Restoring the Thompson House Fireplace at the W. H. Over Museum

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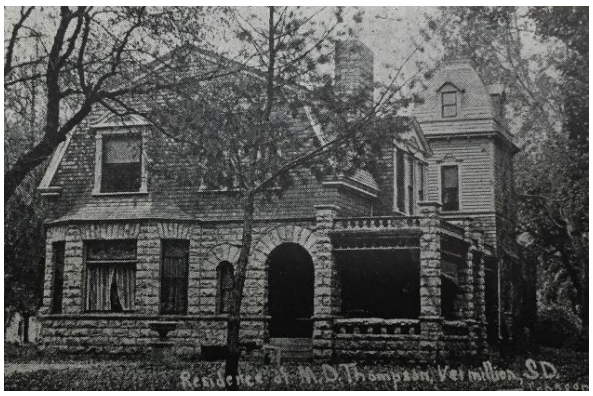
Introduction

One of the most iconic items removed from the historic Thompson house before it was demolished on September 28, 2020, was a Victorian fireplace built in the 1890s. A little background is merited prior to description of the methods we used to restore the magnificent fireplace. Myron D. Thompson, an early settler and prominent businessman built the original structure in 1873 at the south end of what is now Forest Avenue and the west end of Lewis Street overlooking the city of Vermillion when it was located below the bluff. The original building was a wood frame two-story house with four rooms on each story.

The whirlpool that cut into the bluff during the 1881 flood, worried Mr. Thompson enough to move the home in the spring of 1882 to its location at 403 East Main Street. The house was situated on a parcel of land on Block 78 and shared by two other of Thompson's colleagues, Darwin Inman (that house directly east from the Thompson house is currently the home of the University of South Dakota president), and east of Inman's house was the home of prominent lawyer Sheldon Lewis. That house was moved to Cottage Street in the 1940's. Currently the Concordia Lutheran Church is located at that site.

In 1893 the front section of the house facing north was added and included a Sioux Falls quartzite façade and porches (see 1905 photo below, W. H. Over Museum Archives). Most likely the magnificent fireplace located in the front section was added in about that time. Over the 127 years the building was markedly changed, porches were enclosed, and the original tower removed as seen in the 2020 photograph below. Two years prior to its demolition, the structure contained four apartments and was owned by the University of South Dakota Foundation. When the Board of the Friends of W. H. Over Museum suggested salvaging items from the building for an exhibit, the Foundation concurred.



A early 1900s photograph of the house illustrating the stone façade, porch, & tower.

The Thompson house on June 2020.

The fireplace in the Thompson House.

The restored fireplace in the W. H. Over Museum.

Restoration of the Fireplace at the W. H. Over Museum

In the Thompson house the fireplace was dismantled in pieces. The amber-colored fireplace-surround tiles, and hearth tiles were removed individually as were the oak mantle and overmantel, four large ceramic corbels, and the caste-iron firebox-insert and the bronze-plated surround. At the W. H. Over Museum the large fireplace was reconstructed in parts. Prior to reassembly of the fireplace, each component was thoroughly cleaned and restored. The methods used for the restoration of the tiles, wood, and metal elements are described separately. Photographs depict each part of the restoration. Finally, the fireplace took shape, hopefully resembling its past glory.

