company commissioned architect Edward R. Nitsche to design a 4-story concrete frame manufacturing space with upper floor offices. The building cost $135,000, according to the construction permit, which was issued in October 1928. The block was completed a year later.

A final block (Block 5) was constructed in 1948 at 2056 to 2062 North Clybourn Avenue and designed by Nitsche. Initially, plans and permits were issued for the construction of a one- to two-story building that could accommodate a later two-story upper floor addition. Once the roof and interior finished were completed, a new permit was issued in September 1948 for the addition of a third floor.

Following the completion of Block 5 in 1948 there were no new additional blocks to the Ludlow Building. According to historic aerial photographs and fire insurance maps, a third floor was added above Block 1 sometime during the mid- to late-1950s. A raised concrete

This view is looking south on Clybourn Avenue in circa 1922. The view shows the original 2-story Block 1 (left) built for the Tonk MFG. Co., followed by Blocks 2 and 3, which were completed for the Ludlow Typograph Company.

Upper floors were added to Block 1 in the 1950s.

***The Fourth Estate*, April 22, 1922: 22.**

This view of the Ludlow Building is looking south along Clybourn Avenue in circa 1929, following the completion of the 4-story Block 4. Block 4 held additional production space on lower floors, while the upper floors were divided into company offices.

Series 7, Box 115, Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

Block 5 was designed in 1948. It became the final major addition to the Ludlow Building. This plan shows Block 4 (left) and Block 5 (right). ***Plans for Block 5,*** **Anixter Center.**

loading dock with a metal canopy was also added to the northwest elevation of Block 5 sometime during the late-1950s. In 1962, the former Tonk Manufacturing Building that stood to the southwest of the Ludlow Building was demolished and replaced by the extant paved parking lot.

The History of Printing and Typesetting

The Ludlow Typograph Company occupies a significant place in the history of the printed word. In contrast, the history of the printed image falls under the process of printmaking, which includes a variety of forms of reproducing images. For the printed word, Ludlow and the equipment that it produced were part of a revolutionary period in the printing industry, when printing shifted from hand typesetting to a faster and more efficient "hot metal" typesetting process. The result of this shift in how individual characters were set up for printing contributed to a significant expansion in the production of printed material. New newspapers, magazines, and other publishers proliferated during the late 19th century and the early 20th century as new typesetting machines greatly reduced the amount of time required to set up type for printing and therefore increased production.

For the mechanical printing of text, each character printed on a page starts with a single piece of cast metal "type" or "sorts". The type is often stored in job cases and is arranged by font, which is defined by three main characteristics: point size (character height), weight (whether bold or italicized or other), and typeface (currently and incorrectly referred to as font, but represents the style of the characters). The metal type is composed into words, then lines, then paragraphs on a device called a "composing stick" and is then transferred to a galley before being tightly bound and locked in a chase (a frame that holds lines of type in a set page layout). The chase holds all the characters at a uniform level and serves as the negative impression, which is coated with ink and then pressed onto a sheet of paper to create a positive print. This process, known as movable-type, was likely first developed in China around AD 1040 using porcelain and later bronze type pieces. In the early 1400s, following centuries of development around the world, German inventor Johannes Gutenberg refined a movable-type system with durable metal type consisting of a mixture of lead, tin, and antimony, which melted at a relatively low temperature for faster and less expensive casting compared to other metals such as bronze. The printing process is known as letterpress printing. In addition, the type was mass produced by casting individual type pieces from a matrix (a mold for a piece of type). Gutenberg's system of movable-type significantly improved the speed, consistency, and quality of text over handwritten manuscripts. When combined with advances in press technology (the equipment used to transferring the inked impression from the metal type to a sheet of paper), the process contributed to the spread of letterpress printing technology across Europe, which sparked a printing revolution that made it possible for the rapid spread of ideas and technology via printed material.

Typeface:

The body text in this designation report uses the typeface Times New Roman, the size is 12-point, and the weight is "normal". Times New Roman is a serif typeface developed by Stanly Morison in 1931 for the British newspaper *The Times*.

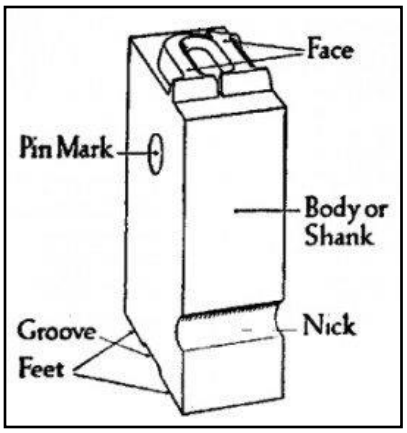
The text in picture captions and in this text box uses the typeface Arial, which is set at 10-point size in bold. Arial is a sans serif style typeface that was designed in 1982 by the Monotype Corporation for use in IBM laser printers. The typeface was designed to be very similar to the Helvetica typeface. Arial served a default font for Windows systems and programs from Windows 3.1 in 1992 through Microsoft Office 2016.

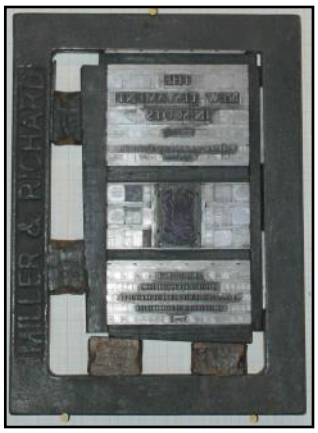
Font:

A font is defined by three main characteristics: point size (character height), weight (whether bold or italicized or other), and typeface (the style of the character).

Point Size	Weight	Typeface			
		Sans	Serif Typefaces		
a a a a a	A A A	Aa	Aa	Aa	Aa
10 12 18 26 48	Normal Italic Bold	Arial	Times New Roman	Garamond	Harrington

Hand Typesetting:





Typesetting for much of the past 500 years has been completed by hand. Individual pieces of type (above left), each representing a single character, are selected to create lines of type that are arranged in a handheld device called a composing stick (above middle). The completed lines are then transferred to galley and then locked in a metal frame known as a chase. The locked chase with a composed page is called a forme (above right).

Hand typsetting was largely replaced by the "hot metal" linecasting process made possible by the Linotype machine and by the Ludlow Typograph.

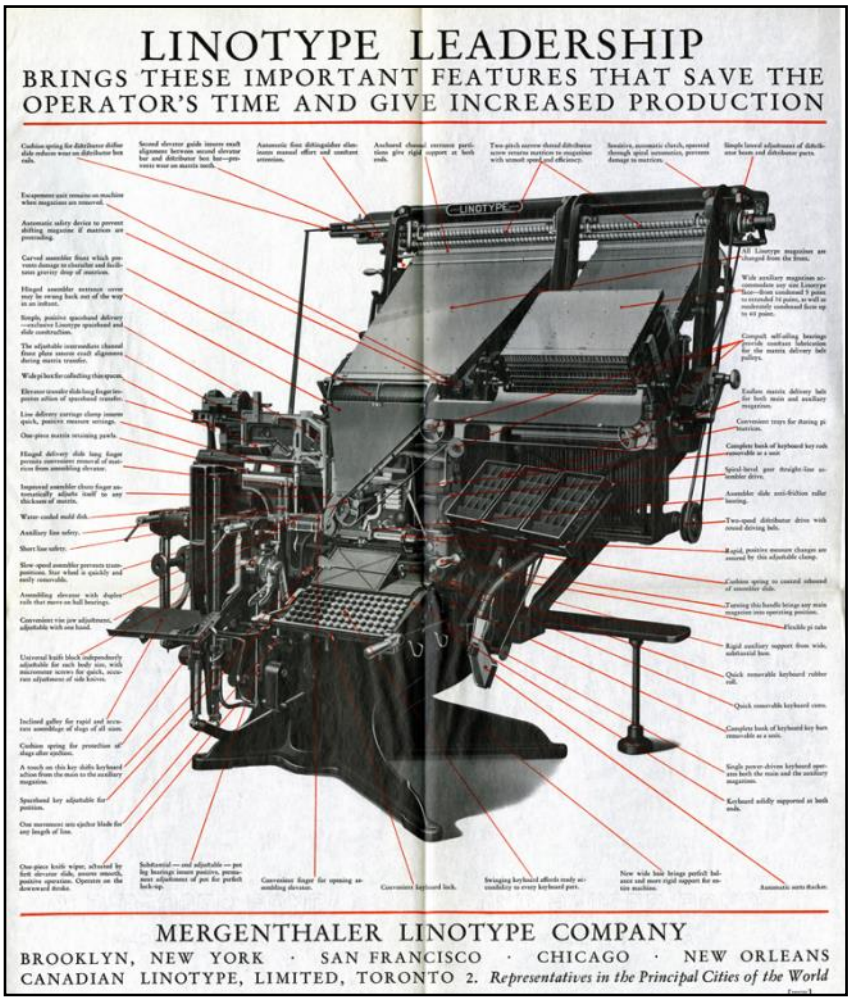
Letterpresscommons.com (above left); Wikiwand (above middle); Wikipedia (above right)

At left is an engraving showing the typesetting and press process of a book printer circa 1600. The engraving was created by Jan Collaert I after an earlier work by Jan van der Straet.

On the left of the image a typesetter selects individual pieces of type. These are arranged to form words and are held in a forme, which is placed in the press on the right. The inked type then creates imprints on paper.

The New Hollstein German Engravings, Etchings and Woodcuts 1400-1700. Amsterdam, 1998, cat. no. (Stradanus), III, 326, i, p.7, Metropolitan Museum of Art.

