



# ALUMINUM ARTISANS OF PITTSBURGH

By Dennis Wildnauer



**O**n July 31, 1888, a meeting of a small group of men in Pittsburgh set in motion a chain of events that created an entirely new industry, ultimately affecting the lives of millions of people.

Captain Alfred E. Hunt gathered in his parlor with George H. Clapp, H.W. Lash, Millard Hunsicker, and Robert J. Scott to form what would become the Pittsburgh Reduction Company (later the Aluminum Company of America, or ALCOA).<sup>1</sup> That Thanksgiving, the first aluminum ingot was poured at a plant on Smallman St. in Pittsburgh's Strip District by a crew of five: Charles Martin Hall, co-inventor (in 1886) of the electrolytic process for the reduction of aluminum; Arthur Vining Davis, later president and CEO of ALCOA;<sup>2</sup> Charles Mathews and H.B. Douglas, both engineers; and a handyman named White.<sup>3</sup>

But Pittsburgh Reduction Company quickly abandoned its intention of producing and selling aluminum in ingot form only. With other metals available in a variety of forms, the men of Pittsburgh Reduction realized that to increase the demand for aluminum, it had to be available in other forms as well. The company soon began producing aluminum in sheets, rods, tubes, bars, and other easily serviceable forms. Credit for developing this fledgling industry rests not only with those directly involved in the industry, but also with countless craftspeople who pioneered the forging of aluminum – predominately by hand – into a variety of architectural and giftware items. These progressive-minded professionals experimented with the new metal even when more familiar metals were available.<sup>4</sup> This article examines three gifted aluminum artisans from the Pittsburgh area, and their unique contributions to the hand wrought aluminum industry.

**Hyman Blum** started a metalworking firm that became known for its highly ornamental wrought iron railings, gates, lighting fixtures, and hardware. Blum (1883–1971) was born in Latvia,

a republic of Russia, where he was trained as a blacksmith, rising to the ranks of carriage blacksmith, the most skilled level. He immigrated to New York City and found work constructing wrought iron fire escapes, but Pittsburgh's burgeoning steel economy soon lured him. Applying the skills and talents he'd learned in Latvia, he started a business in the Oakland section of Pittsburgh in 1908.<sup>5</sup>

Star Ornamental Iron & Wire Works produced an array of wrought iron items including fire escapes and ornamental railings, gates, hardware, and artistic grills. Although unintentional, the company's iron work is comparable in style, detail, and craftsmanship to the renowned work of Samuel Yellin (1885–1940), another of Pennsylvania's iron masters. Pittsburgh's growth, along with a revival of fine ornamental iron production after World War I, provided ample opportunities to include Star's iron work in area homes, businesses, religious institutions, and universities. In fact, when the University of Pittsburgh began planning the Nationality Rooms for the Cathedral of Learning in the late 1920s, Hyman Blum was asked to do considerable iron work for several of them, including the Russian Room.

Hyman Blum had three sons: Louis, Max, and Harry. In 1927, Louis (1909–present) joined the firm as principal designer. The company was also renamed at this time as The Hyman Blum Company. Alcoa, which wanted to refine the purity of aluminum to make it more easily shaped, asked the company to experiment with new alloys being developed for decorative forgings. The Blums soon learned that the age-old art of forging iron would itself need to be forged into new techniques that would allow them to easily work the new metal. They first tried heating the aluminum

**Pictured left: Aluminum chandelier made for the St. Paul's Cathedral by Blumcraft.**



A 10-by-16-inch tray with wonderful stylized Gazelle and Runner motif in etched aluminum made by the Hyman Blum Company.



Photo by Dennis Wildauer

as they did iron, but found that it became too hot and turned to powder upon striking with a hammer. After more experimentation, Alcoa and Hyman Blum determined the correct temperature to easily forge aluminum into the forms and shapes they desired. Hyman Blum now had a new metal to design with and to use in creating their ornamental wrought metal work.

