E-NEWS FROM TILE HERITAGE

April 2006

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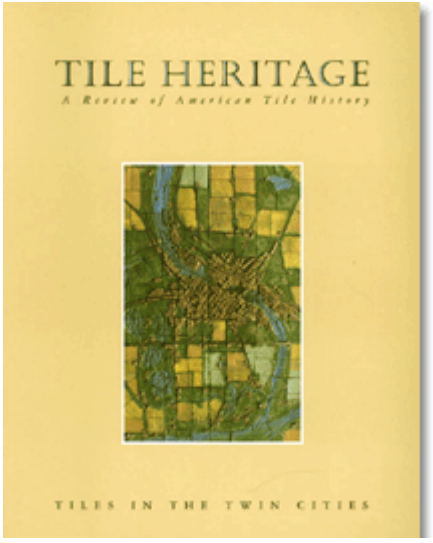
Coming next: Tiles and Mosaics in Chicago

Matt Derrick of San Francisco gets airborne to check out the American Encaustic tile facade at the former Mangrum & Otter tile showroom on Mission Street designed by Bliss & Fairweather, Architects, dating from 1928.

Surfin' the Tile, San Francisco Style!

Last month we reported on waterfalls and the earth's saturation here on Fitch Mountain in Northern California. Locally, March has proven to be one of the wettest months on record. Hence we're now surfin' our way…. to Orlando and the Coverings exposition where you'll find us in Booth 2816, under the flags as guests of the Tile Council of North America. Surfin'? It's our theme this year at Coverings, so ride the wave over, say hello, hang ten and enjoy a free hot dog! During a free moment at Coverings check out "Historic Tiles in Architecture," a video presentation produced by Tile Heritage in cooperation with AVI. You'll find us on the big screen in the lobby of the Orange County Convention Center, opposite Registration. Our special thanks to Coverings for sponsoring the production. Please let us know how you like it!



"Tiles in the Twin Cities"

We are pleased to announce the publication of **Tile Heritage: A Review of American Tile History, vol. 8, no. 1**, titled "Tiles in the Twin Cities," dedicated to the THF symposium held in Minneapolis and Saint Paul in 2002. With our second Minnesota conference upcoming this fall, the timing of this publication couldn't be more perfect. We are especially grateful to our four contributors—Marcia Anderson, Tim Counts, Sharon Darling and Tom O'Sullivan—for their scholarship and for their perseverance, having submitted their work to Tile Heritage over three years ago. Each of the articles is flawlessly written, reflecting over 100 years of Minnesota history. The journal will be in the mail to THF members by the middle of the first week in April.

Minnesota Tile Conference… just ahead!

"Tiles of the Northern Plains: Building on Tradition" will be held in Duluth and Minneapolis September 13-17. Mark you calendar! The program will commence in both cities simultaneously with a series of glass, mosaic and tile making workshops in Minneapolis and a tour to historic sites in Superior (Wisconsin) and Duluth that will include a visit to the 42-room Victorian Fairlawn Mansion and an evening at Glensheen, the quintessential Arts & Crafts estate of Chester and Clara Congden. All attending will come together on Thursday evening for a reception at Clay Squared to Infinity in Minneapolis for the awarding of prizes in the national juried tile exhibition, "One Square Foot." On Friday the Minneapolis Institute of Arts will roll out the red carpet in celebration of its newly completed addition, and we will be engaged there during the day sitting in on our lectures of choice and touring the magnificent museum in between. Friday evening we'll be gathering at the Holiday Inn for dinner and a keynote address by Eric Astrachan, Executive Director of the Tile Council of North America. On Saturday the 16th we will participate in the 5th annual Minnesota Tile Festival at the American Swedish Institute presented by the Handmade Tile Association, which is co- presenting the conference with Tile Heritage. It's going to be a full and exciting program! Please plan on joining us!

Scott Fleming of Oceanside Glasstile demonstrates techniques at Ceramic Tile Design.