Linecast Typesetting:



Linecast typesetting became standard at the end of the 19th century. The first successful mechanized typesetting machine was the Linotype, which was patented by Otto Mergenthaler in 1886. His machine combined a keyboard with a system for casting complete lines of type (line of type: Line o' Type) in metal for use in printing presses.

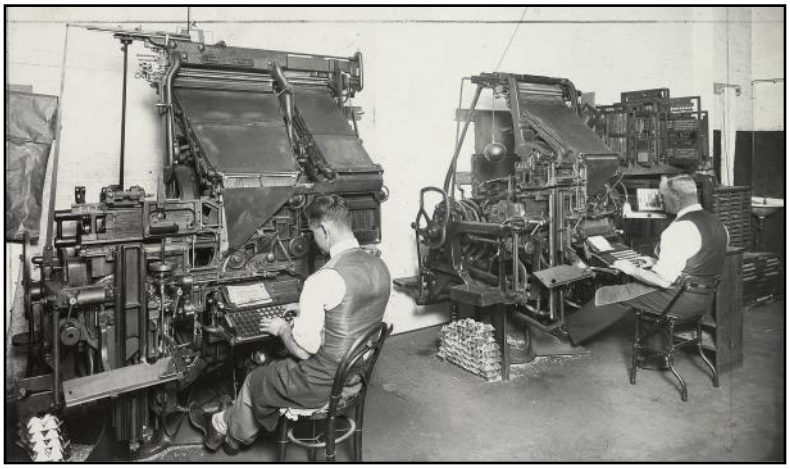
The Linotype machine greatly decreased the time required to compose a page for print by rapidly arranging characters in correct sequence in a single line. The popular machine was widely adopted among printers by the turn-of-the-20th century.

The Linotype principally was used for composing the small text found in articles, while the Ludlow was developed to produce larger lines for advertisements and headlines.

Linotype Leadership, Mergenthaler Linotype Company, 1930, Trade Literature Collection, Smithsonian Institution Libraries.

The Linotype machine holds individual brass matrices (bottom left top) that are mechanically arranged via a keyboard into lines. The lines are then cast by the machine in hot metal to create slugs with complete lines of type for printing (bottom left). The Ludlow specialized in larger point sizes and had hand set matrices. At bottom right are linotype machines in operation in circa 1935. Beside each machine there are stacks of metal ingots for the machine to melt and cast new slugs.

Letterpresscommons.com (bottom left top); Boston Globe (bottom left); Wikiwand (bottom right)



This in turn helped usher in the European Renaissance and the Protestant Reformation. Although Gutenberg did not invent movable-type, his perfection of durable and consistent cast metal type pieces became the standard for printing text until the late 19th century.

A new age in the printing industry developed during the late 19th century with the invention of typecasting machines that could set individual letters as a line of type and then cast the line as a solid and complete line of type, also known as a slug. The first typecasting machine was developed in 1838 by David Bruce; however, this machine did not arrange letters into lines but instead sped up the process for casting new foundry type pieces. This machine influenced the development of mechanical type setting machines. The laborious process of selecting type from job cases, manually setting it up letter-by-letter in lines and paragraphs for printing, and then returning the individual type pieces to their correct storage cases was a time-consuming process. A second limitation of hand-set type was the quantity of cast type available in any given printing shop. To be able to compose multiple pages at a time, printing shops required extensive type storage cabinets to hold hundreds and thousands of pounds of the individual metal type characters. More frequently used letters, such as vowels, were kept in greater quantities than less common letters such as x, y, or z.

As early as the 17th century inventors tried to create typesetting machines that could select and compose precast type. Of more than 200 such inventions, most were commercially unsuccessful. At the same time, there were several efforts to devise a machine for quickly transcribing shorthand notes from Congressional and legal proceedings directly into printed pages. This resulted in the invention of the typewriter during the mid 19th century. During the 1870s, German-born inventor Ottmar Mergenthaler (1854-1899) collaborated with Washington, D. C. public stenographer James Clephane to build a machine that could be used to quickly take notes during proceedings and print them. Mergenthaler patented a machine in 1886 that used a keyboard, similar to the typewriter, to compose and then cast lines of type. Instead of arranging type, the machine arranged matrices, or the female molds for casting type. The matrices were stored in special channels in the machine and were released according to keys on the machine's keyboard. Once the characters were arranged, a "slug or a line of type" (line o' type: linotype) was cast as a single line from a molten pot of metal contained within the machine. The machine then automatically returned the matrices to their proper storage channels for reuse in casting additional lines. The cast lines remained crisp and were recycled by simply placing them in the machine's melting pot. Mergenthaler's Linotype machine competed with several other less popular systems, including the monotype system. The Linotype machine soon defined the printing industry's "hot metal" era and quickly became standard in newspaper and magazine printing offices across the United States and around the world. Major newspapers continued to use Mergenthaler's linecasting process for typesetting through the 1970s when phototypesetting was adopted.

Mergenthaler's Linotype machine excelled at quickly producing lines of type for the high-volume printing of smaller body text. However, the large point sizes needed for titles and advertisements often still had to be composed by hand. During the 1890s, American inventor Washington I. Ludlow devised a machine for casting lines of type that functioned in a similar manner to the Linotype machine but was far smaller and less expensive to use. The machine was targeted at small printing offices that could not afford a Linotype. It consisted of a set of wedge-shaped two-foot-long matrix bars that held the female molds of the characters of the alphabet. The matrices were hand-set to create a mold for casting lines of type.

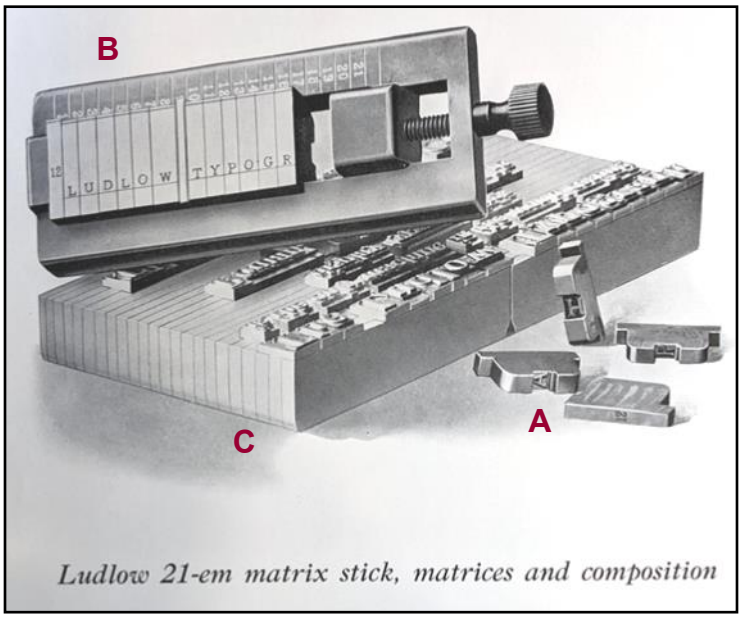
History of the Ludlow Typograph Company

Washington Ludlow brought his design for a linecasting machine to William A. Reade (1867-1930), who was a machinist with experience in typesetting machines. In 1906, Ludlow and Reade formed The Ludlow Typograph Company in Cleveland, Ohio to develop and manufacture Ludlow's original linecasting machine. The company experimented with the machine's design and produced a few commercially unsuccessful devices by 1909. Undeterred, Reade observed that there was a great need for equipment to produce large point size type for display and job composition. He began designing a simple machine similar to Ludlow's that functioned by hand-setting a line of individual brass matrices in a handheld device called a "casting stick" (similar to the hand typesetting process) and then casting a solid metal slug from the composed line. This resulted in the casting of one or more reusable solid lines of type, similar to the Linotype (*see page 18 for a detail description of the process*). Reade filled a patent application in 1910 for the machine, and a working version with engraved brass matrices was unveiled the following year. The new machine was immediately a success and the company started producing matrices for fonts in a variety of sizes and typefaces. New production equipment for Ludlow's own factory was designed and built by the Ludlow company for the manufacture of the thousands of matrices required for the new machines. The first commercial printer to install a Ludlow Typograph was the *Chicago Evening Post* in August 1913. A year later, the *Cleveland Press* installed two Ludlow machines.

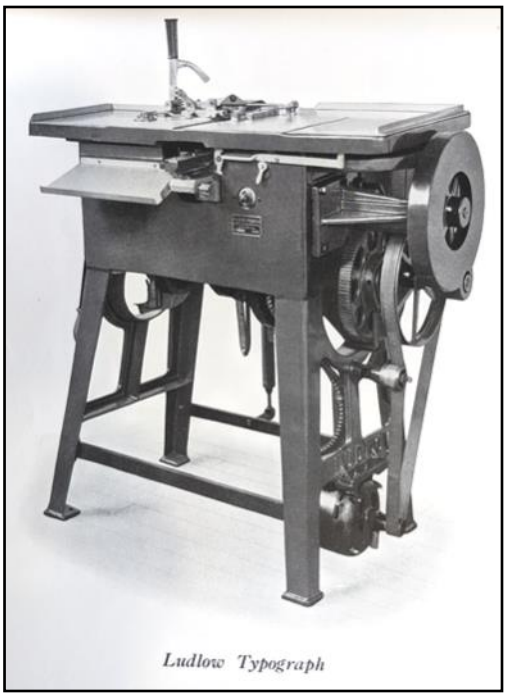
William A. Reade (1867-1930)

The Ludlow Typograph quickly gained acceptance in the American printing industry, especially among newspapers and magazines, for its efficiency and versatility in producing layouts with larger display type, such as those typically used in headlines and advertisements. Newspaper publishers saw the Ludlow as an opportunity to attract more advertisers, which is one of the most significant forms of revenue for a newspaper. Publishers that installed the machines often published front page articles to celebrate their new machines and to exclaim that their paper would only be published using the "hot metal" process of casting lines of type using the Linotype for body text and the Ludlow Typograph for larger eye-catching type. Many newspapers marked the end of hand typesetting for all aspects of production and extolled the new Ludlow linecasting machine as the greatest advancement in the printing industry since Mergenthaler's Linotype machine of 1886. The Ludlow, with its accompanying typeface collections, improved a newspaper publisher's competitive edge for advertisers because the Ludlow promised more versatile graphic design that could attract the attention of readers.

