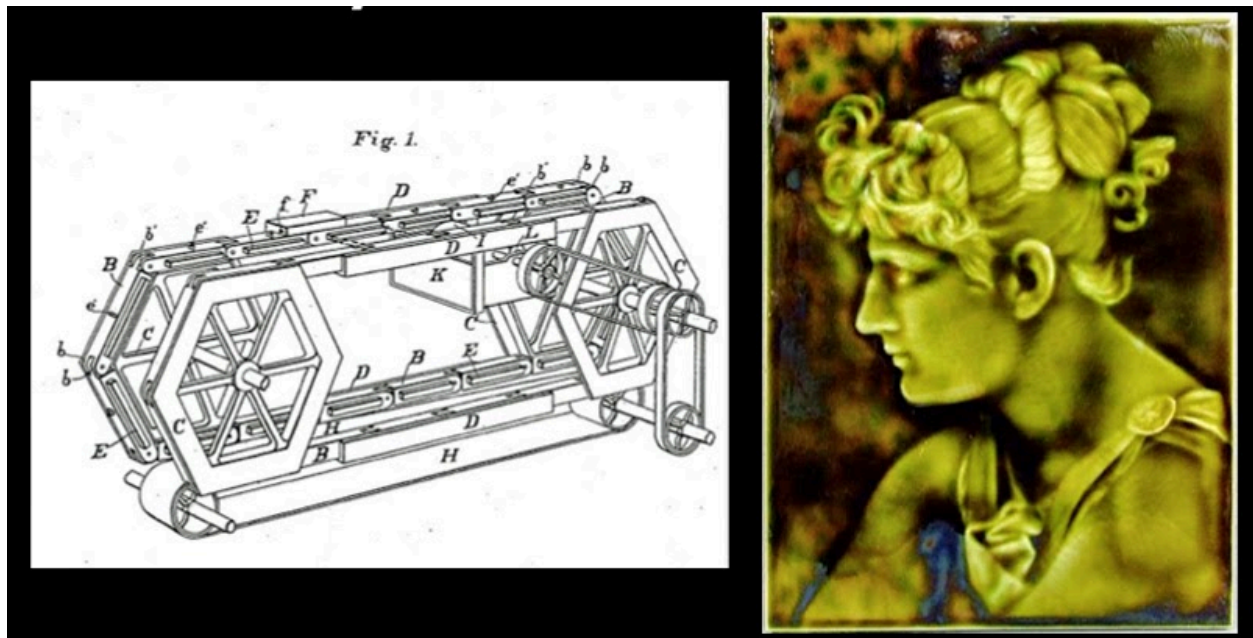


## Isaac Broome: Innovation and Design in the Tile Industry after the Centennial Exhibition

The following is an expanded version of a paper and slide presentation given at the Potteries of Trenton Society Symposium at the New Jersey State Museum in Trenton, New Jersey on April 5, 2014.



Isaac Broome was one of the premier pottery and tile designers and innovators of the last quarter of the 19th century and the early 20th century. The images above are of one of Broome's patent designs--a machine that glazes tiles automatically--and one of his tiles, "Parthenia". These illustrate two major strands in the development of the American tile industry: mechanization and the stylistic development of American art tiles. In order to understand Broome's place in the tile industry, it is necessary to review the development of that industry itself.



**A Hyzer & Llewellyn painted tile. (Philadelphia Museum of Art collection)**

Prior to the Centennial Exhibition in 1876 there were only a few American attempts to produce decorative tiles. Hyzer and Lewellen in Philadelphia, the Charles Cartlidge Company and the Union Porcelain Works, both in Brooklyn, were three of them. (<http://tilesinnewyork.blogspot.com/2013/08/nineteenth-century-brooklyn-potteries.html>)



**A Hyzer & Llewellyn encaustic tile. (Philadelphia Museum of Art collection)**



“Previous to 1872,...Hyzer & Lewellen...were experimenting [with] floor tiles. Their first efforts were directed to the manufacture of encaustic tiles of geometric shapes, - square, diamond and triangular, - with natural and artificially colored American clays, mainly buff, red and black, the designs being inlaid to the depth of about a quarter of an inch. While these attempts proved partially successful, the wet-clay method employed at that time was unsatisfactory, because the shrinkage was found to be irregular and the pieces came from the kiln [in] different thickness[es]. The next experiments were made by the damp-dust process, which has been employed ever since.” (Edwin Atlee Barber, *The Pottery and Porcelain of the United States*, Second Edition, G.P. Putnam’s Sons, 1901, pp. 344-345)

In Greenpoint, Brooklyn Charles Cartlidge & Company made decorated encaustic floor tiles, “...about six inches square...made by inlaying clays of different colors in geometrical designs--red with black scroll-work; a cane-colored device in a red ground; red and white, and a combination of blue and white, in imitation of marble, much used at that time as a flooring for halls.” (Edwin Atlee Barber, “Historical Sketch of the Green Point (N. Y.) Porcelain Works of Charles Cartlidge & Co.”, reprinted from *The Clay-Worker*, Indianapolis, IN, 1895, p. 18) However, we have no pictorial record of these.



Tiles made by the Union Porcelain Works in the Thomas Smith residence, 136 Milton Street, Greenpoint, Brooklyn. The house was built in 1866. (Photo courtesy of Friends of Terra Cotta)

Pictorial tiles made by the Union Porcelain Works, however, still exist. A few years ago Susan Tunick, the founder of [Friends of Terra Cotta](#) and the author of *Terra Cotta Skyline*, showed me some photos of a tiled fireplace in a house at 136 Milton Street, Greenpoint, Brooklyn (built in 1866-67), which was once the residence of Thomas Smith, the owner of the Union Porcelain Works. Only the fireplace remains of the original interior decoration: the cameo tile plaques on the sides of the fireplace and the blue and white 2"x2" and 4"x4" tiles have been identified as made by the Union Porcelain Works,



Tile plaque made by the Union Porcelain Works. (Photo courtesy of the Friends of Terra Cotta)

as have the stair risers on “Keramos Hall”, built in 1887 by Thomas Smith, on the corner of Milton Street and Manhattan Avenue.





"The manufacture of hard porcelain tiles [had] become an important branch of the business of [the Union Porcelain Works]. These tiles are made both thick and thin, in underglaze decoration, and are claimed to be the only tiles made in this country which will endure the heat of a hearth fire. They are decorated with figures of griffins and other fancy designs. The overglaze method has also been applied to tiles for mantel facings and wainscoting, and on the walls of the private office of the establishment may be seen a series of large tile panels embellished with paintings representing the ancient ceramic processes of Egypt, as depicted on the pyramids." (Edwin Atlee Barber, *The Pottery and Porcelain of the United States*, G.P. Putnam's Sons, New York, 1901, pp. 256-257)



**Mintons Tile display at the 1876 Philadelphia (Centennial) Exposition**

But, it wasn't until the watershed event of the 1876 Centennial Exhibition in Philadelphia that the decorative tile industry in the United States became a reality. "In 1876 the fashion for art tiles as decoration for floors, walls, mantels, and furniture was approaching its peak in England, and increasingly urbanized and house-proud Americans were eager to emulate the latest styles. Art tile production in the United States barely existed, but in the manufacturers' stalls in the Main Building [of the Centennial Exhibition], pottery-makers, builders, and home owners were dazzled by the elaborate displays of British [and other] tile companies... . Tiles abounded at the [Exhibition], and fair-goers were able to see tiles used as decoration for furniture, as fireplace surrounds, and on the interior and exterior walls of buildings." (Susan Ingham Padwee, "Art Tiles at the Centennial Exhibition", *Tile Heritage*, Vol. 6, No. 2, Fall 2002, pp. 19, 25-27)



Fig. 16. Japanese pottery.

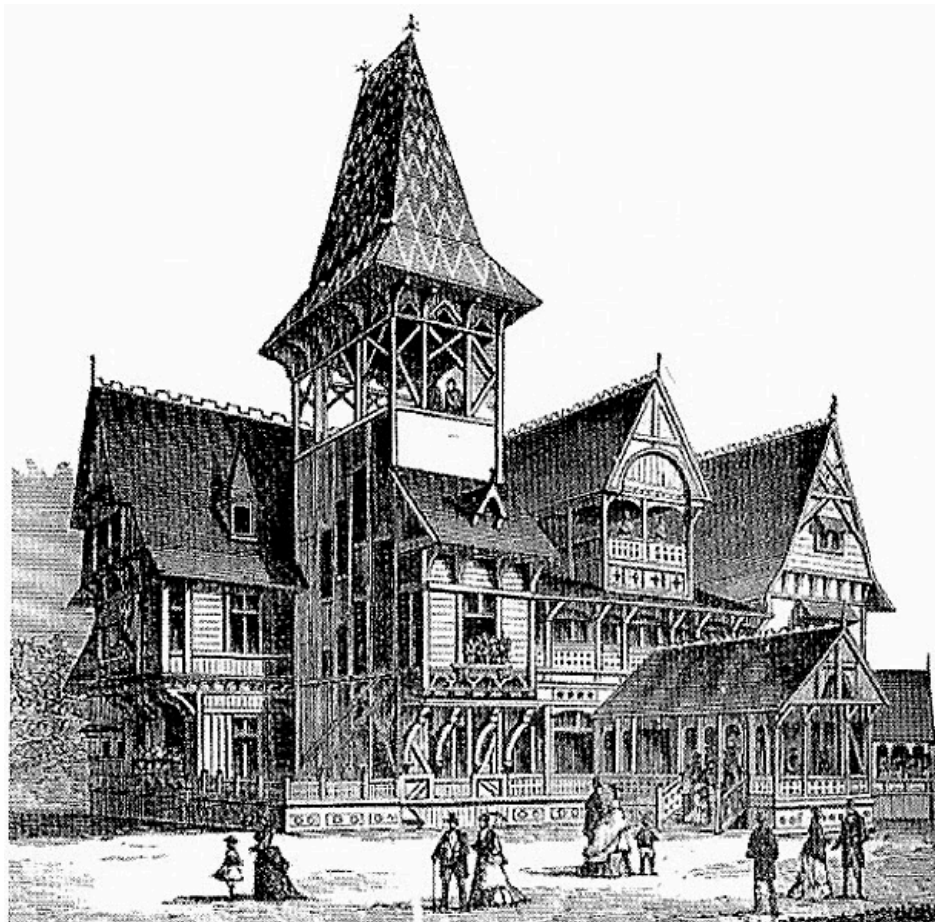
An exhibit of Japanese Pottery. (From *The Illustrated Catalogue to the Centennial Exhibition*)