In 1935, Alcoa commissioned Hyman and Louis Blum to design and construct a suitable repository for Alcoa's "Crown Jewels," the first globules of aluminum produced by Hall in his laboratory in 1886.<sup>6</sup> Alcoa wanted this jewel chest to be made of aluminum and appropriately showcase this monumental event. According to Louis Blum, after preparing a design drawing and having it approved by Alcoa, he and his father began the demanding task of constructing the chest. The exterior was made by repeating five panels that were each acid-etched with a different Arabesque design. All the panels were then strapped together with forged aluminum bands and riveted. Large bail handles attached to the sides produced a superbly elegant chest showing a unique combination of both forged and etched elements. This chest, 5.75" x 8.5" x 14", still holds the Crown Jewels today and is kept in a vault at Alcoa's corporate center. The jewel chest and the Crown Jewels made a rare, brief appearance at the Aluminum by Design exhibit (2000–2001) at the Carnegie Museum of Art in Pittsburgh.<sup>7</sup>

In the early 1930s, Hyman Blum moved the business to a new location in East Liberty. The Depression years were trying times, but the company still created a short-lived giftware line that included trays, bowls, and plaques of highly artistic design and incredible etched details. The designs or motifs were etched onto the items by using acid. Louis, who designed all the pieces, recalls spending time in the library perusing art texts looking for design inspiration.<sup>8</sup> After a design was drawn, it was cut into a template which was placed on top of an aluminum sheet. It was then covered

with wax and the template removed. Acid was placed over the surface, which etched the design into areas where the template was, the wax resisting the acid on the other areas. Few were made, making these pieces exceptionally rare, but can be identified by "HYMAN BLUM, PITTSBURGH, PA. USA" on the back. These hand-forged pieces were very labor intensive, though the craftsmen were paid only 40¢ per hour; still, the work enabled Blum to keep a few employees active during the Depression. The giftware line was discontinued when architectural commissions increased.

One of these jobs was a library for Roy Arthur Hunt (1881–1966) and his wife, Rachel McMasters Miller Hunt. Hunt succeeded Arthur Vining Davis as president of Alcoa in 1928, and purchased a home in Oakland the same year. In 1937, the couple decided to renovate, which included adding a library to accommodate Mrs. Hunt's growing book collection. Architect Benno Janssen, known in Pittsburgh for both his monumental buildings and domestic commissions, called for two railings; one to ascend to the second floor of the home, and the other to surround the upper tier of the library.<sup>9</sup> The task of designing the railings was given to Louis Blum, who recalls working closely with Mrs. Hunt.<sup>10</sup>

Louis Blum recalls that he worked out several designs, made sample elements from forged aluminum stock, and then showed them to Mrs. Hunt for her approval. Her initial reaction to the samples was less than favorable. She was not upset with the designs, but that her husband chose to use "their" house to advertise "his" aluminum. Blum explained that the samples were not completed and did not have their final finish. He returned with completed samples that had been blackened by passing them through a coal-fired forge. The samples were then lightly buffed, highlighting the metal while leaving some of the darkening in the recesses of the aluminum. The striking contrast between the blackening and the shine of the aluminum was stunning; Mrs. Hunt



Hyman Blum



HSWP Library & Archives, Blum collection

All by Dennis Widnauer



Detail of a 23-inch diameter wall plaque showing Sagittarius. The piece features a stylized Zodiac motif in etched aluminum made by the Hyman Blum Company.



loved its look of old silver and approved the design. The railings installed on the stairs to the second floor were of exceptional design, construction, and detail, and remain as superb examples of aluminum's malleable characteristics when placed in the hands of a skilled designer and talented artisan. The hand wrought aluminum railings in the library addition surrounding the upper tier are equally beautiful but of a more simple, open design so not to distract from the beauty of the books.

During World War II, Louis Blum developed a system for the easy assembly of aluminum railings that was adaptable to various architectural situations. These new railings had a sleek new modern look and could be easily assembled by contractors using Blum company components. This new method of constructing aluminum railings proved quite successful and is still in use today. After the war, brothers Max (1907–1999) and Harry (1911–1998) joined the company. The company name changed to Blumcraft and moved to its present location on Melwood Street in Pittsburgh.