Ceramic Tile Design Welcomes History

On March 21st Ceramic Tile Design in San Rafael, California hosted an informative glass tile seminar presented by Scott Fleming, Director of Technical Services at Oceanside Glasstile, Carlsbad, California.

In many ways the event resembled a celebration for the near complete, beautiful, transformation of the Ceramic Tile Design showroom. About eighty people attended—a fine mix of contractors, designers, architects and other colleagues-in-tile, all enjoying the yummy, gourmet Dogs 'n Suds, accompanied by some great music from the resident company band, the CTD Spacers. A great time was had by all!

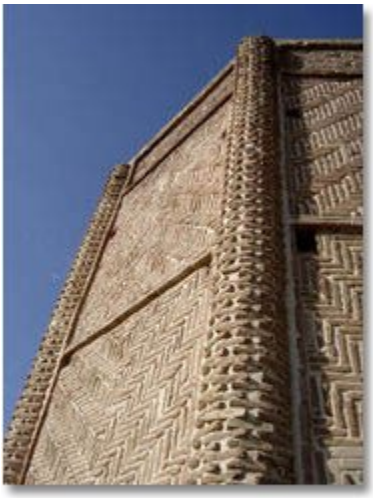
The CTD Spacers entertain the group at CTD.

THF member and company principal Steve Cerami and showroom manager Therese Brown recently invited Tile Heritage to provide a "history wall" as a feature in the new showroom. There are numerous pictures of California installations as well as a glass top display case of historic California tiles on loan from the Foundation's collection. Ceramic Tile Design may well be on its way to becoming a THF "Tile Joint." Our warmest thanks to all at CTD for their vision of drawing together tile history with contemporary design.

Brick making in Egypt from an original carved illustration from the grave of Abd el Qurna, Thebes XVIII Dynasty. Architectural Monographs on Tiles and Tilework No. 2 by Rexford Newcomb. Associated Tile Manufacturers, Beavers Falls PA, 1924.

History of Brick Making

Mud brick, dried in the sun, was one of the first building materials. It is conceivable that on the Nile, Euphrates, or Tigris rivers, following floods, the deposited mud or silt cracked and formed cakes that could be shaped into crude building units to build huts for protection from the weather. In the ancient city of Ur, in Mesopotamia (modern Iraq), the first true arch of sun-baked brick was made about 4000 BC. The arch itself has not survived, but a description of it includes the first known reference to mortars other than mud. A bitumen slime was used to bind the bricks together.



Bricks at the Shebli Tower, Damavand, Tehran. 12th Century installation.

Burned brick, no doubt, had already been produced simply by containing a fire with mud bricks. In Ur the potters discovered the principle of the closed kiln, in which heat could be controlled. The ziggurat at Ur is an example of early monumental brickwork perhaps built of sun-dried brick; the steps were replaced after 2,500 years (about 1500 BC) by burned brick.

Sample; Worn brick wall.

As civilization spread eastward and westward from the Middle East, so did the manufacture and use of brick. The Great Wall of China (210 BC) was built of both burned and sun-dried bricks. Early examples of brickwork in Rome were the reconstruction of the Pantheon (AD 123) with an unprecedented brick and concrete dome, 43 metres (142 feet) in diameter and height, and the Baths of Hadrian, where pillars of terra cotta were used to support floors heated by roaring fires.

Brick makers in the United States, circa early 1900s.

Enameling, or glazing, of brick and tile was known to the Babylonians and Assyrians as early as 600 BC, again stemming from the potter's art. The great mosques of Jerusalem (Dome of the Rock), Isfahan (in Iran), and Tehran are excellent examples of glazed tile used as mosaics. Some of the blues found in these glazes cannot be reproduced by present manufacturing processes.