In addition, many stylistic streams were evident at the Centennial Exhibition, and designers, artists and craftspeople were exposed to them all. For instance, "Prior to this exposition, few Americans had any exposure to Japanese art. ...Displays of Japanese



ceramics stunned American visitors. The Japanese produced large slabs of porcelain meant to be used as table tops and screens. [They] also produced fan-shaped porcelain tiles and smaller panels.” (Susan Ingham Padwee, “Art Tiles at the Centennial Exhibition”, *Tile Heritage*, Vol. 6, No. 2, Fall 2002, pp. 19, 25-27)

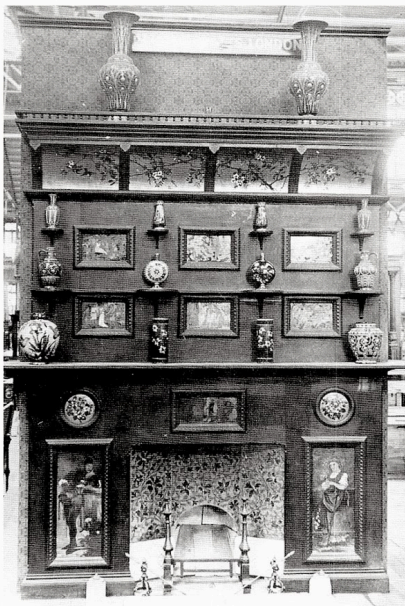
In 1877 George Ferris wrote that the colors used by Japanese ceramists were especially striking. “In Japan [...the use of color] rises to the dignity of a distinct, independent faculty, sometimes sensuously strong and deep, sometimes extremely delicate and varied... . [The Japanese] appear to have solved the problem of color in a way which the European has never dared to attempt. Their combinations, balancing of masses, fineness of gradation, variety, intensity, boldness, command over chemical secrets, and fertility of device, are such as to astonish the unaccustomed eye. This is particularly noticeable in the painting of their porcelain...[,] their richness and balance of color are...beyond criticism.” (George Titus Ferris, *Gems of the Centennial Exhibition*, D. Appleton and Company, 1877, p. 80)



Although there were few, if any, American art tiles at the Exhibition, American potteries were manufacturing roof and exterior wall tiles. The NJ State Building is illustrative of some of the best of U.S. tile work at the time. (Illustration from Ingram, *The Centennial Exposition Described and Illustrated*, in Susan Ingham Padwee, “Art Tiles at the Centennial Exhibition”, *Tile Heritage*, Vol. 6, No. 2, Fall 2002, p. 27)

According to Barbara Bloemink, the Centennial Exhibition attracted over ten million visitors and “had two overriding goals--to provide Americans with first-hand exposure to the fine and industrial arts of other nations, and to demonstrate the excellence of American products and...ensure America’s place within an international tradition of fine craftsmanship and invention.” (Barbara Bloemink, “Introduction”, *The Sphinx and the Lotus: The Egyptian Movement in American Decorative Arts 1865-1935*, The Hudson River Museum, Inc., Yonkers, New York, 1990)

“Revivals and exotic influences were key elements of design and were deeply rooted in popular culture” in the nineteenth century. Many revival styles were associated with different concepts and places--neoclassicism with Greek and Roman democracy, Gothic with Northern European churches--and an exotic eclecticism--'a fascination with the romance of the far away'--also played an important part in design, according to Kevin Stayton, the Chief Curator of the Brooklyn Museum of Art. (Kevin Stayton, “Revivalism and The Egyptian Movement”, in *The Sphinx and the Lotus: The Egyptian Movement in American Decorative Arts 1865-1935*, The Hudson River Museum, Inc., Yonkers, New York, 1990, pp. 6-7)



Clockwise from upper left:  
Minton-Hollins hand-painted panel; Maw & Co. tile and “Seasons” tiles; Doulton & Co. tiled fireplace.

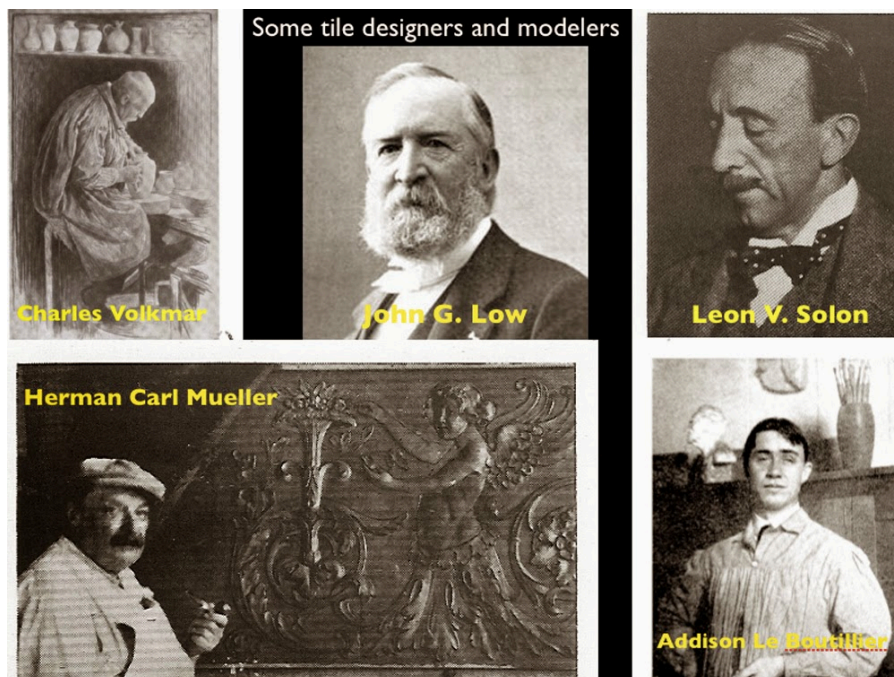


The exhibits at the Centennial Exhibition reinforced these influences with the American public.

In 1878, prior to the large-scale development of the American tile industry, American writer James Joseph Talbot wrote glowingly of the possibilities of decorating a home with tile. Although he focused on English and Continental tilemakers, the implication was clear: here was something Americans could also do, as well as enjoy. (James Joseph Talbot, "Tiles and Tiling", *The Penn Monthly*, Vol. IX, October 1878, pp. 740-758)

Between 1877 and 1890, following the Exhibition, about twenty-five American tile companies were organized. New Jersey companies such as the Raritan Art Tile Works, the Old Bridge Tile Co., Maywood Art Tile Co., and the Trenton companies--Burroughs & Mountford, the Trent Tile Co., and the Providential Tile Works, among others--flourished. Many of these companies imported and used European--mainly English--skilled labor and technology. Like the British they also produced encaustic, relief and transfer tiles, but some also strove to produce a distinctive "American" tile style according to Susan Ingham Padwee.

Elizabeth Cumming and Wendy Kaplan tell us that American designers saw no contradiction in looking to Britain, Europe and the Orient for sources to create a distinctly American style. Some idealized the pre-industrial past and embraced styles derived from Medieval, oriental, folk and colonial styles. (Elizabeth Cumming and Wendy Kaplan, *The Arts and Crafts Movement*, Thames and Hudson, London, 1991, pp. 148+) At the same time, many of these same designers spurred the American tile industry on by inventing or improving machinery and processes that helped create a huge profit-oriented ceramics industry in this country.



Modelers and designers became the “aristocrat-workers” in an heirarchically organized pottery industry. Besides native-born modelers and designers such as William Grueby, Addison B. LeBoutillier, and Henry Chapman Mercer, there were English, French, German, and Canadian immigrant designers helping to build the American tile industry.



**A 6” J. & J.G. Low “natural” tile in a wood and metal trivet frame. (Author's Collection)**

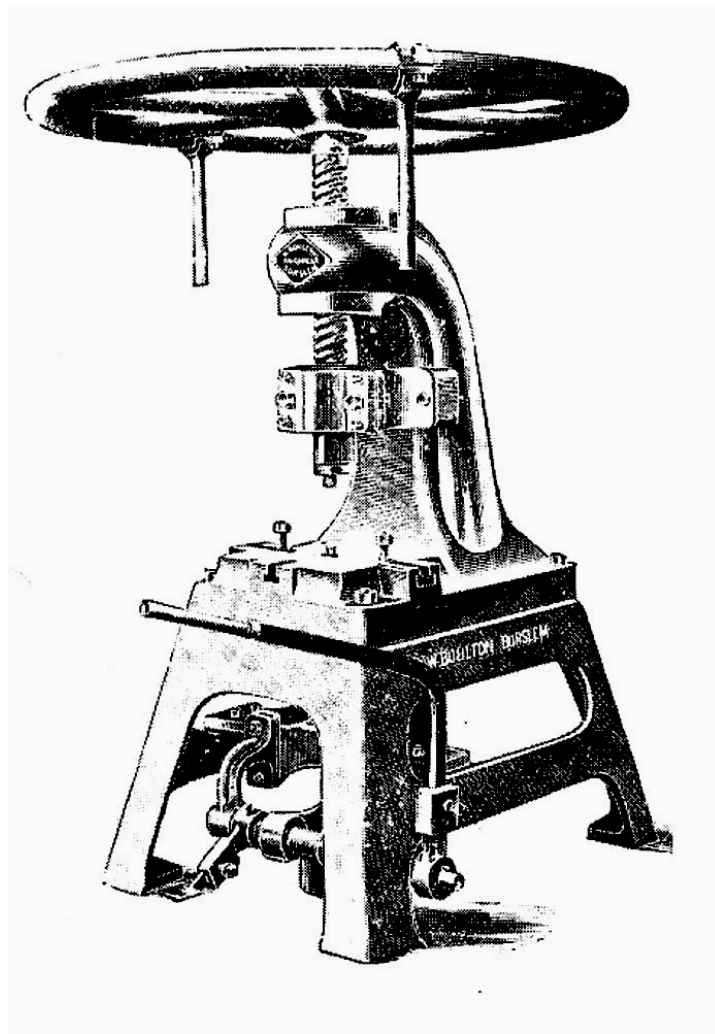
The Low Art Tile Works in Chelsea, Massachusetts under the aegis of John G. Low and his father produced new glazes, designs and tile production innovations. Francis D. Millet reported in articles in the Century and Harpers magazines in 1882, that John Low carved and pressed natural objects into the dust-pressed tiles before they were dried and fired.