Demand for the Ludlow Typograph increased steadily. In 1915, the Mergenthaler Linotype Company of New York became the exclusive sales agent for the Ludlow Typograph Company of Cleveland. Linotype's own *The Linotype Bulletin* published extensive advertisements for the Ludlow machine and described it as a critical part of a complete linotype typecasting system. By 1917, the Ludlow Typograph was in use in the printing departments of dozens of local newspapers and at least fourteen major US newspapers, including the *Brooklyn Eagle*, *Milwaukee Journal*, the *San Francisco Daily News, The Portland Oregonian*, *The Cincinnati Post*, *The Toledo News-Bee*, *The Topeka Daily State Journal*, *The New York Staats-Zeitung* (German) *Indianapolis News*, and *The Philadelphia North American*. The Ludlow system soon became standard among newspaper syndicates These consisted of the Scripps-Howard Newspapers, which operated dozens of papers in the United States from coast to coast; William



Ludlow 21-em matrix stick, matrices and composition



Ludlow Typograph

The Ludlow Typograph machine (above right) was unveiled with much acclaim in 1911. The machine operator selects and arranges individual brass matrices (A) in a special casting stick (B). The prepared line of type is then locked in the machine where it serves as a mold for casting a line of type.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

The

LUDLOW

Typograph

The Greatest Development of the Printing Craft Since the Introduction of the Linotype—San Francisco Daily News

The best proof of the saving in time, labor, and material effected by the Ludlow Typograph is the satisfactory experience of the prominent publishers listed below, some of whom placed repeat orders shortly after purchasing their first machines:

When these recognized leaders bought Ludlows they reduced their floor space and type bills 40 and 90 per cent respectively, and automatically placed their composing rooms on an all-slug basis—the SYSTEM THAT IS ECONOMICALLY RIGHT.

"The 'Company' the Ludlow Keeps"

Laidlaw-Smith, Newark
Gutenberg Press, New York
American Wall Paper Co., Chicago
Continental National Bank, Chicago
W. F. Hall Co., Chicago
Martin Printing Co., Cleveland
E. T. Miller Co., Columbus
Husted Co., Cleveland
Peterson Linotyping Co., Chicago
Montgomery-Ward, Chicago
Postal Sup. & Mfg. Co., Cleveland
Kelley Typesetting Co., Topeka
Fairchild Press, New York
Philadelphia North American
The Brooklyn Eagle
Chicago Post
Lynn Evening Item
Cleveland Press
Chicago News
Indianapolis News
Oklahoma City News
Milwaukee Journal
The Toledo News-Bee
Vancouver Daily Province
The Cincinnati Post
Portland Oregonian
San Francisco Daily News
New York Evening Mail

"Telegraphic Endorsements" is a booklet that outlines the experiences of Ludlow users. Send for your copy.

MERGENTHALER LINOTYPE COMPANY
TRIBUNE BUILDING, NEW YORK

CHICAGO 1100 So. Wabash Avenue — SAN FRANCISCO 646 Sacramento Street — NEW ORLEANS 549 Baronne Street

TORONTO: Canadian Linotype, Limited, 68 Temperance Street

GOOD-BYE GUTENBERG! Farewell Foundry Type. You've Had Your Day! THIS PAPER ALL SLUG SET OR 100% SLUG SET

Pages 25 to 40 — SUNDAY MORNING — DECATUR REVIEW — THE CONSOLIDATED PAPER — Part Three — October 21, 1917. — The Review Composing Room STRICTLY UP-TO-THE-MINUTE THIS PAPER ALL SLUG SET

NOT A SINGLE LINE OF FOUNDRY TYPE IS USED IN THIS EDITION OF THE REVIEW

The First Time the Feat Has Been Attempted on Anything Like Such a Scale — Every Line, Not Only of Reading, but Display Advertising, Headings and Borders as Well

All This Made Possible By the Battery of Ludlow Typographs Just Installed in the Review Composing Room—The Greatest Development of the Printing Craft Since the Linotype.

The Ludlow Typograph was widely adopted during the 1910s in printing offices across the United States and around the world.

Left, the Mergenthaler Linotype Company advertised the Ludlow in its *Linotype Bulletin* (1917). It lists the many newspapers that operated the Ludlow Typograph.

Above, newspapers such as this 1917 issue of the *Decatur Review* (Illinois) announced the end of hand typesetting and switched exclusively to the use of Linotype and Ludlow linecasting machines.

Right, the *Saskatoon Daily Star* was one of four newspapers in Canada to own a Ludlow in 1919.

A WONDERFUL NEW MACHINE IS INSTALLED

Ludlow Typograph Puts The Star Mechanical Dept. in Front Rank

ONLY FOUR LIKE IT IN CANADA

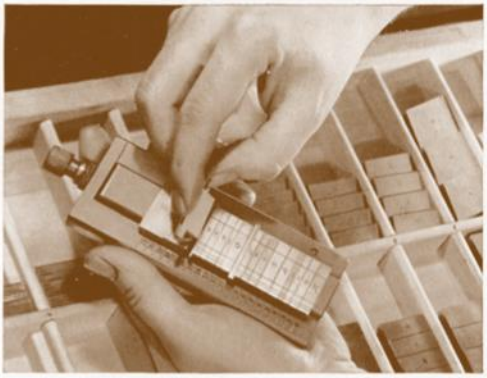
ELIMINATES HAND-SET TYPE ALTOGETHER—GIVES LIMITLESS VARIETY

Ludlow Matrices Are "Gathered"

The direct, efficient Ludlow method of display composition eliminates unnecessary operations. Using single types, the compositor picks up each letter or space one-at-a-time, turns the nick and face of each character into position, inserting each character in the stick one-at-a-time. Contrast this time-wasting practice with the efficient Ludlow way, where the compositor "gathers" broad, flat, easily-handled Ludlow matrices in word or syllable groups. He then inserts these assembled matrices, as groups, in the stick—several-at-a-time. These immediate time-savings help to make for profitable composing room production.

Ludlow Lines Are Quickly Spaced Out

Spacing out a Ludlow line is as easy as assembling. Instead of spaces that are hard to get at, the "ears" of Ludlow spacing units extend beyond those of the letter matrices, and are readily inserted or removed, making the matter of spacing a quick, easy operation. Good Ludlow composition assures proper word-spacing and letter-spacing—also spacing that is visually right between words and letters. With the Ludlow there is no necessity for spacing "tight to lift," because a simple turn of the thumb-screw at the end of the Ludlow stick holds the line of matrices firmly in the machine during the casting operation.

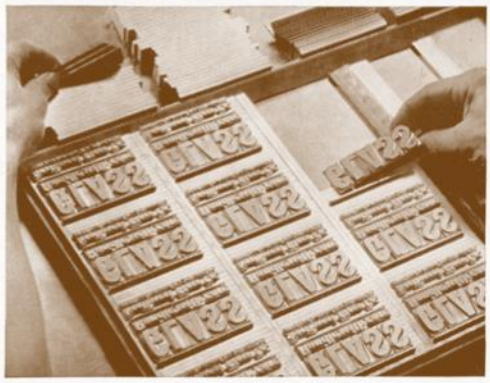


Ludlow Slug-Casting Is Easy

The mechanical simplicity of the Ludlow makes slug-casting practically automatic. The matrix stick is inserted in the machine, and the lock-down lever holds it in place for casting. The casting operation starts with a touch of the lever. Molten metal is forced through the mouthpiece into the matrices, and the finished slug is delivered on the galley at the front of the machine. By automatic repeat-casting, any number of typeface slugs or ruleform slugs may be produced from the same line of matrices. Using a blank slug block, blank slugs also may be produced on the Ludlow in any quantity desired.

Ludlow Slugs Save In Make-up

A Ludlow-set job affords the advantage of handling only sluglines in composition and make-up. There is no danger of "pi" or transposed letters. There are no worn or broken letters to be checked. Italics or scripts offer no broken letter hazards, for in Ludlow composition they are as sturdy as any roman letter. Ludlow sluglines are easily made up into an accurate form with Ludlow-cast blank slugs or with strip material, and once placed in the form and O.K.'d, they are there to stay. The solid, square form minimizes "work-ups" and other pressroom troubles, to the advantage of both compositor and pressman.



The Ludlow Company's 1960 publication Some Reasons Printers Prefer Ludlow offers the above detailed explanation of the benefits and economy of the Ludlow Typograph in typesetting.

Some Reasons Printers Prefer Ludlow (Chicago: Ludlow Typograph Company, [n.d., circa 1960]).