In 1952, architect Alfred D. Reid asked Blumcraft to build 40 lighting fixtures for St. Paul's Cathedral in Oakland.<sup>11</sup> Each massive chandelier had 88 separate hand wrought and cast aluminum parts that were then hand assembled. With five aluminum reflectors at the bottom and eight lights at the top, they were designed to illuminate a wide area. The body was constructed of highly polished Alcoa aluminum sheet. The cast ornaments were made of a special Alcoa aluminum alloy that would permit proper forming, welding, and finishing. They were also given a gold anodized finish to contrast with the polished aluminum body. They were then suspended 75 feet from the ceiling and 21 feet from the floor. It took Blumcraft nearly a year to complete all of the units, which can still be found illuminating the cathedral.

With almost 100 years in business, Blumcraft has supplied architectural elements to more than 77,000 buildings throughout the world. Its metalwork can be found in The White House, NASA

buildings, The Louvre Museum, the Washington Monument, the Statue of Liberty, the Metropolitan Museum of Art, and the Smithsonian Institution. Fine examples of their workmanship in both iron and aluminum can also be found throughout Pittsburgh in homes, museums, universities, and religious institutions.

**Henry August Mansfeld** was a highly skilled metal artisan who first worked as a craftsman for Hyman Blum. Mansfeld (1897–1985) was born in Germany where he was the ninth of 10 children.<sup>12</sup> After World War I, where he served in the German army, he became an apprentice and learned the ornamental iron trade. He continued training for several years and in 1923, immigrated to Pittsburgh where his sister was living. It is unclear when he began working for Hyman Blum but it was likely in the late '20s. Mansfeld worked there until 1942, fabricating and installing a variety of wrought metal work including iron and aluminum. During this period, he lived in several locations including East Liberty and Wilkinsburg.

About 1938, Mansfeld began producing his own line of hand wrought aluminum giftware using repoussé techniques used by many aluminum artisans in the region. Repoussé refers to a technique whereby motifs are created in relief by hammering on the reverse side of the metal: an image is engraved into a steel plate or die and then the sheet aluminum is "pushed" into the die by hammering from the reverse. When removed, the die image is imparted onto the aluminum sheet. Since commercially pure aluminum is relatively soft, it was conducive to yielding to the hammer and the die. An item could then be formed in wooden or metal forms into a wide variety of giftware items.

Mansfeld drew his own designs and engraved, with hammer and chisel, many exquisite steel dies that display highly stylized subject matter. These designs include horses, gazelles, cardinal at pond, geese, and numerous floral representations. Mansfeld was





A 12-by-20-inch Mansfeld by Dennis hand wrought aluminum plaque with highly stylized Adam and Eve motif.

quite interested in fine art and studied art texts, incorporating much of this inspiration into his own die motifs. Many show extremely stylized representations of his subjects with obvious Art Nouveau influences, although some incorporate Art Deco aspects as well. Perhaps his most elaborate motif is of Adam and Eve in the Garden of Eden, showing Adam – a lion at his feet – pensively taking the apple from Eve. Another exceptional motif shows the abduction of women by Romans, possibly based on a painting

by Nicolas Poussin titled “Rape of the Sabine Women” (rape in this sense referring to the archaic sense of being seized). These two motifs, plus over fifty more that have surfaced, are all highly artistic and quite unique in the realm of aluminum giftware.

After Mansfeld left Blum in 1942, he moved to Morningside and began working for other firms manufacturing and designing wrought iron work in the Pittsburgh area, but he continued producing his own aluminum giftware. Mansfeld hand-crafted all of his own dies, forms, and equipment – along with his aluminum art – at home in his spare time. He worked in his basement, which he had soundproofed to reduce the noise from the hammering. Each piece was sold locally through department stores such as Kaufmann’s. He continued to make a variety of aluminum giftware items including trays, bowls, candleholders, wastebaskets, magazine racks, and lamps. Unfortunately, a substantial portion of his work went unmarked, making it difficult for many items to be positively identified as Mansfeld’s. However, pieces have been found marked either “H.MANSFELD” or “MANSFELD, P.P.P. CO., HAND CRAFT.” It remains unclear what the “P.P.P. CO.” refers to.