**A high relief J. & J.G. Low tile. (Author's collection)**

According to Millet, though, the main tiles made by Low were relief tiles made either by Richard Prosser's dust-pressed method or by the wet clay method. Low's contribution was to invent a method of working designs in high relief.



A tile press. (Terence A. Lockett, *Collecting Victorian Tiles*, Antique Collectors' Club, Ltd., Woodbridge, Suffolk, 1979, p. 47)

For the dust-pressed tiles, "The original designs are made in modeler's clay or wax, reproduced in plaster, and then the dies are made from these in any metal desired, and finished to fit the [tile] press. When the pattern is in prominent relief, like a head, the workman has only to pile up the [clay] dust in the bed [of the press] to correspond roughly with the deepest depression in the die, so as to insure the complete filling of all the parts, and then the tile can be struck with...ease." (Francis D. Millett, *Some American Tiles*, Wellington & Burrage, Boston, Mass., 1882, pp. 5-6)





**A low-relief J. & J.G. Low tile designed by Tile Club member Elihu Veder to commemorate the 150th performance of the play Esmeralda performed in Madison Square Garden in 1882. (Author's collection)**

This dust-pressed method is geared to a mechanical process where tile manufacture is relatively rapid and inexpensive.



A Low plastic sketch modeled by Arthur Osborne, titled "The Monk". "This is a beautiful example of this pre-eminent designer's ceramic work. The tile...is glazed in bright emerald and has characteristic pooling in the elaborately carved recesses." It's size is 17 ½" x 7" x 1 ½" thick. (Photo courtesy of Wells Tiles, Los Angeles, CA; <http://wellstile.com/catalog/2011/04/28/j-j-g-low-plastic-sketch-tile-by-a-osborne/>)

Another Low innovation was the "plastic sketch". This type of tile could be made in any size by a wet clay process: "The designs are first made in clay or wax, and a plaster cast is taken, which serves as a mold for the reproduction of any number [of tiles]. ...The



stock [clay] is mixed in the same way as [dust-pressed tiles], only it is taken from the drying pan while it is [still] moist enough to be plastic. ...When it is...the proper consistency, the workman beats it out into a thin mass, smoothes the surface, lifts it with both hands, and flaps it over upon the mold. ...He then works it with his thumb into the depressions of the plaster matrix... . The dry plaster soon absorbs the superfluous moisture from the clay, and the tile becomes sufficiently rigid to be lifted from the mold.” (Francis D. Millett, *Some American Tiles*, Wellington & Burrage, Boston, Mass., 1882, pp. 8-9)



Low plastic sketches in storage at the National Museum of American History, Washington, DC. Arthur Osborne created about 50 different plastic sketches for Low. (Photo courtesy of Michael Padwee)

“Arthur Osborne emigrated from England to America in the 1870’s and worked for the J. and J. G. Low Art Tile Company, where he became the chief designer and modeler of low relief molded tiles which were press molded by hand and identified by the inscribed initials “AO”. ...Osborne departed Low Art Tile in the late 1890s when he returned to England and started producing his prolific line of acclaimed “Ivorex” plaques.”  
(<http://wellstile.com/catalog/2011/04/28/j-j-g-low-plastic-sketch-tile-by-a-osborne/>)



**American Encaustic Tiling Company, 12" x 18" panel, "Summer", designed by Herman Carl Mueller. (Tile is in the Study Galleries in the American Wing of the Metropolitan Museum of Art; photo courtesy of Michael Padwee)**

Herman Carl Mueller immigrated from Germany in 1878 and worked as a modeler for the American Encaustic Tiling Company (AET) in Zanesville, Ohio from 1887-1894. Tile historian Michael Sims writes that prior to 1887, "American Encaustic's products were at least the equal of any other manufacturer's, except in the field of art tiles. To rectify this, [...AET] hired the talented, sculptor-mechanic, Herman Carl Mueller...[,and the] artistic quality of the company's tiles improved dramatically. Mueller's fireplace surrounds and classical figure panels are among the finest art tiles ever produced. [Mueller] also demonstrated to architects the virtues of using decorative tiles in such things as fountains and radiator grilles." (Michael Sims, "The Tiles of Zanesville, Ohio: America's Tile Manufacturing Center", *Flash Point*, Vol. 6, No. 3, July-September 1993, p. 19)





**Mosaic Tile Co. mural designed by Herman Carl Mueller. The tiles were made by Mueller's patented "pseudo-encaustic-mosaic" process in 1898 for the St. Nicholas Roman Catholic Church, Zanesville, OH. (Photo courtesy of Michael Padwee)**

In 1894 Mueller helped form the Mosaic Tile Company and patented a process of making a pseudo-encaustic-mosaic tile\* which has been used widely in many buildings, such as the original tiles in the California State Capitol Building in Sacramento and a Christopher Columbus mural on the St. Nicholas Roman Catholic Church in Zanesville.

\*[Mueller's pseudo-encaustic-mosaic tiles were produced by using a piece of metal, a cell-plate, divided into smaller cells, placed over a mold, and into which different powdered glazes could be added via screens to color the tile. This was a way to easily color multiple tiles in the same way.]



Original tile-mosaic altar (demolished), St. Thomas the Apostle Church, Woodhaven, Queens. (Photo courtesy of St. Thomas the Apostle Church).

In 1908 Mueller formed his own company in Trenton, the Mueller-Mosaic Tile Company, where, in addition to experimenting with new glazes on architectural forms, he helped to create new mosaic and tile designs such as this mural in Queens, New York (no longer in existence).





Addison LeBoutillier's "Beaver" design made by Grueby Faience, c.1904, for the Astor Place subway station on the IRT #6 line in Manhattan. (Photo courtesy of Michael Padwee)

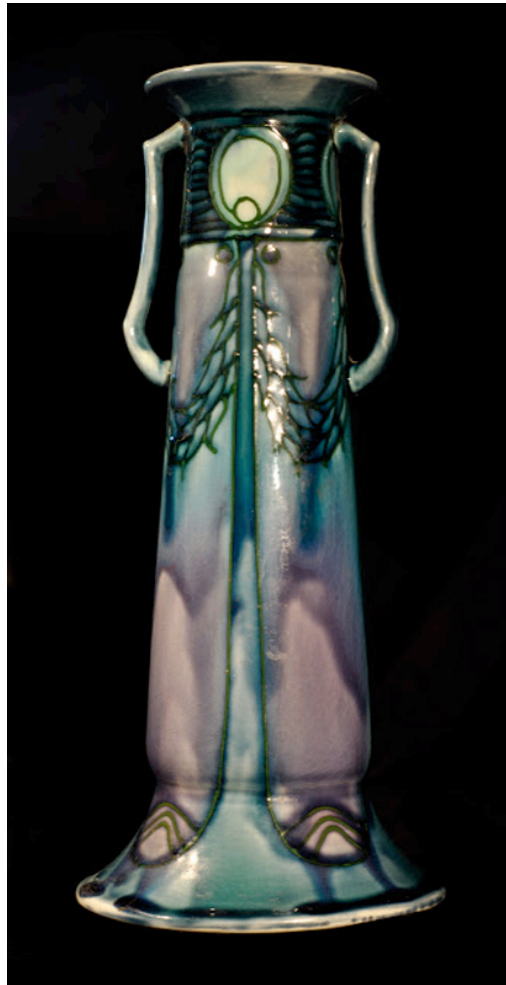
William Grueby learned his craft in the Chelsea, Massachusetts pottery of the Robertson family, the Chelsea Ceramic Art Works, as well as in the J. and J.G. Low Art Tile Works. Historian Susan Montgomery writes that Grueby emphasized form and color in his creations and "...resisted over-industrialization, preferring to maintain the values of handcraftmanship. ...Grueby workers processed raw clay mechanically and used the potter's wheel to form pieces, but the modeling was done entirely by hand. Tile production was more mechanized in that it included molds, but multi-colored tiles had to be hand-glazed." (Susan J. Montgomery, *The Ceramics of William H. Grueby*, Arts and Crafts Quarterly Press, Lambertville, NJ, 1993, p. 48)

Grueby was the first to develop his signature matte and curdled glazes, which spurred his competitors to experiment and develop their own variations of stand-alone matte glazes. Hanna Tachau wrote that Grueby, along with his chief designer, Addison LeBoutillier, produced tiles with a "soft velvety texture and pure tonal quality". (Hanna Tachau, "America Re-discovers Tiles", *International Studio*, Vol. LXXV, No. 299, March 1922, p. 78) Also, two of the "...country's leading arbiters of turn of the century style chose to incorporate Grueby into their work. Tiffany Studios used Grueby Pottery for lamp bases, and Gustav Stickley used Grueby Tiles in his stands and tables...." (<http://www.jmwgallery.com>)



**Two sixty-eight-tile panels made by the American Encaustic Tiling Company, c.1913, for the Empire State Dairy, 2840-44 Atlantic Avenue, Brooklyn. (Photos courtesy of Friends of Terra Cotta)**

Another designer who made significant contributions to tile decoration and design was the colorist Leon Victor Solon. Prior to immigrating to the United States in 1909, Leon Solon designed colored bookbindings for the “Sutherland Decoration” of George Baguley’s bookbindery in Newcastle-under-Lyme, and he designed colored textiles for Wardle and Company.



**An early Minton Secessionist twin handled vase c. 1905 by Leon Solon and John Wadsworth of inverted trumpet form, with twin ear shaped handles and tubelined laurel swags in shades of blue and purple, with a cream roundel to the neck. A stunning example of the Art Nouveau style introduced by Solon and Wadsworth. (Photo courtesy of Nick Cashin, "UK Pot Heads" blog; <http://ukpotheads.blogspot.co.uk/2012/05/minton-secessionist-vase.html>)**

Solon became the art director for the Minton Potteries from 1897-1909, and helped develop Minton's "Secessionist" ceramic line. After immigrating, Solon became the art director for the American Encaustic Tiling Company where he developed brightly-glazed faience tiles and a color theory for architecture, which led to him being hired as the colorist for the Philadelphia Museum of Art and Rockefeller Center. Solon also invited other artists such as Arthur Crisp and Augustín Lazo to design tiles and murals at AET. (Michael Padwee, "Leon Victor Solon: Color, Ceramics, Architecture", <http://tilersearcharticles.omeka.net/items/show/35>)



Isaac Broome, sculptor and artist, was a Canadian immigrant to the United States, and as a tile modeler and designer, he was also part of this general movement that helped create an American art tile style and industry.