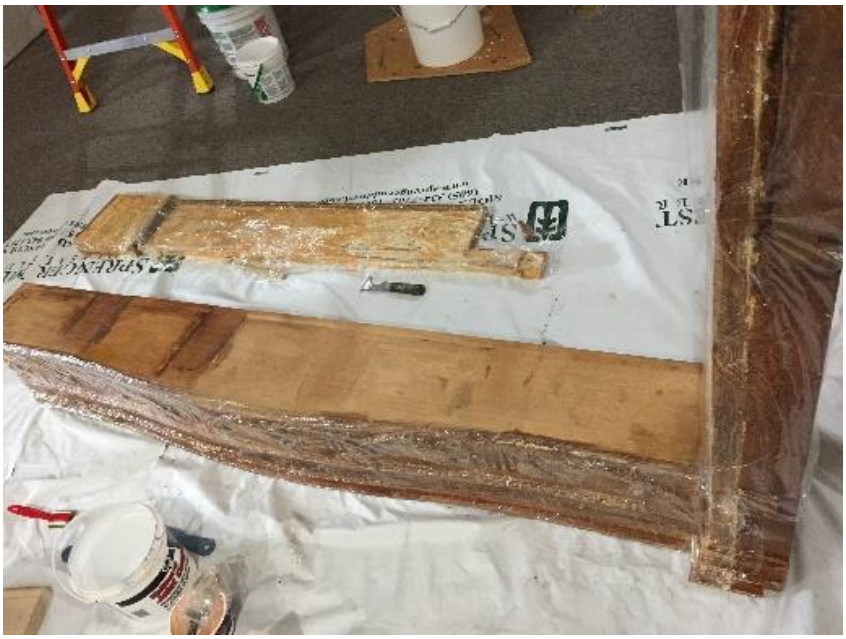
The Mantel and Overmantel

When we started our restoration, we noted that the large quarter-sawn oak mantel and overmantel were previously painted and stripped. Unfortunately, paint remained in crevices and needed to be removed. Luckily, one section of the mantel was enclosed in a wall allowing us to determine the original rich reddish brown hue color of the mantel and overmantel like the color seen in the interior of several Victorian houses.

Firstly, the mantel and the decorative carved columns were removed. To remove the remaining paint, we used Citristrip stripping gel and covered the gelled area with saran wrap that was left on overnight. Then the detail work began to remove the paint in carved pieces and numerous recessed places. Scrapers, sanding, and finally dental picks were used to remove the last tiny particles of paint. These processes required many days of tedious work. In addition, parts of the mantel were missing, and replacements were constructed. To replicate the color of the oak and constructed additions, the wood was stained with Minwax Wood finish Gunstock 231, which resembled the original reddish-brown color of the fireplace. When the correct hue was obtained and dried, the mantel was covered with Miniwax fast-drying polyurethane.

Before the same methods were applied to restore the mantel, the two veneer-covered panels were removed. The harsh treatment of painting and stripping applied to the panels caused the three layers of veneers to crack. We decided to restore the panels separately.

The overmantel contained appliqued beading and floral elements that needed to be carefully cleaned using the same stripping gel used on the mantel. Twelve hours of scraping, sanding, and using dental picks were required to remove the last traces of paint. Subsequently, the overmantel was sanded, stained with Gunstock 231, and covered with polyurethane.



Part of the mantel was gelled and then wrapped in plastic wrap to aid in removal of the paint.