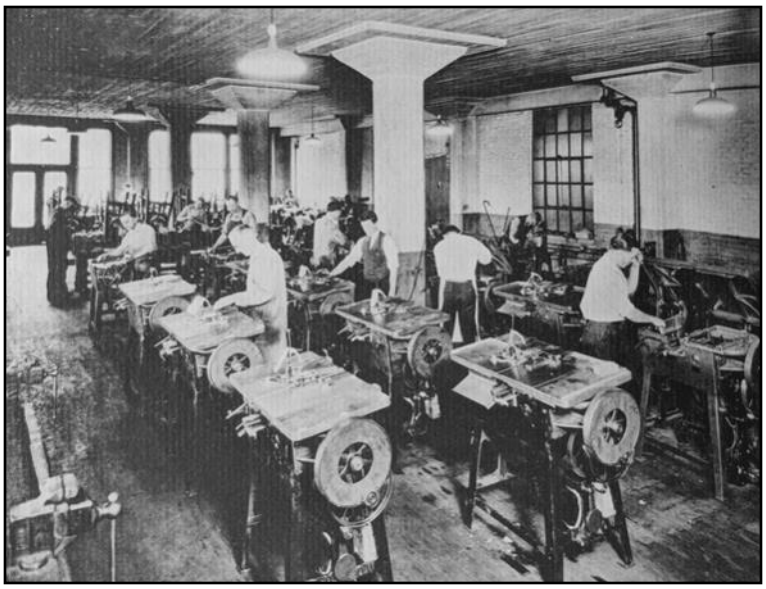
Randolph Hurst's group of dozens of newspapers across the country; the Gannett Group's newspapers in New York State; and the Lee Syndicate, which operated several Midwest newspapers.

While the use of the Ludlow was widely received among newspapers, it was also installed in many other printing offices, such as the Gutenberg Press of New York, the catalog printing office of Montgomery-Ward in Chicago, and the vast printing plant of Chicago's R. R. Donnelley & Sons. In December 1917, the Ludlow Typograph Company reestablished control of its sales from the Mergenthaler Linotype Company and opened an office in Chicago in the Old Colony Building on Dearborn Avenue and Van Buren Street (a designated Chicago landmark). The office then moved to a suite in the Transportation Building at 600 South Dearborn Street, which was close to several of the city's largest printers and printing goods suppliers. By June 1918, Ludlow relocated its headquarters from Cleveland to Chicago and opened the office along with it a new primary production facility in an existing one- and two-story building at Clybourn and Magnolia Avenues, (Block 1).

During the 1920s, the Ludlow Typograph Company continued to expand its physical footprint along Clybourn Avenue as demand for its machines increased. Just as the facility grew, Ludlow continually improved its signature typograph in the 1920s, such as the development of unbreakable italic matrices. At the time, most matrices for italic typefaces were comprised of a rectangular matrix block with a slanted letter etched into it. However, due to varying letter widths, such as the difference between letters "I" and "W", the kerning or the spacing between letters was not always equal or evenly distributed. Ludlow developed slanted, parallelogram-shaped matrices that resulted in perfectly kerned characters.

In 1920, a second line casting machine, the Elrod Strip and Rule Caster, was introduced by Ludlow. The Elrod was invented in 1917 by Benjamin Elrod, a linotype machine operator, to cast blank metal filler strips for rules, leads, and bases for printing plates. The continuous cast strips were more efficient for composing layouts than individual metal slugs. Once Elrod's machine was perfected, he sold his design to Ludlow, which marketed the Elrod as a complementary piece of equipment for any printer's linecasting department and composing room.

Ludlow was not only a manufacturer of efficient machines, but it was also a design house with a full art department that was tasked with designing and creating typefaces for the use with the company's machines. The 1920s marked a prolific period of typographic development that was felt across the US. High volume printing made possible by the linotype machine had led to dozens of new publications, which in turn created new advertising opportunities. Typography in advertising became a critical component of the total graphic effect in printed media. In addition, Chicago was becoming a center of the printing industry in the United States, and had major printing houses, mail-order catalog printers, and magazines that all took advantage of the city's geographic location and accessibility to transportation, which established advantageous bulk shipping rates. In order to differentiate advertisements and to present the most modern face to consumers, advertisers and publishers started seeking new typefaces and modern interpretations of the classics. Ludlow's director of advertising and typography, Douglas C. McMurtrie, marketed typefaces as a "style product" that companies could choose from to best present their values and to appear contemporary to their customers. The company published type specimen books that displayed the range and variety of Ludlow's typefaces and presented ways that type could be graphically combined with images, ornament, and color to create a graphically



At left is a circa 1930 view showing the factory space where Ludlow Typograph machines were assembled.

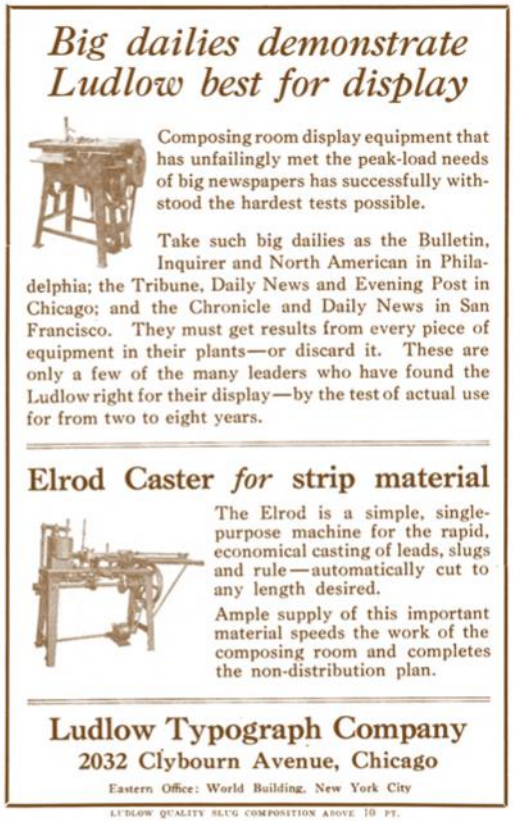
Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

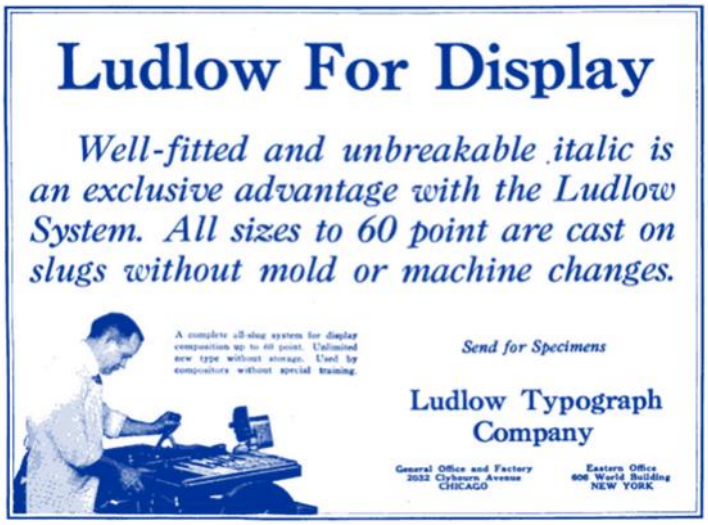
At right is a circa 1930 view of part of the matrix department showing a row of precision punch machines that were used to emboss characters on brass matrices.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

At left is a circa 1930s view of the Ludlow Typograph Company headquarter offices in Block 4. At far left in the image is a portrait of company founder William A. Reade.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.





At left is an advertisement for the Ludlow company's typograph and Elrod machines. The Elrod was introduced in 1920 for casting blank slugs used in separating lines of type.

Above, Ludlow Typograph machines excelled at casting strong, evenly-spaced lines of italicized type.

Left: *The Fourth Estate*, April 22, 1922: 21; above: *The Inland Printer*, March 1921: 737.

distinctive message. Type design at Ludlow's Clybourn Avenue headquarters and factory was led by two significant designers: Douglas C. McMurtrie and Robert H. Middleton.

Ludlow's Typeface Designers: Douglas C. McMurtrie and Robert H. Middelton

Douglas Crawford McMurtrie (1888-1944) was a historian and scholar of typeface. He was born in New Jersey and attended the Massachusetts Institute of Technology before serving as a printing manager at several publishing houses, including *Condé Nast Press* in New York where he designed the iconic typeface used for *Vanity Fair* from 1923 to 1936 . He was editor of the prominent *Ars Typographica* magazine and helped form the Continental Type Founders Association. In the 1920s, he moved to Chicago, where he joined the *Cuneo Press* as its typographic director. He entered Ludlow in 1927 as the company's advertising manager and was tasked with developing and advertising typefaces to Ludlow customers. One of his designs in 1928 was the sans serif typeface Ultra-Modern, which was visually defined by its dynamic thick and thin weights . The design reflected some aspects of the streamlined avant-garde typography then being developed in Europe, yet it was more expressive and featured more ornamental flair.

McMurtrie deftly approached the typographic arts from his background as a historian of printing technology and typography. He published over 400 books on the topic, including *The History of Typefounding in the United States* (1925), *Type Design* (1927), *Modern Typography*

and Layout (1929), and the two-volume set *History of Printing in the United States* (1936). In addition, McMurtrie contributed to greater changes in advertising by raising awareness of the potential visual influence of typography. He regularly presented lectures as an expert on typography to publishers, advertisers, and other organizations across the country on the benefits and practice of effective typograph and graphic design. A lecture he titled "Typography that Sells Merchandise" was one of his most popular. McMurtrie's aesthetic vision and historical perspective likely influenced Ludlow's second significant typeface designer, Robert Middleton.