Prior to moving to Trenton to work for Ott & Brewer in about 1876, he lived and worked in Pittsburgh, Philadelphia and Brooklyn, New York. In Pittsburgh, in the 1860s, he was a sculptor and was part of the local art scene.



David Gilmour Blythe and Issac Broome in front of J.J. Gillespie's Gallery in 1865.

His friends included the painter David Blythe, and the gallery owner J.J. Gillespie. Broome may also have tried his hand, unsuccessfully, at a pottery business there.

In Philadelphia, Broome exhibited his work at the Pennsylvania Academy of Fine Arts from at least 1858 when his bust of Bishop Potter was shown, and he was an “Academician” at the Academy from about 1860 on. Sometime in the early 1870s Broome moved to the Greenpoint section of Brooklyn, which was known for its pottery industry. Part of the time he lived, and possibly had a kiln on the property at 175 Calyer Street. It is probable that Broome was involved in a pottery venture in Greenpoint with a local architect, J. Charles Caspar, at that time.

Three companies in Trenton and one in Pennsylvania--Ott & Brewer, the Trent Tile Company, the Providential Tile Works, and the Beaver Falls Art Tile Works--made plaques and tiles designed and modeled by Isaac Broome. Many of these were very popular, and although it is not known exactly how his designs traveled from the United



States to England, tile companies, there and in the U.S., made use of his designs, even though they were probably copyrighted.

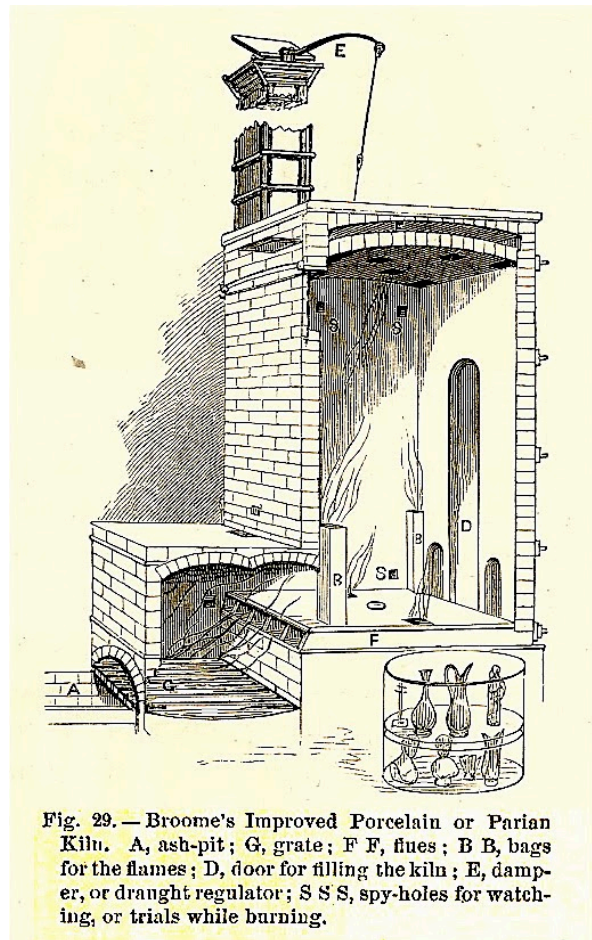


Fig. 29.— Broome's Improved Porcelain or Parian Kiln. A, ash-pit; G, grate; F F, flues; B B, bags for the flames; D, door for filling the kiln; E, damper, or draught regulator; S S S, spy-holes for watching, or trials while burning.

Drawing for Broome's "Improved Porcelain or Parian Kiln". (Jenny J. Young, *The Ceramic Art*, Harper & Brothers, New York, 1878, p. 464)

While at Ott & Brewer, in the mid- to late-1870s, Isaac Broome designed parian plaques along with his other works of art. One of Broome's patents at this time was for an improved porcelain or parian kiln.



(L) Parian Plaque marked “BROOME SCULPT” below hem of dress. 14 3/8” x 11 1/4”. Ott & Brewer. (R) 14 1/2” x 10 3/4” Parian Plaque marked: “I. BROOME/OTT and BREWER/U.S. 1776”. Both are the gift of Emma and Jay Lewis to the Metropolitan Museum of Art, 2011.

One of Broome’s plaques, above, depicts women's fashions of the day, while the other harks back to our colonial past.

In “The Western Art Movement” (1887) Ripley Hitchcock, an art critic and editor, wrote of the characteristics of a developing “American style” of pottery in china painting after the Centennial Exhibition. “At present one characteristic of [American] potteries is the unusual variety of clay bodies and glazes. Another is the absence of restrictions upon the artists. They are not bound...to the production of a given amount of work, but are left free and encouraged in every way to produce individual work.” (Ripley Hitchcock, “The Western Art Movement”, *The Art Movement in America: Three Articles Reprinted from The Century Magazine*, The Century Company, New York, 1887, August 1886, pp. 578-579) Although this was referring to china painters in the United States, Hitchcock could easily have been referring to tile modelers and designers.





Three Trent portrait tiles, 4 1/4" and 6" square, all marked "IB". (Dirk Soulis Auctions, Estate of Gene DeGruson, December 11, 2013, Lot 220)

As with many of the best ceramics designers of the period, Broome would have wanted to control the design process from conception to finished product. Although he was a prolific designer Broome's work with tiles took place within three industrial tile settings. These tile companies--Trent, Providential and Beaver Falls--had to make a profit in order to survive, and used processes such as the dust-clay process, and mechanization to create as many tiles in as short a period of time as possible. Broome's mechanical patents, as we shall later see, also helped to build the industrial base of the American tile industry.

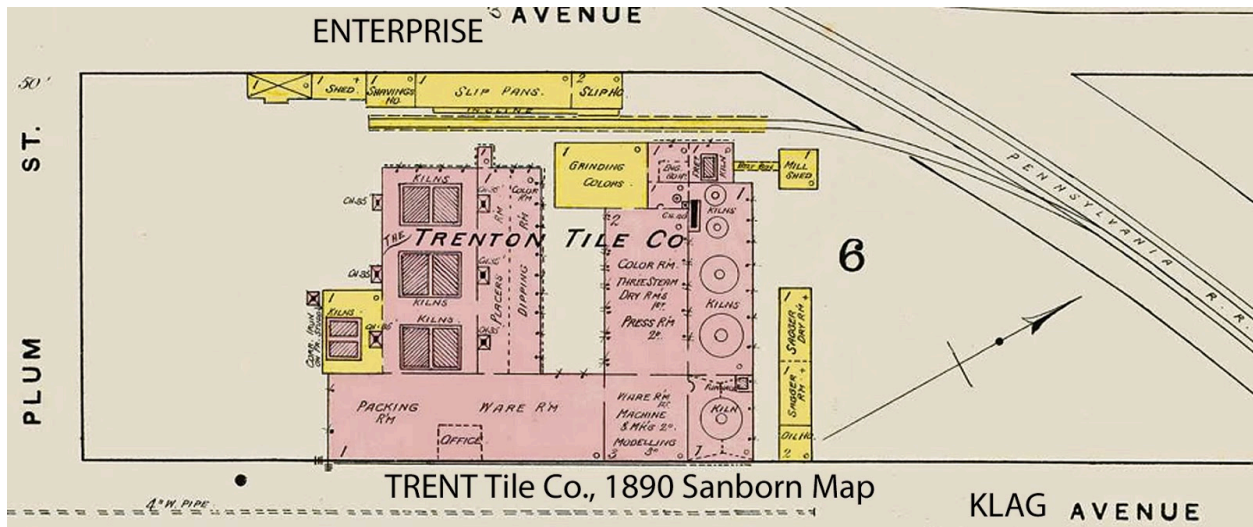
"The height of art tile production in the United States [also] coincided with the beginning Arts & Crafts Movement, popular in America from about 1875 to 1920. One basic tenet of the movement was that everyone deserved to live with beautiful, affordable things in their homes. One way in which consumers could realize this goal was to incorporate tiles...into their residential interiors." (<http://www.tfaoi.com/aa/10aa/10aa86.htm>)



(top) A 6" x 18" Trent panel (3 tiles) showing a reclining woman in an exotic locale. From the "Music" mantel facing. (bottom) A 6" x 18" Trent panel (3 tiles) showing three reclining classical women. From the "Seasons" mantel facing. (Both are from Norman Karlson's *Encyclopedia of American Art Tiles*, Region 2.)

After the 1876 Centennial Exhibition American consumers at first tended to prefer classical tile styles. (Gary B. Magee, Andrew S. Thompson, *Empire and Globalisation: Networks of People, Goods and Capital in the British World, c. 1850-1914*, Cambridge University Press, Cambridge, UK, p. 158) The Trent Tile Company, with the help of Isaac Broome, supplied many of these throughout the country. Decorative arts historian Elisabeth Cameron wrote, "Frequent themes include portraits, classical and contemporary figures, e.g. ...allegorical panels representing the muses." (Elisabeth Cameron, *Encyclopedia of Pottery & Porcelain, 1860-1960*, Facts on File Publications, New York, NY, 1986, p. 62)





The Trent Tile Company in 1890.

According to *The Trenton Times* of September 6, 1883, The Trent Tile Company was first organized as the Harris Manufacturing Company in 1882 to manufacture porcelain spinning rings, to replace steel rings then in use in every cotton, wool and silk mill throughout the world. While experiments were taking place to solve a glaze problem in the manufacture of these rings, the Harris Manufacturing Company began to manufacture relief tiling. "The tiling...is unlike any tiling made for art decorations made in any country, and it is unequalled in richness of finish and the strikingly beautiful decorative effects it is capable of producing. It is the only tiling manufactured in relief with a smooth surface... . While it produces all the effects it is possible to give to relief work, there are no raised portions exposed, [...thus] the chances to damage the relief work...[are decreased...]." ("Novelty Pottery Designs", *The Trenton Times*, Thursday, September 6, 1883, p. 1)

I have not been able to locate any tiles made by Harris, but the article compares the Harris tiles favorably to tiles manufactured by the Low Art Tile Works, and discusses an imminent name change from Harris to the Trent Faience Works. Further, "The unprecedented success of the company in manufacturing of relief tiling has encouraged them to extend...production [...to] other art decorations, and they are now preparing designs for a series of plastic sketches and other mantel decorations, which they expect to have ready for the coming holiday trade. ...At present the industry furnishes employment to thirty people... . [This will] soon be increased by a number of skilled people, including a designer of international reputation. The management of the works is in charge of Leonard Roden,...and he possesses a valued assistant in Joseph Kirkham\*, the oven-man, who was employed [...by] Josiah Wedgewood, for a period of sixteen years." ("Novelty Pottery Designs", *The Trenton Times*, Thursday, September 6, 1883, p. 1)

\*[I should mention that Kirkham figures prominently in the formation of the Providential Tile Works, and later, in using at least one of Broome's designs at one of Kirkham's California companies.]