Mansfeld was known to be a gentle, solitary man. Along with his aluminum craft, he studied art, drawing, and painting, wrote poetry, and sang in a German singing society. In his later years, Mansfeld became an avid gardener and developed an interest in the science of numerology. In 1967, before moving to Arizona, he sold his dies, forms, and tools to a cousin. They lay unused but well cared for until 1997 when this author acquired them while conducting research of the aluminum industry. The artifacts are again being cared for while serving to aid in understanding the hand wrought aluminum craft, and the dies are being used to produce new items. Each piece is marked “Hand Wrought Mansfeld by Dennis.”

**Clayton Tracy Sheasley** (1913–present) was born in Bradford, Pa.,<sup>13</sup> and by age 16, had graduated from high school and entered





Hand wrought aluminum railings made for the Hunt home by the Hyman Blum Company. The detail shows its dark finish and intricate hand wrought workmanship.

nearby Grove City College. He graduated in 1933 with a Bachelor's degree in history. Though employment was difficult at the time, Sheasley learned that Arthur Armour (1908–1998) had recently started a business in Grove City producing hand wrought aluminum giftwares. Sheasley began working for Arthur Armour in 1935 for 30¢ an hour. He quickly learned the craft, working in the forge to produce fine hand wrought aluminum giftwares. Unfortunately, he developed an allergy to the turpentine then used in the finishing process, and also had a serious automobile accident which forced him to leave the Armour forge in 1936. While recovering in the hospital, Sheasley decided to enter the Presbyterian Western Seminary in Pittsburgh to become a minister. He and his wife Selma Mae settled in an apartment above what used to be the carriage house on the grounds of the old Henry Oliver estate on Pittsburgh's North Side. It had once been the hayloft.

In 1938, Sheasley again changed careers, leaving the seminary to embark on producing his own line of hand-hammered aluminum giftware using repoussé techniques he had learned in Arthur Armour's forge. Sheasley's initial production was done in his hayloft apartment, but he soon moved to another location in Millvale that provided ample space to work as well as an area for a sales room and office. His only workers were Russell Gilliland, a brother-in-law, and Stan Rowland, a good friend who helped part-time. Rowland was a skilled woodworker and was responsible for making most of the wooden items used in conjunction with the aluminum line such as handles and candle cups. He also made the wooden forms that were used to shape the bowls, trays, and other items.

Sheasley engraved all of his own steel dies by hand, using hammers and chisels, from his own designs as well as from original drawings by Stan Rowland's wife Peg who was a talented artist. Most of the combined design motifs were floral, which were quite popular, but he also engraved dies with fish, wheat, and pine themes.

Among his most unique designs were several that were more

formal and classical: he called them *Greek Key*, *Scallop*, *Moorish*, and *Renaissance*. His inspiration came from architectural pattern books showing plaster ceiling designs found in 18th-century buildings. Sheasley made bowls, trays, coasters, candleholders, bookends, and smoking and desk accessories. Items made during this period were marked on the back with a "T" enclosed in an octagon, which stood for his middle name of Tracy. Sales were good until World War II when obtaining aluminum became difficult due to restrictions. During the war, Sheasley and friend Jerry Stokes formed a partnership called Tracy Engineering and produced machine parts for the war effort.

In 1946, Sheasley moved to Ben Avon and again began producing aluminum giftware. He soon opened a new forge in Slippery Rock, traveling there from Ben Avon daily. This forge was in a much larger building, allowing Sheasley to expand his product line and hire additional workers. He also purchased previously-engraved steel dies from the Leroy Deloss Forge, a defunct firm that made aluminum giftware in Emlenton, Pa. Sheasley now had several dies to use on his many new items with intricate shapes and forms. He marked pieces on the back with "CLAYTON SHEASLEY" during this period of production. New items included wastebaskets, desk sets, candleholders, and baskets, and he now offered his wares in either a brightly polished finish or a new smoked finish. The smoked finish was created by passing the item through a coal fired forge, then lightly polishing to leave some coloring within the image, thus highlighting it. Sales were very good and he had as many as 18 workers at one time.