Western Europe probably exploited brick as a building and architectural unit more than any other area in the world. It was particularly important in combating the disastrous fires that

Brick tools, Brunner & Lay catalog, Chicago, circa 1928.

chronically affected medieval cities. After the Great Fire of 1666, London changed from being a city of wood and became one of brick.

Bricks and brick construction were taken to the New World by the earliest European settlers. The Coptic descendants of the ancient Egyptians on the upper Nile River called their technique of making mud brick tobe. The Arabs transmitted the name to the Spaniards, who, in turn, brought the art of adobe brickmaking to the southern portion of North America. In the north the Dutch West India Company built the first brick building on Manhattan Island in 1633. Basically, the process of brickmaking has not changed since the first fired bricks were produced some thousands of years ago. The steps used then are used today, but with refinements. The various phases of manufacture are as follows: securing the clay, beneficiation [see below], mixing and forming, drying, firing, and cooling.

Size and Proportions

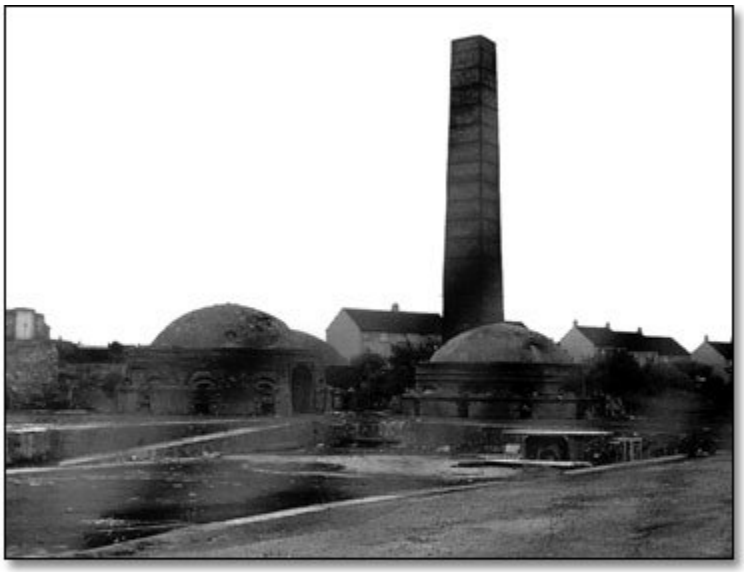
Hard-burned brick should be used for face work exposed to the weather, and soft brick for filling, foundations, and the like. The mainstay standard US brick measures approximately 8 x 4 x 2.25 inches (203 x 102 x 57 millimeters), and has a crushing strength of between 1000 and 3000 lbf/in² (7 to 21 megapascals) depending on quality. The modern standard UK brick size is 215 x 102.5 x 65 millimetres.

A highly impervious and ornamental surface may be laid on brick either by salt glazing, in which salt is added during the burning process, or by the use of a "slip," which is a glaze material into which the bricks are dipped. Subsequent reheating in the kiln fuses the slip into a glazed surface integral with the brick base.

Regardless of size, bricks are usually manufactured with the depth equal to half the length (assuming that the brick is laid horizontally), in a 1:2:4 ratio. This allows for several convenient layouts that must necessarily interweave the bricks in any structure, often both at the corners and within the wall depth in order to ensure the greatest possible durability of the structure.

Sources: The information in the above article was drawn from the Tile Heritage archive, Wikipedia online and The Encyclopedia Britannica online.

Brick shapes: Illustration from the Encyclopedia of the Ceramic Industries (UK 1929).



Brick and fireclay kilns, Hurlford, West of Scotland, 1969 (demolished 1980).

Playing with Clay…Words

The challenge: beneficiation. In the article above on the “History of Brick Making” we read “The various phases of manufacture are as follows: securing the clay, beneficiation, mixing and forming, drying, firing, and cooling.”

What’s beneficiation all about? Sounds like it may have something to do with the church, right? Wrong!

The answer: beneficiation refers to “a processing (of raw material) to improve the physical or chemical properties.”