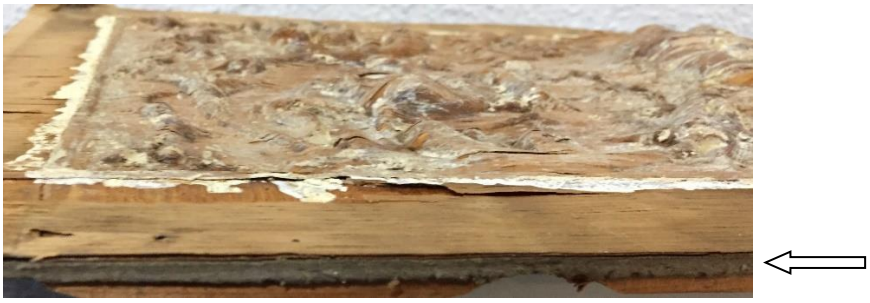
Panels

The two decorative panels that simulated carved wood, were removed from the overmantel. Both panels were in poor shape. Attempts to glue the veneers proved to be futile because the veneers were too brittle. Consequently, three layers of veneer were removed and a dark grey layer of embossed Lincrusta, appeared. A little background first. Lincrusta-Walton (later just called Lincrusta) was invented by Fredrick Walton in 1877 and is composed of a mixture of oxidized linseed oil mixed with paraffin wax, wood flour, gums, and pigments. The mixture is pressed and embossed to form designs that can be painted. Lincrusta, according to Helen Brazil's 2018 University of Lincoln Master's thesis (LINCRUSTA 1877 - 1887: THE DEVELOPMENT, DESIGNS AND CHARACTER OF LINCRUSTA-WALTON), "the dark brown version is described as 'an excellent imitation of carved oak' which, when varnished, resembled polished wood". No mention of the use of veneers covering Lincrusta were found after extensive research.

To restore the design of the Lincrusta panels, missing sections that were replaced with plastic wood, which was dried overnight. Subsequently, the replaced plastic wood sections were sanded with increasingly finer sandpaper, the last was 1000 grade. Looking at a variety of overmantels that contained carved panels, we mixed paint to customize the simulate carved wood. Once the paint was dried, the raised embossed elements were lightly brushed with brown paint to help contrast the raised elements

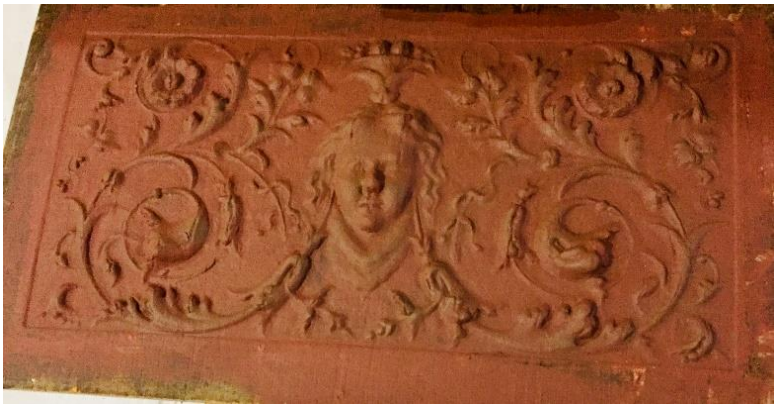
from the background. After the paint was dried, the panel was covered with a coat of polyurethane.

After the refurbished panels dried, they were replaced into the overmantel.



A side view of one of the panels showing the poor shape of the layers of veneer and the bottom charcoal colored Lincrusta section indicated with the arrow.

Plastic wood was used to reconstruct missing parts of the Lincrusta design.



The sanded and painted panel reveals the decorative pattern.

The varnished and restored panel placed back into the renovated overmantel.

Tiling the fireplace surround

When the fireplace was in the Thompson building, amber glazed ceramic tiles (6 inches long, 1 inch wide) surrounded the fireplace insert. According to Caleb Hobbs, a local master tiler, the original brick fireplace was covered with cement. To adhere tiles to the cement, the tiles were soaked in water and then placed onto the wet cement. Removal of tiles revealed the cement, and some adhered tiles. Some tiles were broken during removal from the cement. These were cut into smaller tiles. Before the tiles were assembled into the pattern of the surround, each tile was cleaned and trimmed. In some cases, the cement adhered to the back and all four edges of a tile. For the exhibit, tiles were placed on ¾-inch-thick plywood. First, the plywood was prepared with a coat of Laticrete Hydro Ban, to form a basis for the tile adhesive, TEC Super Flex, to adhere. Tiles were positioned to develop the pattern for the fireplace surround noted in the original fireplace. The area that was to be tiled received a coat of TEC adhesive and each tile was generously dabbed with the adhesive prior to being positioned on the prepared plywood. We estimated that over 700 tiles were needed to complete the pattern.

Unfortunately, many of the ceramic tiles were broken during removal necessitating adjustment of the final pattern. To establish the pattern, we started at the top center of the plywood with the 1" x 6" tiles and placed shorter tiles towards the bottom. When the tile placement was completed, the titled surround rested for several days.