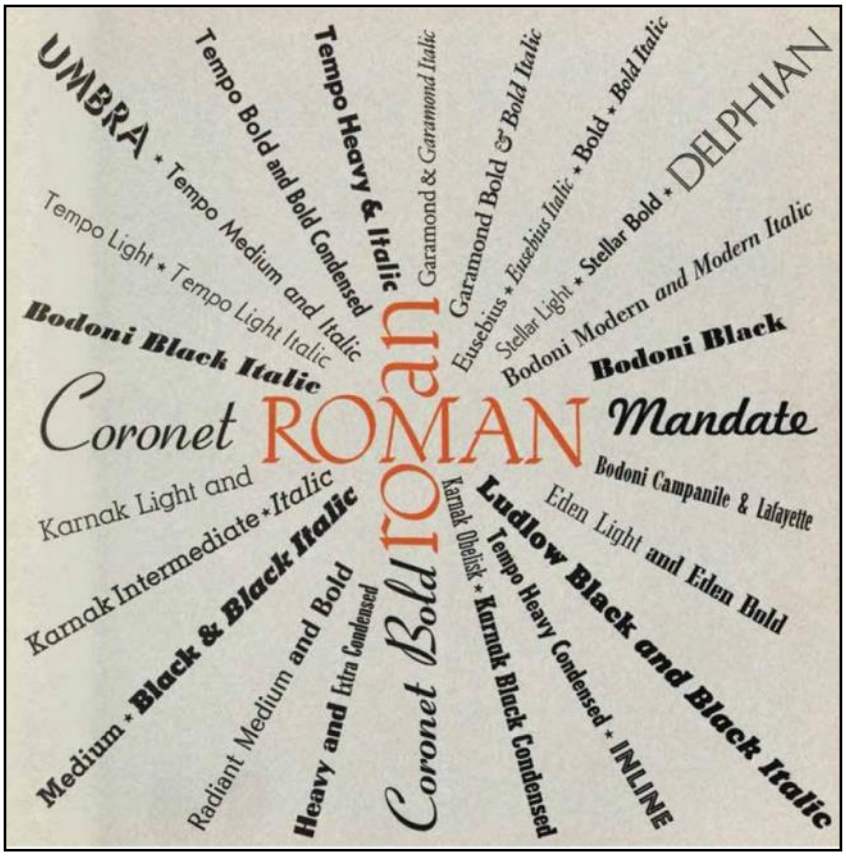
Robert Hunter Middleton (1898-1985) was hired on a temporary basis in 1923. Middleton was born in Scotland and arrived in Alabama with his family at age 10, before moving to Eldorado, Illinois. Middleton became an aspiring artist and studied at the Chicago Academy of Fine Arts before transferring to the School of the Art Institute, where he became a student of typographic arts professor Ernst F. Detterer (1888-1947). Detterer was commissioned by Ludlow to develop a new modern typeface based on a 15th century design. Middleton assisted with the development of the new typeface for Ludlow, which became known as Eusebius. From 1933 to 1971, Middleton directed the facility and controlled the quality and the Ludlow type library. He designed over 100 typefaces and created both artistic fresh alternatives to established designs, as well as designing completely new styles. The company's Tempo (1930), Karnak (1931), and Record Gothic (1956) families of typeface were interpretations of historical designs, while Middleton's interpretation of the Garamond (1929) and Bodoni (1930) typefaces are recognized as scholarly variations of popular typefaces. Middleton's modern designs included the calligraphic sans typeface Stellar (1929), which preceded the similar typeface "Optima" by two decades. His design for Radiant (1938) was another sans serif typeface that at the time had no historical precedent. New typefaces were released regularly, and newspaper and magazine printers adopted them for use throughout their publications. Middleton's typefaces can be seen in all manner of advertisements, headlines, and other text that needed to stand out in publications from the 1920s through the 1970s.

The wide variety of typefaces designed by both Robert Hunter and Douglas McMurtrie made the Ludlow Typograph Company very successful and profitable. The company's profits were primarily made through the sale of brass matrix sets of its typeface collections. Each new typeface was sold as a complete set of matrices in a variety of point sizes to publishers for use with existing Ludlow Typograph machines. In addition to matrix collections with the English language alphabet, Ludlow also produced special characters for an array of foreign languages around the world, which allowed the company to compete globally.

By the late 1920s, Ludlow Typograph machines were used in every major newspaper office in Chicago. In addition to US newspapers both big and small, Ludlow machines also became the standard of international newspapers, such as the *London Daily Mail*, *The Manchester Guardian*, the *Glasgow Herald*, the *Edinburgh Scotsman*, the *Yorkshire Post of Leeds*, and the *Vancouver Daily Province*. Ludlow opened branch offices in every major region of the globe to serve international printers. In 1929, the company saw its highest profits. Although the US had just entered the Great Depression, Ludlow remained a profitable enterprise and even contemplated construction of a large new factory on the southeast corner of Elston Avenue and Logan Boulevard 1.5 miles to the northwest from its Clybourn Avenue facility. However, for reasons not determined, the Elston Avenue plant was never built.

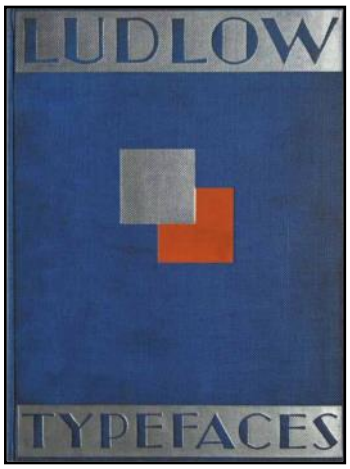
Above: Ludlow typeface designers Robert H. Middleton (left) and Douglas C. McMurtrie (right) review a typeface sample at the Ludlow Typograph Company Building on Clybourn Ave.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.



Robert Middleton produced this wheel of Ludlow typefaces for the 1940 annual exhibition of *27 Chicago Designers*.

The Newberry Library, Chicago.



Circa 1933 Typeface Catalog.

The Newberry Library, Chicago.

Example of Umbra typeface.

InternetArchive.org

Example of McMurtrie's Ultra-Modern typeface (1928). InternetArchive.org

Later History: 1960s to the Present

The Ludlow Typograph Company continued to expand its plant and remained a major supplier of linecasting machines as well as typeface matrix sets through the 1960s when phototypesetting technology began to replace hot metal linecasting in printing. Despite the technological shift, Ludlow remained a viable company into the 1970s by producing a range of products. For the printing industry, Ludlow entered the computing industry by producing an automated typewriting machine called Swiftape that created a punched paper tape that could be read by a computer. The system provided a variety of automated processes for page composition. It was quickly adopted by several leading newspapers and printers across the country. Ludlow also introduced a phototypesetting machine called Brightype, but it was not as popular as competing machines.

Ludlow continued to manufacture the Ludlow Typograph and brass typeface matrix sets for rubber stamp manufacturers. In the mid-1970s, the Ludlow Typograph Company moved to 5976 North Northwest Highway (extant) in the Norwood Park neighborhood on far northwest side Chicago's. The Ludlow Typograph Company remained at this location until the company's closure in the mid-1980s. Ludlow's London office remained in operation under the name Ludlow Industries Ltd. until it was dissolved in 2003.

The Ludlow Building was acquired in 1976 and transformed into the flagship location of the Anixter Center, a social service agency. The Anixter Center was founded in 1919 by thirteen women as the Douglas Park Jewish Day and Night Nursery. The organization originally served as an orphanage but in 1956 the agency's mission changed to serve people with disabilities. The former Ludlow Building served as the agency's main location where individuals with disabilities could come to work in workshops and/or to receive various services. In 2020, the Anixter Center began shifting its services to smaller, community-oriented sites across the city and sold the Clybourn Avenue building.

History of the North Branch Industrial Corridor

The industrialized area known as the North Branch Industrial Corridor developed in the mid- to late-19th century alongside primary transportation routes that included rail lines and the North Branch of the Chicago River. The land on the east side of the river was lightly settled by the 1860s with truck farms that supplied vegetables, especially celery, to markets in Chicago. One of the area's largest landowners was businessman and railroad builder Joseph E. Sheffield (for whom Sheffield Avenue was named). One of his large tracts, bounded by Asylum Place (later named Webster Street) on the south, Racine Avenue on the east, Clybourn Place (later named Cortland Street) on the south, and Southport Avenue on the west, was known as Sheffield Nursery, which propagated bedding plants, landscaping trees, and flowers for winter blooming. The neighborhood (today the western edge of the Lincoln Park community area) remained largely agricultural until the 1860s when blocks of small frame workers cottages began to be built in the area east of Clybourn. These homes were bought, leased, or rented by German and later Scandinavian immigrants who arrived to work at new factories that were built along the North Branch. After the great fire of 1871, the construction of cottages and brick houses significantly increased.

The land along the North Branch River, between Clybourn and Elston avenues, developed into a significant industrial area by the late 19th century, and continued to grow well into the 20th

century. Main streets and rail lines throughout the corridor were densely lined by lumber, stone, coal, and sand yards, as well as tanneries, shipyards, distilleries, brick yards, and several factories by the 1890s. Access to water transportation and to the Chicago, Milwaukee & St. Paul Railroad and the Chicago & North Western Railroad lines were attractive to manufacturers. In addition, the surrounding neighborhoods provided an ample pool of workers. Around the turn of the 20th century iron foundries, such as A. Finkl & Sons Company, were drawn to the area. Industrial growth was so great that in 1902 the original Clybourne Place (later Cortland Street) swing bridge was replaced with the extant trunnion-bascule bridge (a designated Chicago Landmark) in order accommodate increasing road and river traffic. By the 1910s, the North Branch of the Chicago River was a densely packed industrial corridor with hundreds of manufacturers representing dozens of industries. Earlier industries were joined by producers of heavy machinery, electrical equipment, elevators, "plastic paint," and various part-casting foundries. Among these producers was the Tonk Manufacturing Company, which specialized in piano stools and wood ornament for furniture. Tonk had a large plant on Magnolia and built what is today part of Block 1 on the northwest corner of Clybourn in 1913. In 1918, the Ludlow Typograph Company chose to relocate its headquarters and production to this building, which it expanded and called home for several decades.