In 1948, Clayton Sheasley moved his family to Slippery Rock to be closer to the forge. However, by 1950 the hammered aluminum giftware market was becoming saturated with both imports and high production pieces from several New York-based firms. Sheasley recalled seeing an article in a magazine where a new bride had received 27 pieces of aluminum as wedding gifts. He decided



candleholders, floral tray with handles, and silent butler with gazelle motif, all by Henry Mansfeld.



A 14-inch Mansfeld by Dennis octagonal, hand wrought aluminum plaque with motif believed to be inspired by the painting, "The Rape of the Sabine Women."

to end his production of hand-hammered aluminum giftware fearing that this flooding of inexpensive pieces would make competing difficult.

Sheasley switched his focus to producing wooden church furnishings, though occasionally still working with aluminum. He designed and engraved a die with four evangelists to be used in making church collection plates, and made medallions for the Episcopal Diocese of Pittsburgh with another new die motif. But Sheasley's ultimate aluminum creation was made for St. Peter's Catholic Church in Slippery Rock; he hand-crafted, entirely from aluminum, an impressive four-foot baptismal font with two new die motifs. One motif was of an upside down dove representing the Holy Spirit; the other was of crossed keys, representing St. Peter. Legend has it that St. Peter was crucified head down and the keys were to the kingdom of heaven that were given to him.

About 1954, Sheasley decided that he no longer needed the dies and equipment that he used for the aluminum giftware production. They went to James DePonceau (1912–1999), whom he knew from his tenure at the Arthur Armour Forge. DePonceau, who also produced his own line of aluminum giftware, used and cared for these for many years.

Eventually, Sheasley was ordained as an Episcopal priest and served at St. Christophers Church in Hermitage, Pa., for many years. Upon retirement in 1979, he moved to Florida. Clayton Sheasley's impressive aluminum art will live on for many generations and will serve and delight all who come to possess it.

As the hand wrought aluminum giftware industry blossomed, there were scores of artisans and producers, large and small, across the United States. Through the 1930s, the design, quality, and workmanship was high and much of the product was sold in better department stores and jewelry shops. Several producers, including Alcoa, employed top designers to create pleasantly

designed lines of aluminum giftware.<sup>14</sup> These wares were promoted to be used in fine homes alongside the finest silver. Immediately after World War II, however, the increased demand for giftware items encouraged high production levels from larger producers. By the 1950s, consumer tastes had changed to items having cleaner lines and a more modern appearance. The giftware industry also had numerous media with which designers and producers could create, including glass, ceramics, wood, and other metals. Modern manufacturing facilities were able to produce a myriad of giftware items including those made from aluminum. In time, the form and quality of aluminum giftware deteriorated into the inexpensive, high production wares that today make up the bulk of what is often referred to as "hammered aluminum." All of these factors contributed to the decline of the smaller, artisan-based aluminum shops, forcing many to close.

The numerous aluminum artisans of Western Pennsylvania stayed true to their roots of producing high quality, hand wrought aluminum articles. In reality, the worker was elevated to the level of artist, very much in the tradition of the Arts and Crafts movement.<sup>15</sup> Many of their pieces have gone beyond collectible curiosity to attract attention from historians and museums, as seen by the recent exhibit, *Aluminum by Design: Jewelry to Jets*, at the Carnegie Museum of Art. These pieces remain popular for the same reasons that people originally purchased them – they are beautiful, functional, and exhibit a high degree of hand workmanship. ☼

Dennis Wildnauer is a collector, researcher, and producer of hand wrought aluminum art. Since 1997, he has produced his own line of hand wrought aluminum called "Mansfeld by Dennis" which uses vintage dies engraved by Henry Mansfeld. More can be seen at [www.enter.net/~corner](http://www.enter.net/~corner). Wildnauer welcomes additional information on aluminum artisans.





An 11-inch fluted aluminum bowl with Greek key motif, candleholders, and rare point-of-sale plaque by Clayton Sheasley.

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- 2 "Arthur Vining Davis," *Alcoa Aluminum Newsletter*, January 1963.
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