**The Trent Tile Company in 1921**

By 1892 Trent operated 20 kilns--including six round biscuit kilns and upwards of a dozen enameling or English muffle kilns, and by 1910 employed 300 workers. By 1912 Trent ran into financial difficulties and was placed in receivership. In 1916 Trent was purchased by the Receiver, Thomas H. Thropp, who died in 1931. The company was then purchased from Thropp's family by R. P. Herrold, but it went into receivership, again, in 1939, and was closed down. In 1940 the Wenczel Tile Company bought the factory...[which] was located at Klagg Avenue and Plum Street." (Michael Padwee, "The Manufacture of Ceramic Tiles in Trenton-Part 2: The Trent Tile Company", *Trenton Potteries, Newsletter of the Potteries of Trenton Society*, Vol. 4, No. 4, December 2003, p. 1)



Broome created some iconic classical designs with exotic overtones for the commercial market, as well as other designs for Trent tiles: (top) a Broome classic panel design; (bottom-L) a Broome design marked "Sample"; (bottom-R) four stove tiles.





Two of Broome's designs, #449 and #448.

From late 1883 to 1885 Isaac Broome was the chief designer and modeler for the Trent Tile Company. Broome's work for the Etruria Pottery and Ott and Brewer in Trenton was popular with their customers, as well as with decorative arts critics and writers of the day. Broome's work had garnered awards at National exhibitions, and the Trent organizers probably hoped--and this was borne out--that Broome's previous success would translate positively to Trent's advantage. According to Edwin Atlee Barber when Broome left Trent to help organize the Providential Tile Works, he left behind enough art tile designs at Trent so that many were still being made in the 1890s (Edwin Atlee Barber, *Pottery and Porcelain of the United States*, Century House Americana, Watkins Glen, NY, 1971 reprint of the 1893 edition, pp. 363-365), and we know by the 1905 catalog, into the early 1900s.



**Trent tile molds at the Trenton City Museum. (Courtesy of the Trenton City Museum)**

We are fortunate that a room of Trent tile molds was discovered in a boarded-up, basement room in the Wenczel Tile factory (Wenczel was located in the old Trent tile works) in 1985 and were donated to the Trenton City Museum.

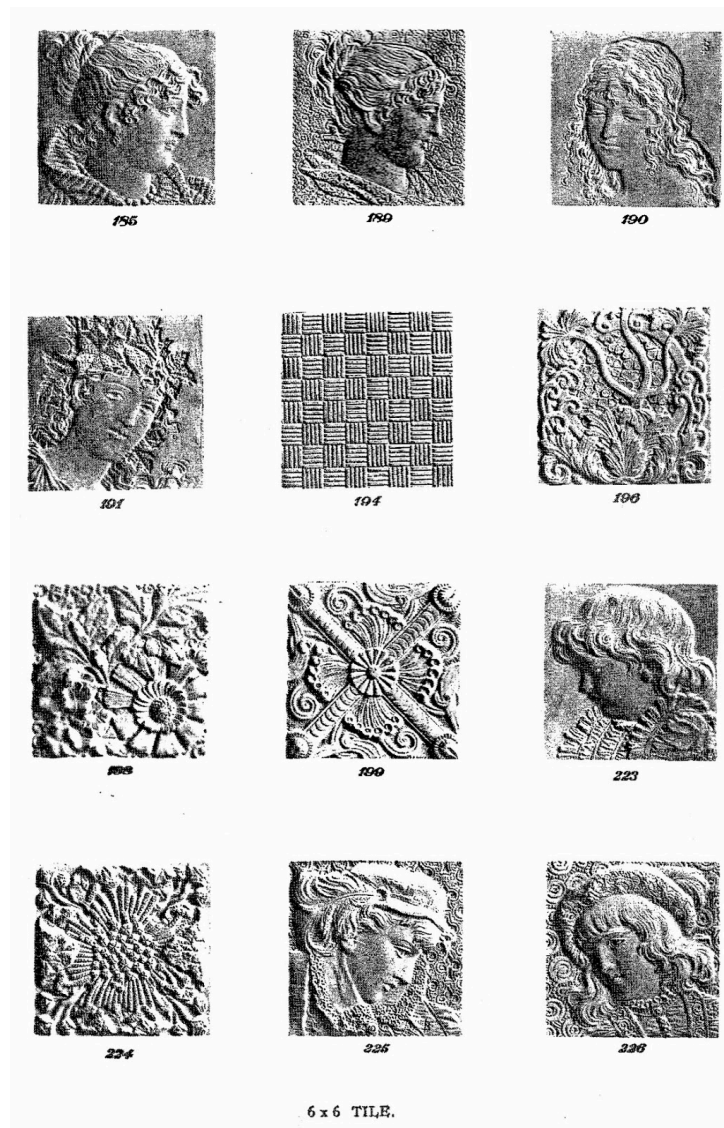


Plate 45 from the Trent Tile Company's undated Illustrated Catalogue.

Some of the molds (and thus the tiles made from the molds) have the signatures of Broome or William Gallimore, the tile modeler who replaced Broome in 1886, while others can be attributed to Broome on the basis of their early design numbers from the undated Trent Tile Company *Illustrated Catalogue* and from the 1905 Trent Catalog.





**Negative and positive mold images of the “Spring” seasons tile: a cherub with Broome’s signature in the bottom, outer corners. (Mold courtesy of the Trenton City Museum)**

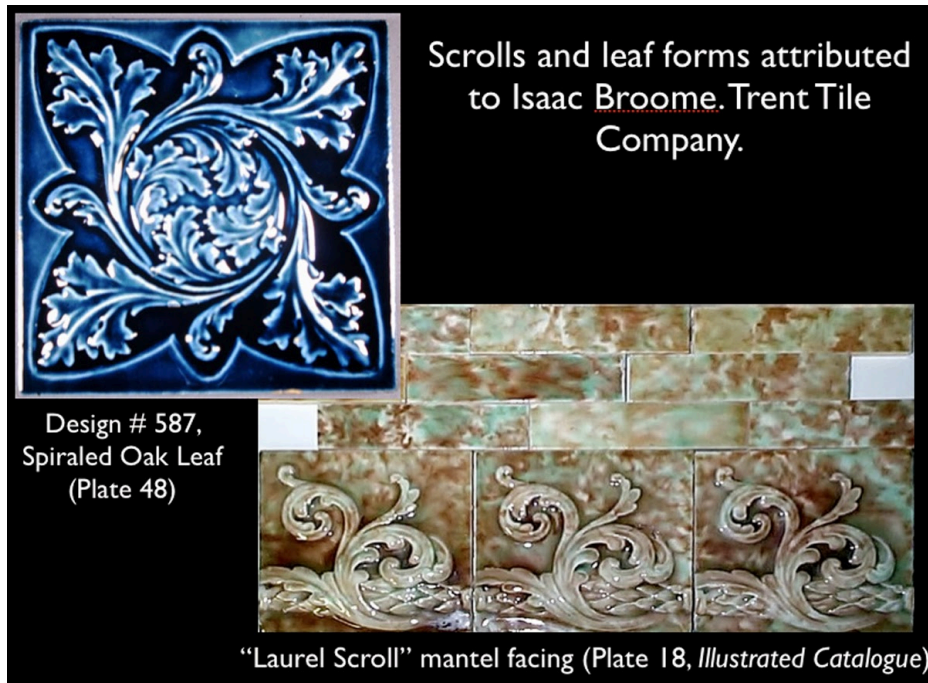
It had always been assumed that Trent's tiles of cherubs were most probably designed by William W. Gallimore, however the “Seasons” molds (above) show some cherubs to be Broome’s work. His signature is in the lower outer corners of these molds.



A 6" x 9" edge tile from the set that used Mold # 1206 as a central tile in a fireplace surround. (Mold courtesy of the Trenton City Museum)

Broome also created wonderful "ribbon" tiles, (this mold is attributed to Broome),





and scroll and leaf tiles. (These are early design numbers and are attributed to Broome.)



The negative mold for Broome's 6" x 12" "Horses" tile. (Mold courtesy of the Trenton City Museum)





Both the horses mold and the serving boy mold (below) are also of tiles attributed to Isaac Broome.



Positive mold # 729, one of two 6" x 12" tiles picturing serving boys. (Mold courtesy of the Trenton City Museum)



**Ulysses S. Grant**  
(Collection: Metropolitan Museum of Art, American Wing)

**Tile design #584**  
(Collection: Michael Padwee)

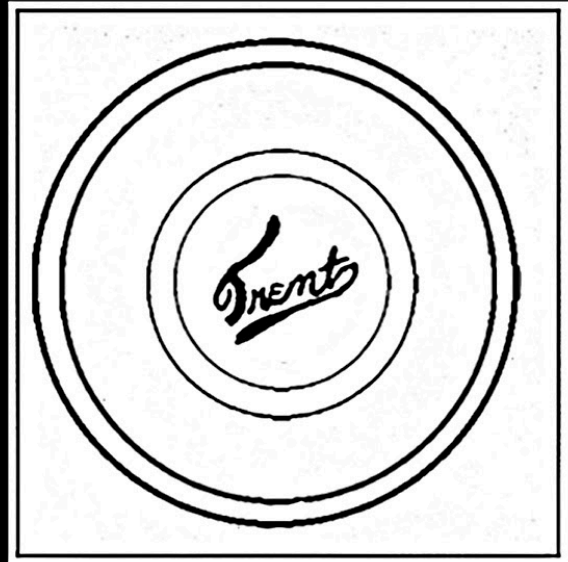


Broome also designed historical and classical portrait tiles for Trent. The first is a portrait of Ulysses S. Grant, and the second is a classical portrait in very high relief, design #584.