The North Branch remained one of Chicago's important industrial centers though the 1970s, when many companies either closed or moved operations. In 2017, the Chicago Plan Commission adopted the North Branch Framework Plan to guide the future development of the North Branch Industrial Corridor. As part of the plan, approximately sixty industrial buildings, including the Ludlow Building, were identified as "character buildings" that represent the distinctive industrial history of the North Branch Corridor.

Architects of the Ludlow Typograph Company Building

The Ludlow Typograph Building was continually expanded over time as the company grew. Notable architect Alfred S. Alschuler designed the building's first block in 1913, originally for the Tonk Manufacturing Company. Four later blocks were added for the Ludlow Typograph Company. Architect William C. Jones designed blocks 2 and 3 in 1918 and 1922, while architect Edward A. Nitsche designed blocks 4 and 5 in 1928 and 1948.

Alfred Samuel Aslchuler (1876-1940)
Alfred S. Alschuler designed Block 1 of the Ludlow Typograph Building, which served as a model for later expansions of the building by other architects.

Alschuler was best known for his work in and around his hometown of Chicago, although as a nationally known designer, his work can be found scattered across the country. Born to German immigrant parents in Chicago, Alschuler earned his bachelor's and master's degrees in architecture from the Armour Institute of Technology (now the Illinois Institute of Technology) and spent a year studying at the Art Institute of Chicago. In 1899, he began his professional career in the offices of architects Dankmar Adler and Louis H. Sullivan.

After Dankmar Adler's death in 1900, Alschuler left the firm and worked for Samuel Atwater Treat until opening his own independent practice in 1907. Alschuler's firm would become one of the region's largest in the 1910s and 1920s. Although a specialist in the design of industrial and commercial buildings, Alschuler received a wide array of commissions including office

towers, synagogues, libraries, automobile showrooms, and hotels. He developed a number of patents for innovations in construction techniques, including a two-story elevator system for distributing packages in mail order houses; specifications for metal lath construction; a system for constructing concrete columns supported on steel columns in multi-storied buildings; and a method of roof construction. Alschuler was the first architect in Chicago to use reinforced concrete and was a leader in the use of multicolored terra cotta and standardized office-building units. Alschuler was active in the field until his death on June 11, 1940, nearing the age of 64.

Although Alschuler's work ranged among various architectural styles, examples of architectural modernism stand out among his most notable work. His 1926 design for a manufacturing plant for the Florsheim Shoe Company at 3963 West Belmont Avenue (a designated Chicago Landmark), is a bold example with sleek, rectilinear design formed by its exposed concrete structure. The Benson & Rixon Department Store at 230 South State Street in Chicago, a 1937 Art Moderne-style design with smooth terra cotta cladding, is another important work by Alschuler. One of his best-known works is the London Guarantee & Accident Building (1923, a designated Chicago Landmark) at 360 North Michigan Avenue, which is a 22-story Classical Revival-style building featuring a concave façade topped by a cupola modeled after a Greco-Roman lantern.

Beyond Alschuler's many downtown works, the architect was also responsible for many industrial buildings across Chicago, several of which were tied to the printing industry. A contemporary of the initial Ludlow Building Block 1 is the Donohue & Henneberry printers and publishers building annex at 227 to 233 South Dearborn Street from 1913 (a designated Chicago Landmark part of the Printing House Row District). During the 1920s, Alschuler designed four large concrete reinforced printing buildings for the massive complex of the Cuneo-Henneberry Printing Company along Grove Street near 22nd Street (demolished). In 1921, he designed the extant manufacturing building for the Columbia Colortype Building at 2032 South Calumet, which was later home to Chess Records. Two years later, he designed the extant brick and terra cotta trimmed printing building for the Atwell Printing Company at 221 East Cullerton Street. Other industrial buildings include several buildings in the Central Manufacturing District (listed in the National Register), such as buildings for Doorley Brothers/ Chicago Curtain Stretcher Co. at 1121 West 37th Street in 1909, Pfannmueller Engineering Co at 3701 South Ashland Avenue in 1909, Southern Cotton Oil at 1464 West 37th Street in 1909, and a storage building for Albert Pick & Co. at 1200 West 35th Street in 1911, among many others.

In addition to notable commercial and industrial buildings, Alschuler also designed several synagogues across Chicago. One example is the 1912 Sinai Congregation in the Grand Boulevard community area at 4600 South Dr. Martin Luther King Jr. Drive (now the Mt. Pisgah Missionary Baptist Church Complex, a designated Chicago Landmark).

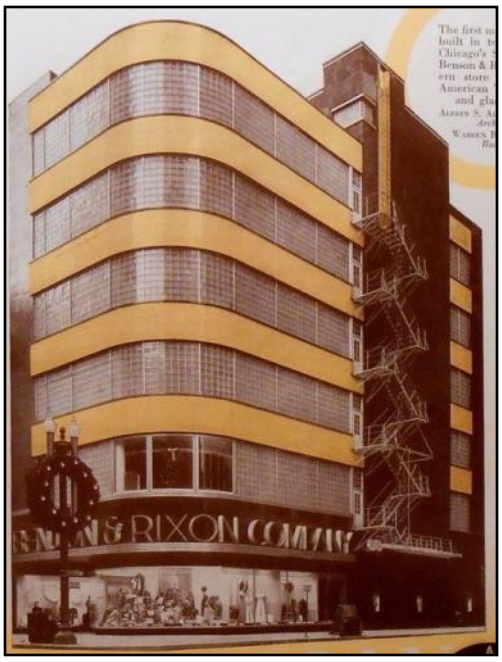
William C. Jones (1868-1930)
Architect William C. Jones designed Block 2 in 1918 and Block 3 in 1922 for the Ludlow Typograph Company. Jones was born in Cincinnati, Ohio and moved to Chicago in 1890, becoming associated with the firm of Holabird & Roche. In 1894, Jones partnered with architect Gilbert Marshall Turnbull (1856-1919) under the name Turnbull & Jones. The firm designed homes, commercial blocks, schools, government buildings, factories, and churches across the Midwest. By the mid-1910s Jones was working alone and had become well known for his ability to complete projects within budget. He was especially known for his church and parish house designs. Three extant local buildings include the Gothic Revival style Saint Peter's

Alfred S. Alschuler (1876-1940) designed the initial portion of Block 1 of the Ludlow Typograph Company Building. His firm grew to become one of the largest in the region and designed a wide range of building types in a variety of styles.

Alschuler also designed plants for several printing firms.

The London Guarantee & Accident Building at 360 N. Michigan Ave. was built in 1923 and is a Chicago Landmark.

ChicagoPC.info

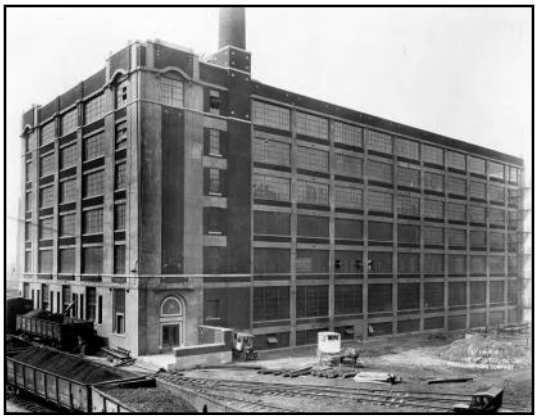


The Art Moderne style Benson & Rixon Department Store was built in 1937 at 230 S. State St. It is a Chicago Landmark.

American Terra Cotta Company Advertisement, Ebay.

The non-extant printing building of the J. F. Cuneo Press was built in 1921 at 2242 S. Grove St.

Northwest Architectural Archives, University of Minnesota.



Above: In 1921, Alschuler designed a manufacturing building for the Columbia Colortype Company on the northwest corner of 21st St. and Cullerton Ave.

Northwest Architectural Archives, University of Minnesota.

The extant Atwell Printing Company Building was built in 1923 at 221 E. Cullerton St.

Northwest Architectural Archives, University of Minnesota.

Block 1 of the Ludlow Building was built in stages. The first floor and part of the second floor were completed in 1913 and designed by architect Alfred S. Alschuler. An addition including the third floor was built in the 1950s. This view is looking south along Clybourn Ave.

Blocks 2 and 3 were designed by architect William C. Jones. These identical blocks were completed in 1918 and 1922.

Blocks 4 was designed by architect Edward A. Nitsche in the same style, using the same cladding materials as Alschuler's original 1913 design for Block 1. Blocks 4 was completed in 1928 and is the tallest of the Ludlow Building's five blocks.

Episcopal Church Parish House at 623 West Belmont Avenue in Chicago (1926, a designated Chicago Landmark); the Neo-Classical style First Church of Christ Scientists in Rock Island, Illinois (1914); and the Tudor Revival style Deer Path Inn in Glencoe, Illinois (1923).