Fireplace surround tiles were adhered to the plywood. Note that some tiles were shorter than 6 inches toward the bottom of the surround.

Hearth Tiles

Unlike the relative uniform characteristics of the fireplace surround tiles, the ceramic hearth tiles made by the US Encaustic Tile Company (Indianapolis, Indiana), were of several sizes and colors to form a distinct pattern. First tiles were cleaned and then positioned to determine placement. During this process, several tiles were determined to be missing necessitating the construction of substitute "tiles" out of wood, matching colors of the native tiles, and varnishing the tiles. To determine the size of the plywood platform needed, tiles were placed with spacers needed for grouting. Subsequently, the plywood was prepped with the Laticrete Hydro Ban, and let dry. Areas to be tiled were prepared with the adhesive TEC Super Flex and the bottom of each tile covered with the adhesive and placed on the plywood. Spacers were located where the grout would go. The spacers removed once the adhesive started to harden. After all tiles were placed on the hearth, they were dried for several days. Then the hearth was grouted with premixed gray Simple Grout, the tiles cleaned, and the completed hearth let dry.

Hearth tiles placed on plywood prior to grouting. Note the red plastic spacers between some tiles.

Corbels

A unique feature of the Thompson house fireplace is its four large ceramic, amber glazed corbels that are ornamental mantel supports and compliment the colors of the fireplace surround tiles. In the Thompson house the corbels were held in place with cement. Most of the corbels are intact with just a few missing pieces. Unfortunately, when the fireplace was painted, paint got into the intricate corbel designs. To remove the paint, the corbels were soaked in sudsy water and much of the paint removed with a toothbrush, a small scraper, and dental picks. Holes in the plywood containing the fireplace surround tiles were used to help anchor the corbels. Because there were not enough tiles recovered to fill the area between the corbels, oak panels were treated like the mantel using the same stain and polyurethane coating and placed between the corbels.

Note the many decorative elements in the cleaned corbels. The unglazed sections were anchored into holes above the fireplace surround tiles.

Fireplace: insert and surround

The cast iron fireplace insert, which was used to burn wood and coal, and its bronze plated surround were made by the Peerless Manufacturing Company (Louisville, Kentucky) according the name found in the inner part of the insert. The highly decorated surround needed to be cleaned to remove paint lodged in crevasses using the stripper gel, water, and a bronze brush. The pattern of the surround resembled that found in a surround in two of the fireplaces in the Cross house built in 1894 in Emporia, Kansas that is being restored by Ross MacTaggart (https://www.oldhousedreams.com/2013/08/29/1893-queen-anne-emporia-ks/).

Details of the cleaned insert surround. Note that the screws were incorporated into the design.

Assembling the Fireplace

To support the fireplace in the exhibit, a series of 2-by-4s were constructed to accept the different components of the fireplace. The first part of the fireplace assembled was the fireplace insert. Next the tiled fireplace surround, and the insert surround were put in place, the hearth was positioned, and the corbels inserted and anchored. Then mantel was fastened to the exhibit supports. Finally, the overmantel was placed on top of the mantel and fastened to the mantel and supports. An oak floor taken from the Thompson house was placed around the hearth and comprises the floor of the exhibit. Below are pictures to illustrate the supports and the restored fireplace.

The supports for the fireplace mantel and overmantel with the fireplace insert shown in pieces.

The entire restored fireplace with details of the mantel, overmantel, panels, corbels, fireplace and insert surrounds, insert, and the hearth.

Conclusion

The process of dismantling and restoring the Thompson house fireplace entailed understanding how to deal with many of its components: tiles, wood, ceramic corbels, and metal. With help for pictures of the fireplace as it stood within the building, research, and advice from several people, we were able to reconstruct a magnificent fireplace and document the processes involved to allow future patrons appreciate the grandeur of a Victorian fireplace as it may have stood over 125 years ago.