(Back of 3" tile, design # 177)



(Back of 4 1/4" tile, design # 28)



Two early key patterns on Trent tiles. The left key pattern is similar to a J. & J.G. Low pattern. (From Michael Padwee, *A Guide to the Patterns and Markings on the Backs of United States Ceramic Tiles, 1870s-1930s* (1997).

Another way to identify an early Trent tile design is by the key patterns on the backs of the tiles. Key Patterns are the designs on the backs of tiles that help the tiles stick to the wall or floor adhesive. In its early days Trent used frame-like, grooved key patterns on the reverse of some tiles--much like the grooved key patterns of the J. & J.G. Low Art Tile Works. Trent also used circular key patterns with the script "Trent" on some early tiles.





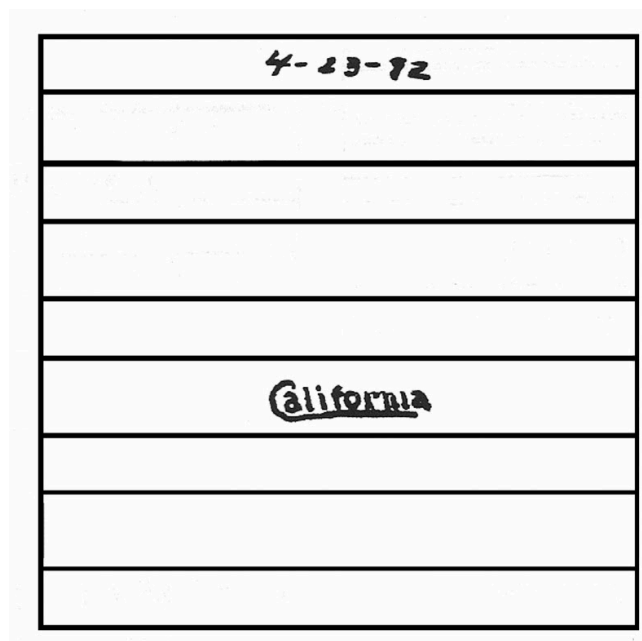
**Broome's "Michelangelo" tile design, #184, in Trent's Illustrated Catalogue, was reproduced by other tile companies.**

Broome's "Michelangelo" tile design was copied by at least ten British tile companies and one California company, with or without his permission, and it was also used by the Providential Tile Works. (see Auction Lot 132 in "From England to America: One Hundred Years of Tiles", The Perrault-Rago Gallery, Lambertville, NJ, July 1st-23rd, 1995)



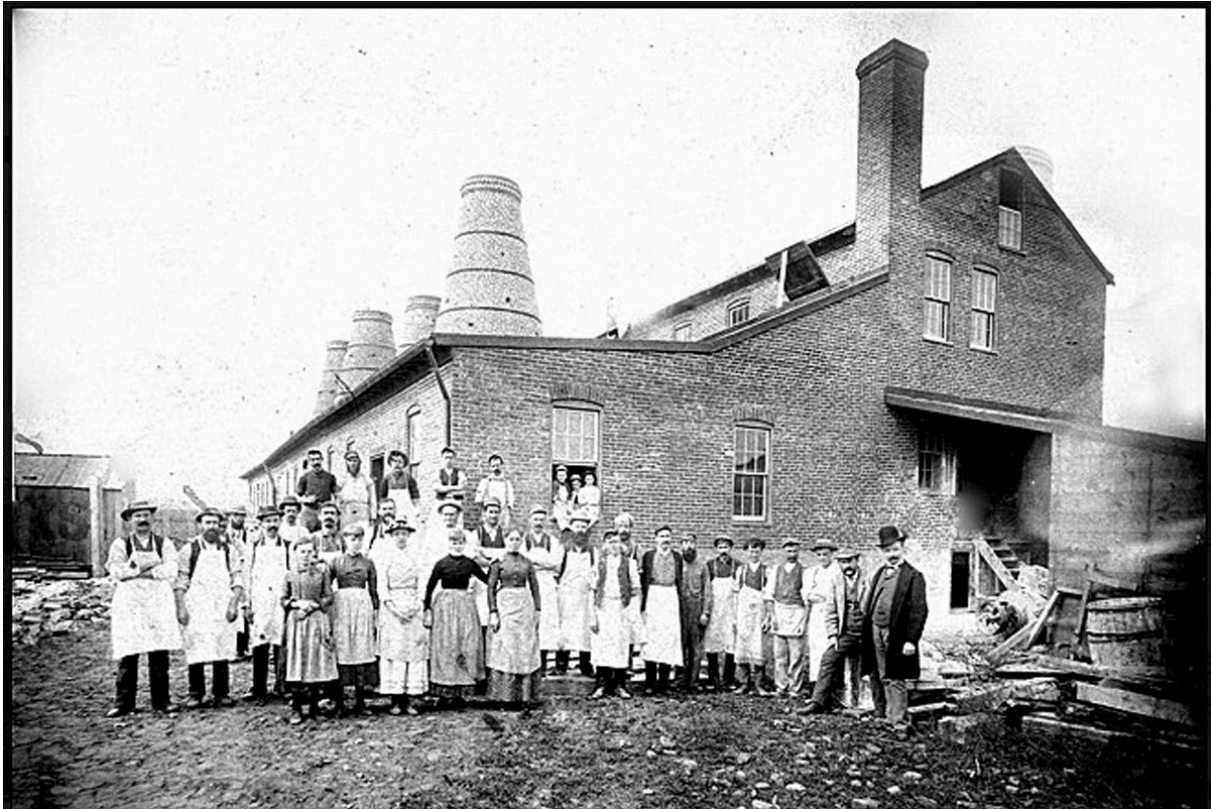
”[How] this pair came to be made by J & W Wade of Stoke upon Trent is unknown and has provoked much discussion, it appears that they are the only such pair. These are found from time to time mostly in greens and blues and rarely in this particular glaze. ... John and William Wade commenced tile making in 1888 under the company's general trading name of Wade & Co. Tile making proved very successful and the business was split off in 1891, named J & W Wade and with the trading name 'The Flaxman Art Tile Works'.” The tiles are embossed “Flaxman” on their reverse sides. (<http://www.tile-heaven.co.uk/deets/03161.htm>)

It is possible that Joseph Kirkham, who worked at Trent and was a principal of the Providential Tile Company, where Isaac Broome worked after leaving Trent, took some of Broome’s molds with him when he moved to Ohio and then to California.



The back of Broome’s “Michelangelo” tile made by Joseph Kirkham’s Pacific Art Tile Company/Western Art Tile Company or it’s subsidiary, the California Tile and Terra Cotta Company in Tropic, California. (Correspondence between California tile historian Steve Soukup and the author) Recently, however, a Tropic Pot-teries tile has also surfaced with the script “California” marking, above, molded in relief on its reverse, fur-ther confusing this issue.)

One of the California companies associated with Kirkham--either the Pacific Art Tile Company/Western Art Tile Company or it's subsidiary, the California Tile and Terra Cotta Company, which were all located in Tropic, California, is thought to have produced the Michelangelo tile with a "California"-marked back.



Although unidentified in the original blog post by Tom Glover (<http://glover320.blogspot.com/2008/01/no-date-no-identification.html>), one comment stated : "This photo is in the pottery display at the Trenton City Museum in Ellarslie Mansion on the second floor. The description says "The Providential Tile Works c. 1880" The photo comes from the Trenton Free Public Library, Trentoniana collection." I was later told the photo was actually of the Providential Tile Works in the 1890s.

In 1886 Broome moved from Trent to the Providential Tile Works, just across the street from Trent. The Providential Tile Works was organized in 1886 by Joseph Kirkham, James Robinson and C. Lewis Whitehead. According to tile historian Norman Karlson, there was a good deal of competition between Trent and Providential.



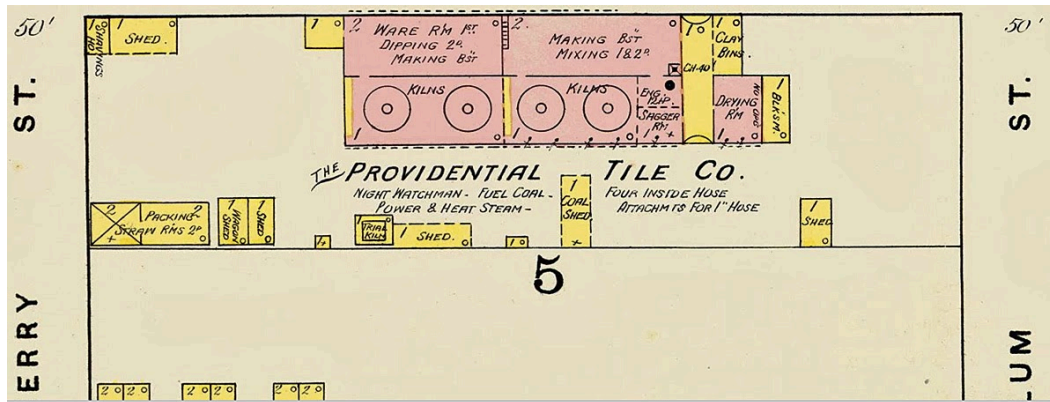
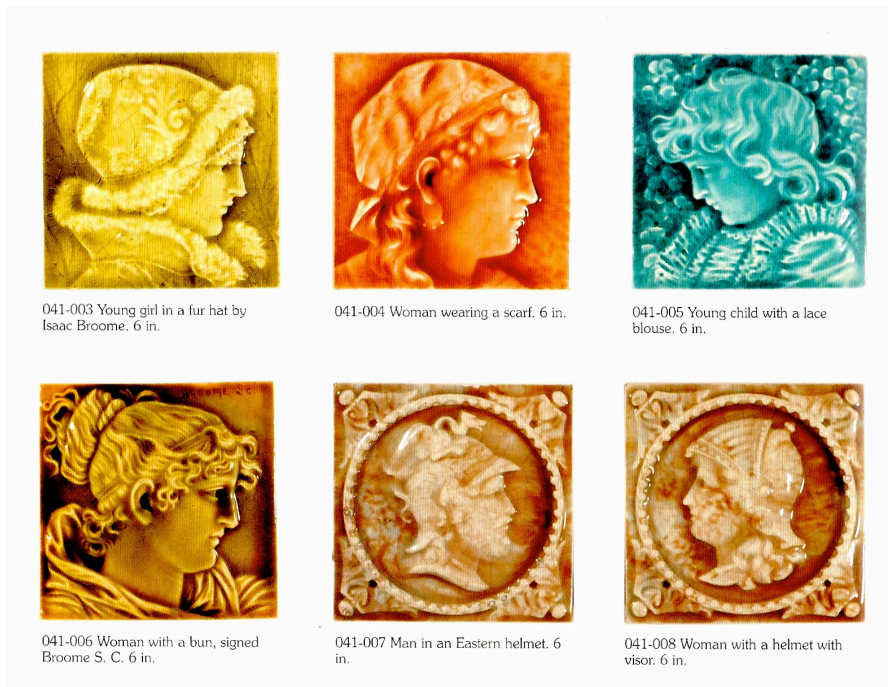