Edward Adolph Nitsche (1891-1976)
Edward A. Nitsche designed the last blocks of the Ludlow Typograph Building. He was engaged to design Block 4 in 1928 and was again selected by Ludlow to design Block 5 in 1948. Nitsche was born in Chicago. One of his jobs was as a draftsman at the Jos. C. Llewellyn Company, a Chicago architectural firm that designed a range of industrial, commercial, and residential buildings in Chicago and across the Midwest. Nitsche was briefly employed by the Rock Island, Illinois architectural firm of Cervin & Horn, where he met architect William Theodore Braun (1887-1954). In 1920, Braun and Nitsche opened an office together in Chicago in the Steinway Hall, an office building that contained the studios of several significant architects that helped shape the Prairie School. During the 1920s, Nitsche designed plans for residential buildings, including concepts for affordably remodeling older homes with modern styles. His designs were frequently published in the *Chicago Daily Tribune* alongside articles by Louise Bargelt. Nitsche's plans for the Ludlow Building's Block 4 were completed in 1928. By the 1940s, Nitsche became an architect with the Chicago District of the Army Corps of Engineers, which he served until 1956. During his service with the Army Corps, he designed dozens of industrial buildings, including a plant for the Litho Equipment and Supply Company in 1946 (1001 East 87th Street, extant) and Block 5 of the Ludlow Building in 1948.

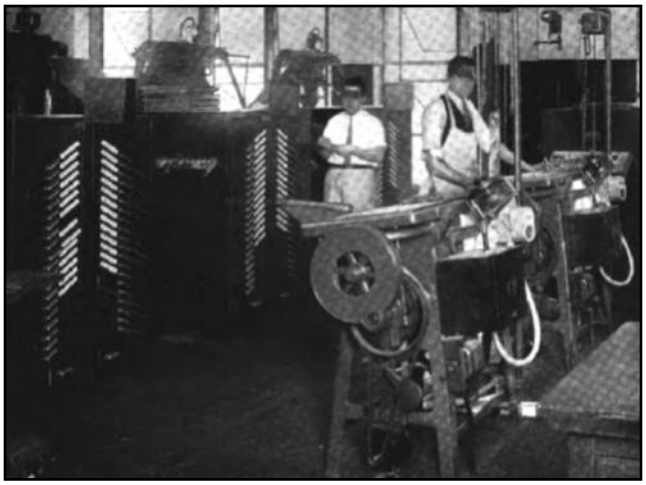
Block 5 was designed by architect Edward A. Nitsche and was completed in 1948. The north corner of the building was built at an angle to follow an existing railroad right-of-way

Newspaper Offices with the Ludlow Typograph

The Ludlow Typograph was widely adopted during the 1920s and remained in use as a critical part of the composition and printing process at printing companies, magazines, and newspapers across the United States and around the world through the 1960s when phototypesetting became standard.

At right is a view of the linecasting room of the *Birmingham News* (Birmingham, Alabama), which installed Ludlow Typographs and matrix storage cabinets in 1925.

***Newspaper Experience with the Ludlow*, 1930.**

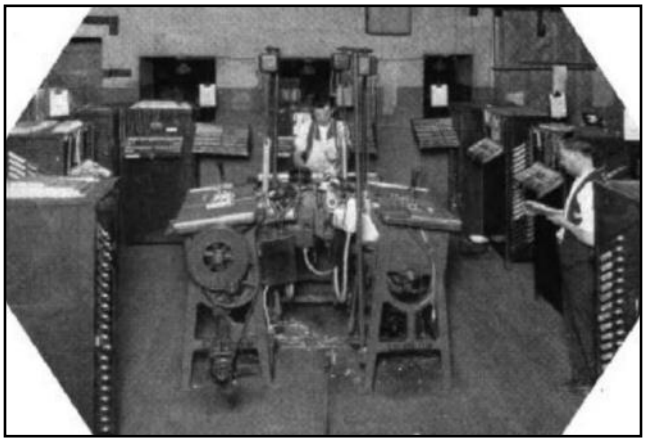


At left is the Ludlow Department of the *Cleveland News* in circa 1929.

***Newspaper Experience with the Ludlow*, 1930.**

At right is the linecasting room *The New York Sun* in circa 1929. Ludlow also outfitted several other major New York City newspapers with Ludlow Typographs and matrix cabinets by the late-1920s.

***Newspaper Experience with the Ludlow*, 1930.**



Criteria for Designation

According to the Municipal Code of Chicago (Sections 2-120-620 and -630), the Commission on Chicago Landmarks has the authority to make a preliminary recommendation of landmark designation for an area, district, place, building, structure, work of art, or other object with the City of Chicago, if the Commission determines it meets two or more of the stated "criteria for designation," as well as possesses a significant degree of historic integrity to convey its significance.

The following should be considered by the Commission on Chicago Landmarks in determining whether to recommend that the Ludlow Typograph Company Building be designated as a Chicago Landmark.

Criterion 1: Value as an Example of City, State, or National Heritage

Its value as an example of the architectural, cultural, economic, historic, social, or other aspect of the heritage of the City of Chicago, the State of Illinois, or the United States.

- The Ludlow Typograph Company Building is significant in Chicago's history for its association with the printing industry, a significant aspect of the city's economic heritage that placed Chicago at the center of American book, magazine, catalog and periodical publishing. The Ludlow Company was a major supplier of printing equipment and an influential designer of typeface that was used by printers in Chicago, nationally and globally.
- The Ludlow Typograph Company Building is significant for its association with the Ludlow Typograph Company, which occupied and expanded the building from 1918 until 1974. The building served as Ludlow's international headquarters for sales, manufacturing, and typeface design. Over the course of the company's history, the building was expanded on Clybourn Avenue to accommodate greater production capacity, with four consecutive blocks and two significant upper floor additions.
- The Ludlow Company played a significant role in the printing industry as a supplier of linecasting machines for large-size type. The Ludlow Typograph machine produced cast lines of large-size type that the popular Linotype could not produce. The Ludlow and Linotype machines became standard equipment in printing departments across the country and around the world. They remained a critical part of the composition process until hot metal typesetting was replaced by phototypesetting in the 1970s.
- Ludlow made significant contributions to the typographic arts, specifically through the creative genius of two of its longtime typeface designers, Douglas C. McMurtrie and Robert H. Middleton, who influenced graphic design in advertising and in the overall publishing industry. Through their contributions, Ludlow regularly introduced new typefaces that gave publisher's the opportunity to create visually distinctive graphic compositions that would attract readers.

Criterion 3: Significant Person

Its identification with a person or persons who significantly contributed to the architectural, cultural, economic, historic, social, or other aspect of the development of the City of Chicago, State of Illinois, or the United States.

- The Ludlow Typograph Company employed two prominent typeface designers who supplied the company with dozens of significant typeface collections that were engraved

on brass matrices for use in Ludlow Typograph machines. The designers were Douglas C. McMurtrie and Robert H. Middleton.

- Typeface designer and printing historian Douglas C. McMurtrie (1888-1944) was a nationally-renowned expert on printing and typography. He published over 400 books on printing and typography and designed some of Ludlow's iconic typefaces, including the visually dynamic sans serif typeface "Ultra-Modern." McMurtrie also designed the typeface used by Condé Nast Press in New York for its national publication *Vanity Fair*.
- McMurtrie's aesthetic vision for typographic design made him an influential figure in the printing and advertising industries. He regularly presented lectures to publishers, advertisers, newspaper publishers, and others in the printing industry on the benefits of and need for effective typographic design. His vision and influence helped raised the significance of typographic arts in graphic design, which contributed to a greater shift in advertising.
- Typeface designer Robert H. Middleton (1898-1985) was employed at Ludlow from 1933 to 1971. Middleton was an accomplished typographic artist and is credited with designing over 100 typefaces that encompassed both artistic alternatives to established designs as well as completely new and modern styles. His designs, including Ludlow Garamond (1929), Stellar (1929), Bodoni (1930), Tempo (1930), Karnak (1931), Radiant (1938), and Record Gothic (1956), were part of Ludlow's collection of typefaces that were adopted by publishers in all manner of visually distinctive advertising, article headlines, and other text in publications from the 1920s through the 1970s.

Criterion 4: Exemplary Architecture

Its exemplification of an architectural type or style distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

- The Ludlow Building exemplifies the Commercial Style of architecture in Chicago as applied to an industrial building. Architect Alfred S. Alschuler's design reveals the influence of movements, such as the Prairie School, that developed in Chicago during the early 20th century.
- The building is utilitarian, but its overall form and repeating layout is distinguished by a high-quality design that made it possible for future expansion both horizontally and vertically as its occupant required additional production space. The incredibly flexible design allowed the building to retain a cohesive visual identity despite continued additions.
- The Ludlow Building is finely crafted with traditional building materials. The exterior is of multi-hued, red-toned face brick with Bedford limestone trim.

Criterion 5: Important Architect

Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Chicago, State of Illinois, or the United States.

- The Ludlow Building's original Block 1 (2028-38 North Clybourn), which set a precedent for all future additions and expansions of the building, was designed by Alfred S. Alschuler, one of Chicago's most prominent early 20th century architects. A prolific architect, Alschuler specialized in commercial and industrial architecture, but he designed a wide range of structures throughout his career, including hundreds of public

Above: Looking south along Clybourn Avenue circa 1928, showing Blocks 1 through 4 of the Ludlow Typograph Company Building. The same view is shown below in 2021.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

buildings, synagogues, apartment buildings, and utilitarian manufacturing and storage buildings.