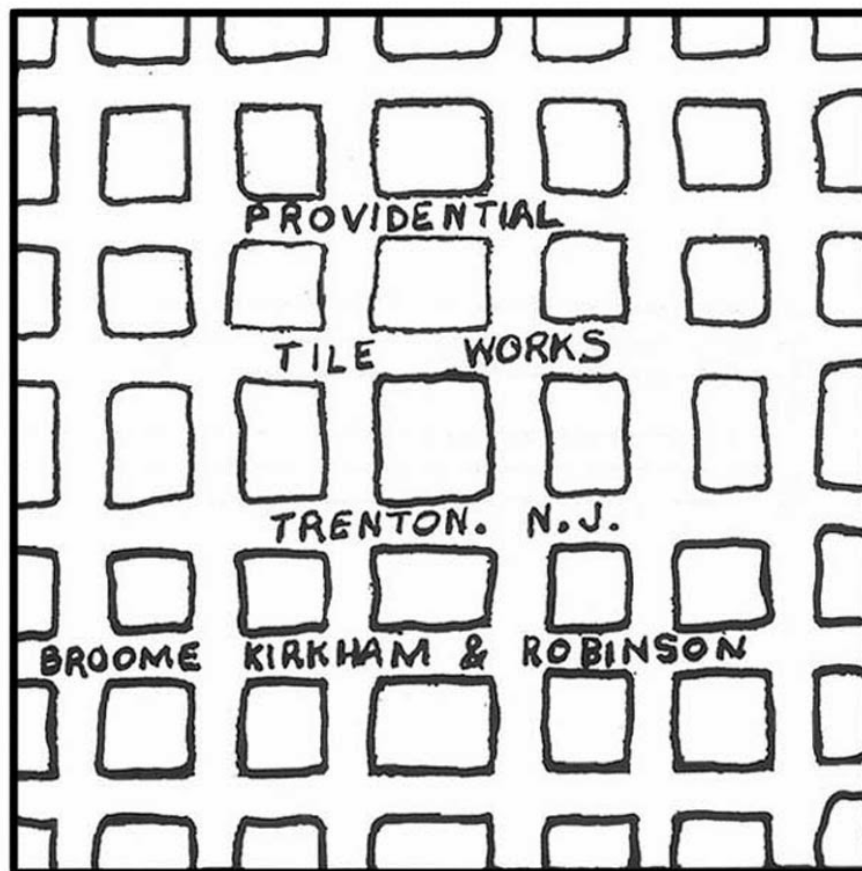
Diagram of the Providential Tile Works from an 1890 Sanborn Map. The Trent Tile Company is across Plum Street to the right.

Broome was hired away from Trent and worked for Providential for four years (Norman Karlson, *The Encyclopedia of American Art Tiles*, Region 2, Mid Atlantic States, Schiffer Publishing Ltd., Atglen, PA, 2005, p. 165), not only bringing his skills but even some of the designs he used at Trent. This was not an unusual occurrence as there are many instances in British and American tile factories of workmen taking their designs or glaze formulas with them as they moved from one company to another. Many of these were seen as the property of the modelers and ceramists, and were also probably seen as an additional bargaining point by those workers.



Providential designs attributed to Broome. Tiles #041-005 and #041-006 were also produced by Trent-- Designs #223 and 185. (Norman Karlson, *Encyclopedia of American Art Tiles*, Region 2, Schiffer Publications, Atglen, PA, 2005)

“Like Trent, Providential produced dust-pressed, embossed tiles in mechanical, fly-wheel presses... . [The tiles] were then colored with translucent glazes that accentuated the relief designs. Principally made to adorn fireplace mantels, many...were produced in a contiguous series designed to surround a fireplace opening—as was the fashion in upscale homes in the late 19th century.” (<http://www.tileheritage.org/THF-TileoftheMonth-Jun-08.html>)

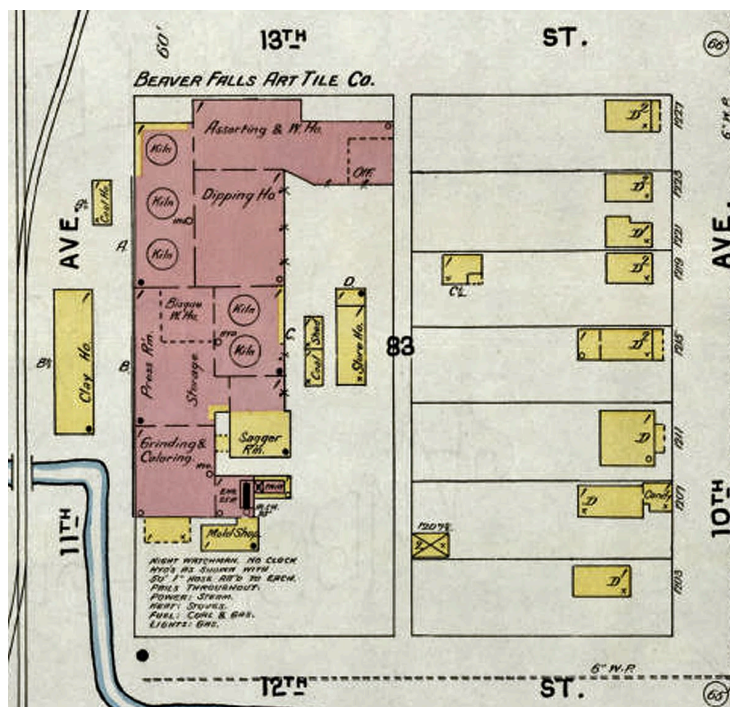


The reverse grid pattern and markings on a 6” Providential relief tile. (Author’s collection)

Although Isaac Broome was probably not a part owner of Providential, many of Providential’s tiles were marked “BROOME, KIRKHAM & ROBINSON”. Thus, Broome’s name replaced the name of one of the owners of the company, C. Lewis Whitehead, on the backs of many tiles, indicating Broome’s high regard as a modeler, as well as helping to sell tiles because of his name recognition.



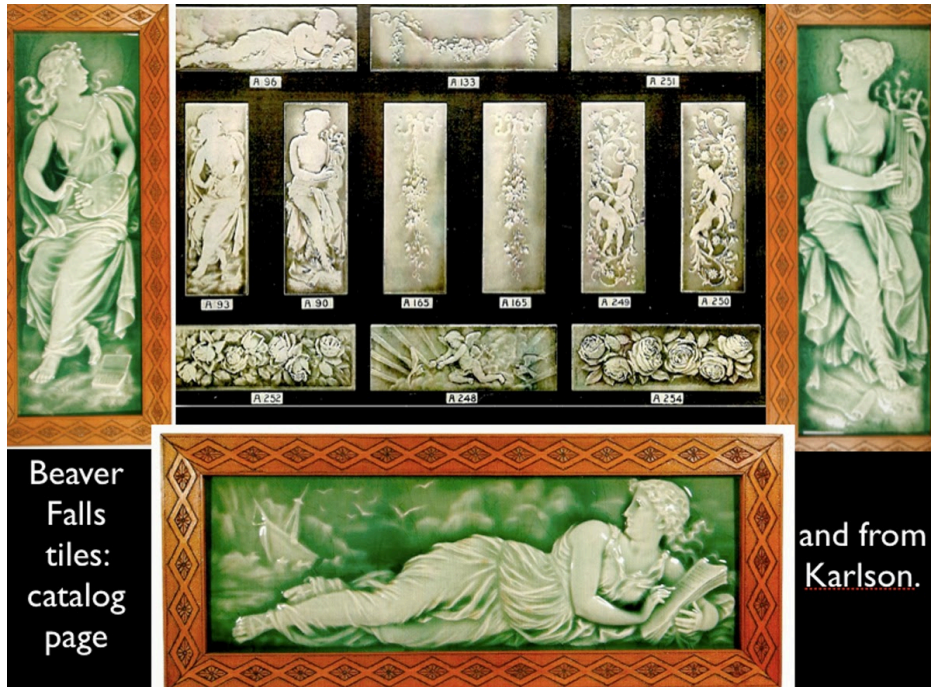
In 1890 Broome left Providential and became a partner in William T. Lee's, Washington Pottery in Trenton, which advertised hard porcelain ware for hotels.



Beaver Falls Art Tile Company. 1896 Sanborn map.



He then moved on to design and model tiles for the Beaver Falls Art Tile Company, which had been organized in 1886 in Beaver Falls, Pennsylvania. Beaver Falls' tiles were not only used for mantels, but also to decorate stoves and walls.



Beaver Falls tiles: catalog page

and from Karlson.

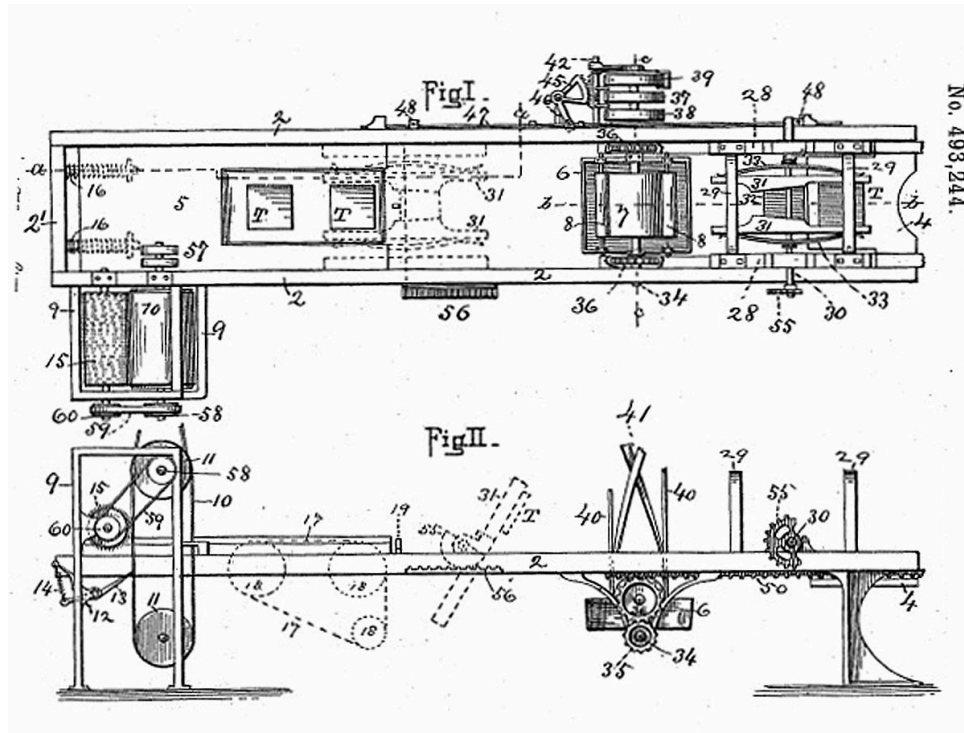
Color Beaver Falls catalog page and tile panels from Norman Karlson, *Encyclopedia of American Art Tiles, Region 2.*



Beaver Falls' version of Broome's "Sappho" tile. (Edwin Atlee Barber, *Pottery and Porcelain of the United States*, Century House Americana, Watkins Glen, NY, 1971 reprint of the 1893 edition)

Broome was influenced by the views of the British art and social critic, John Ruskin, who stressed the moral, social, and spiritual purposes of art and a Naturalist theory of visual representation. For Ruskin, according to decorative arts historian Richard Mohr, “beauty and function and nature should always be twined together.”

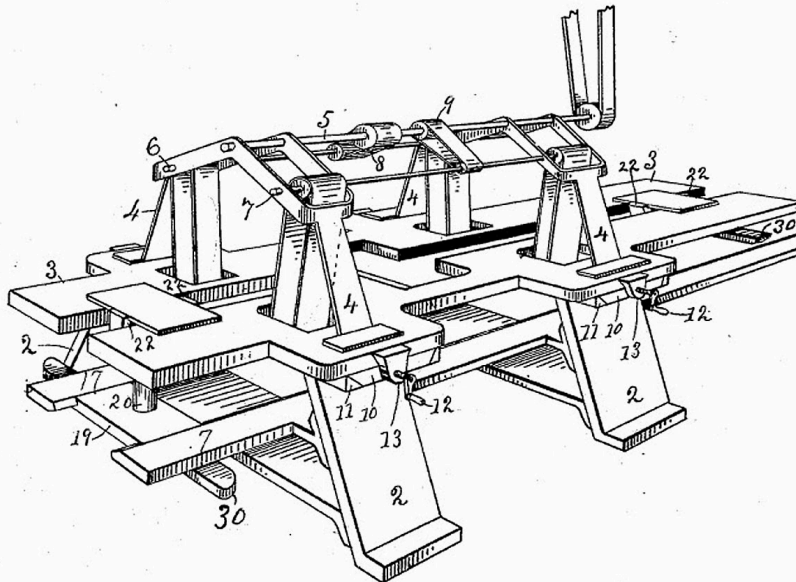
However, Broome also embraced the dust-pressed, mechanical methods of commercial tile production, as did many of his contemporaries at this time. Broome developed some technological advances for use by the new, American tile industry while working for Beaver Falls.



Patent # 493,244 (granted, 1893). A machine that automatically transports tiles to be glazed and cleaned of excess glaze.

In 1892 Broome applied for a patent for a machine that would automatically transport tiles to a decorating vessel, decorate the individual tile, clean off the excess glaze, and remove the tile so another could be decorated. This patent, No. 493,244, was granted in March 1893.

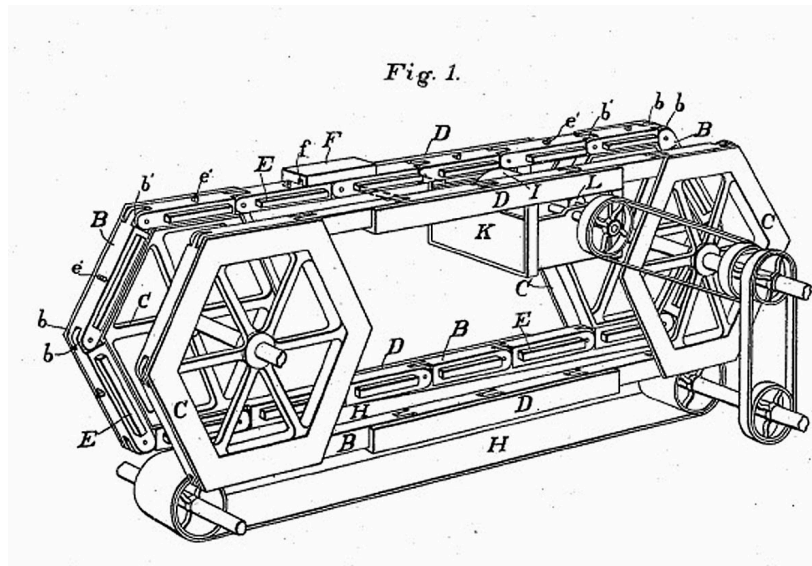
Fig. I.



Patent # 509868 (1893) for a machine that improves the edge-cleaning function of the previous patented machine.

Another patent, No. 509868, granted to Broome in December 1893, was for a "Tile-Dressing Machine", which improved on the edge-cleaning function of the first patented tile-decorating apparatus.

Fig. 1.



Patent #532,636 (1895) for a roller mechanism that would automatically glaze tiles.



Finally, Broome further improved his first apparatus with Patent No. 532,636 in January 1895, "Tile Decorating Apparatus". The improvement, here, was the use of a roller mechanism to glaze tiles automatically.



Beaver Falls mantel facing and tiles. (Karlson, Region 2, pp. 191, 197)



044-036 Stove tile portrait of a Roman soldier. 3 1/4 in.

044-037 Stove tile, in a metal frame, portrait of a woman with flowers in her hair. 3 1/4 in.



044-038 Stove tile, in a metal frame, portrait of woman with headless tile. 3 1/4 in. diameter.

044-039 Stove tile portrait of a woman. 4 1/4 in.



044-040 Stove tile portrait of a man. 4 1/4 in.

044-041 Stove tile portrait of a queen. 4 1/4 in.



While at Beaver Falls, Broome "...was responsible for many of [the company's] best tiles: heavily molded figureheads, floral and geometric tiles, intaglio tiles, and large relief panels for fireplaces and mantels." (Norman Karlson, *The Encyclopedia of American Art Tiles*, Region 2, Mid Atlantic States, Schiffer Publishing Ltd., Atglen, PA, 2005, p. 190) Many of his designs are also found on round stove tiles. (Notice that at least two of the stove tile designs above were also produced by Providential.)

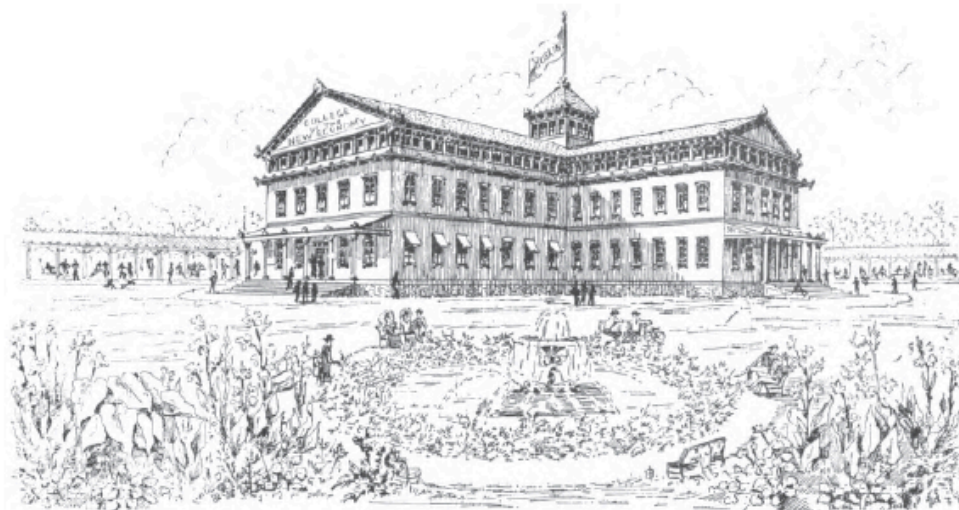


A Beaver Falls mantel facing from an undated catalog, Plate #A 62. Elements of this are similar to elements of Trent's "Cupid and Rose" mantel facing.



Mantel facing in "India style" designed by Isaac Broome from an undated, unpaginated Beaver Falls catalog.

These were many of the same types of art tiles that Broome modeled for Trent and Providential, and which were in fashion in the last quarter of the 19th century. Broome was a brilliant sculptor and tile modeler. He helped three tile companies become successful, and he gave a growing American middle class works of art for their own use and admiration.



DESIGN OF RUSKIN COLLEGE OF NEW ECONOMY—Isaac Broome, Arch't.

**Isaac Broome's design for a school of industrial arts at the Ruskin Cooperative Colony. (Not built)**

Although Broome left the ceramics industry for a few years in the late 1890s to participate in the Ruskin community in Tennessee and wrote a book based on his experiences, he was disappointed and distressed by the failure of the community to provide an industrial arts education for its members, and the failure of the community as a utopian socialist experiment, itself. Broome returned to Trenton, and he continued his artistic career in the ceramics industry in the early 1900s.

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I would like to thank Brenda Springsted, trustee of the Trenton City Museum collection and the Trenton City Museum for access to their Trent collection; the Potteries of Trenton Society; the Tile Heritage Foundation; Nicholas Ciotola, Cultural Curator of the New Jersey State Museum for his help; and Judi Wells and Scott Anderson for their help researching Isaac Broome.