- Alschuler is significant in Chicago architectural history for his designs of several preeminent synagogues, department stores, office buildings, and industrial plants. His works include several significant downtown buildings, including the Benson & Rixon Department Store (1937, 230 South State Street) and the London Guarantee & Accident Building (1923, 360 North Michigan Ave., a designated Chicago Landmark). In addition, Alschuler was a prominent designer of industrial and manufacturing buildings, such as the Ludlow Building. Industrial examples of Alschuler's work include the Florsheim Shoe Company building at (1926, 3963 West Belmont Ave.) and the Atwell Printing Company (1923, 221 East Cullerton Street).
- The Ludlow Building is only one of several manufacturing buildings designed by Alschuler that is associated with the printing industry in Chicago. Alschuler's most prominent design for a Chicago printer was the non-extant large complex for the Cuneo-Henneberry Printing Company along Grove Street near 22nd Street. An extant example is the Donohue & Henneberry printers and publishers building annex at 227 to 233 South Dearborn Street from 1913 (a designated Chicago Landmark).

Integrity Criteria

The integrity of the proposed landmark must be preserved in light of its location, design, setting, materials, workmanship, and ability to express its historic, community, architectural, or aesthetic interest or value.

The Ludlow Typograph Company Building retains very good architectural integrity. Character-defining features, including overall form, location of fenestration, location of entrances, and masonry remain on the main northeast elevation. Generally, changes to the complex are largely reversible. These include non-historic windows. All exterior doors and garage doors are non-historic replacements. Other alterations include the addition of a loading dock on the northwest elevation of Block 5 in the 1960s and the opening of an entrance doorway on the northeast elevation of Block 2.

Despite these changes, the Ludlow Typograph Company Building retains its ability to express its history as the long-time headquarters and production plant of a leading Chicago company, which was a significant supplier of printing equipment and designer of typeface for the printing industry. As utilitarian structures, industrial buildings were often altered, improved, and expanded to accommodate changing needs as new materials and technologies were developed; the Ludlow Building is no exception.

Significant Historical and Architectural Features

Whenever an area, district, place, building, structure, work of art, or other object is under consideration for landmark designation, the Commission on Chicago Landmarks is required to identify the "significant historical and architectural features" of the property. This is done to enable the owners and the public to understand which elements are considered most important to preserve the historical and architectural character of the proposed landmark.

Based upon its preliminary evaluation of the Ludlow Typograph Company Building, the Commission staff recommends that the significant features be identified as:

All exterior elevations, including rooflines, of the building.

Examples of Ludlow's wide variety of typefaces that were available for use with the Ludlow Typograph around 1960. Many of these were well represented in publications of all kinds across the country and internationally.

Some Reasons Printers Prefer Ludlow (Chicago: Ludlow Typograph Company, [n.d., circa 1960]).

Selected Bibliography

"Advertisement for bonds issued by Charles W. Folds & Co., Inc," *The Chicago Daily Tribune*, January 25, 1924: 25.

"Advertisement for the Mergenthaler Linotype Company," *The Linotype Bulletin*, September 1917: 33.

"Advertisement for the Mergenthaler Linotype Company," *The Linotype Bulletin*, November 1917: i.

"A Kansas in New York. Chapter XXVI: Machinery for Greater Efficiency—II," *The Topeka Daily State Journal*, June 10, 1918: 4.

Allison, Lara. "Ludlow Typefaces," in *Art Deco Chicago: Designing Modern America*, edited by Robert Bruegmann. Chicago: Chicago Art Deco Society, 2018.

"A Wonderful New Machine is Installed," *Saskatoon Daily Star* (Saskatoon, Canada), May 19, 1919: 3.

Chase, Al. "Buys Site for Big Plant on North Branch," *The Chicago Daily Tribune*, December 20, 1929: 25.

_____. "Chicago to Have World's Largest Printing Plant," *The Chicago Daily Tribune*, July 24, 1921.

"Chicago, ILL," *Engineering News*, October 30, 1913.

"Chicago," *The Iron Age*, November 21, 1918: 1308.

"Chicago," *The Iron Age*, December 5, 1918: 1430.

"Classified advertisement for Sheffield Nursery," *The Gardener's Monthly and Horticultural Advertiser*, April 1965: 2.

Consuegra, David. *Classic Typefaces: American Type and Type Designers*. New York: Allworth Press, 2004, 2011.

"Death of Max Tonk," *The Furniture Maker and Artisan*, September 1914: 147.

Douglas C. McMurtrie Papers, The Newberry Library, Chicago.

Dunham, Fred H. "History and Development of the Ludlow Typograph," in The *Genesis of Machine Typesetting*, Frank M. Sherman, editor. Chicago: M & L Typesetting & Electrotyping Company, 1950.

"Factories," *The Economist*, April 23, 1921: 960.

"Factory Bldg," *The American Contractor*, September 3, 1913: 56.

Haley, Allan. *Typographic Milestones*. New York: John Wiley & Sons, Inc., 1992.

Historic Chicago Building Permits, University of Illinois.

Inventory of the Douglas C. McMurtrie Papers, 1850-1944, Bulk 1925-1944, The Newberry Library, site: https://mms.newberry.org/xml/xml_files/McMurtrie.xml, accessed: May 28, 2021.

Karch, R. Randolph. *The Operation of the Ludlow Typograph*. Rochester, New York: Rochester Athenaeum and Mechanics Institute, 1939.

"Ludlow Factory Enlarges Its Capacity," *The Fourth Estate*, April 22, 1922: 22.

"Ludlow Typograph Company Opens Chicago Office," *The Inland Printer*, December 1917: 394.

"Ludlow Typograph Co. Profits Best in History," *The Chicago Daily Tribune*, February 14, 1930: 20.

Newspaper Experience with the Ludlow, A Record of Achievement. Chicago: Ludlow Typograph Company, 1930.

"New Typograph Machine," *The Detroit Free Press*, July 14, 1907: 27.

"Not a Single Line of Foundry Type is Used in this Edition of the Review," *Decatur Review* (Decatur, Illinois), October 21, 1917: 25.

Peters, James. *Goldblatt Bros. Department Store*, Department of Planning and Development, City of Chicago, Final Landmark Recommendation, April 2, 1997.

Robert Hunter Middleton Papers, The Newberry Library, Chicago.

Rollins, Carl Purington. "American Type Designers and Their Work at the Lakeside Press Galleries of R. R. Donnelley & Sons Company, Chicago, Illinois," *Print, A Quarterly Journal of the Graphic Arts*, volume 4, 1947: 18, site: www.InternetArchive.org, accessed: May 27, 2021.

Sanborn Fire Insurance Company, *Atlas of Chicago*, Volume 2, Sheet South 31, Fire Insurance Map Collection, Geography and Map Division, Library of Congress.

Specimen of Types in General Use at the Condé Nast Press. Greenwich, Connecticut: Condé Nast Press: 1923.

Swiftape: Practical Answer to High-Speed Justified Tape Production. Chicago: Ludlow Typograph Company, [n.d. circa 1960].

The Brightype Method. Chicago: Ludlow Typograph Company, 1960.

The Liberal Democrat (Liberal, Seward County, Kansas), July 12, 1917: 1.

"The Ludlow Typograph," *The Linotype Bulletin*, November 1915: 77.

Theory and Practice of Composition. Washington, D. C.: United States Printing Office, 1950.

Tonk, William. *Memoirs of a Manufacturer*. New York: Presto Publishing Co., 1926.

"Typograph Office Moves," *The American Printer*, June 5, 1918: 64.

Various patent records, Alfred S. Alschuler Collection at the Spertus Institute Ashler Library.

Wicklund, Matthew M. *Saint Peter's Episcopal Church and Parish House*, Department of Planning and Development, City of Chicago, Final Landmark Recommendation, July 12, 2018.

William A. Reade: 1866-1930. Chicago: Privately Printed, 1930.

Williams, Fred. "The Ludlow Typograph," *Type & Press*, Fall 1984.

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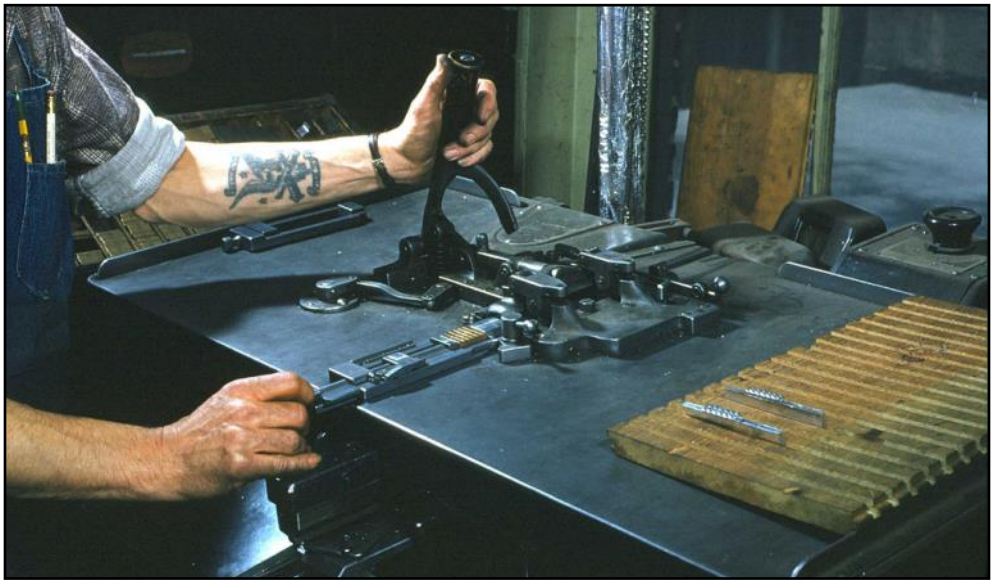

Specialized typograph operators used the Ludlow Typograph to cast solid lines of type from selected matrices arranged in Ludlow casting stick.
BritishLetterpress.co.uk