The Picture Frames of Stanford White (1853 - 1906)

William Adair, Gold Leaf Studios, Washington DC

Artists such as Thomas Wilmer Dewing, Augustus St. Gaudens and Abbot Thayer had a preference for the classically styled frames designed by Stanford White. The prestigious architectural firm of McKim, Meade and White was a staunch champion of the Renaissance Revival style. Not only did they receive many important commissions (including re-decoration of The White House), but they also founded the American Academy in Rome, an organization dedicated to the study of Classical ideals.

The revival of these aesthetics held sacred during the Renaissance, Ancient Rome and Greece, were openly pursued by White and his colleagues. The picture frames he designed were carefully conceived to blend into the environment created by the architecture. The interiors possessed classical ornamentation of elaborate cornices and rich detail. As a result, White's frames were a logical choice for artists aspiring to similar ideals. Some of the patterns were inspired by the tabernacle style used by Piero della Francesca during the Renaissance (Fig. 1). The primary characteristic of the tabernacle style is an entablature supported by two pilasters flanking the perimeter of the painting. Other patterns he created resemble a "Whistlerian" profile, but instead of simple fluted reeds, White designed a variety of patterns with a Greek wave design, chevrons, twisted rope and ribbon, all combined into one flat profile (Fig. 2). Although White produced many designs (Fig. 3), the most innovative and distinctive pattern was the grille frame that resembles a gilded lattice or lace, suspended one inch over a brightly gilded panel. As a result of the panel's reflection from below, it produces a dazzling effect with only small amounts of available light. An optical illusion is produced that makes it appear that light is emanating from within the frame. This "halo" is particularly effective when combined with the luminescent quality of Dewing's paintings (Fig. 4). It may be for these reasons that Dewing preferred this style for many of his paintings. Unfortunately, these frames are extremely fragile and they are often found in a broken and deteriorated condition as a result of normal wear and tear for almost a century. Originally, these frames were well-constructed and the method used in gilding followed traditional techniques that are passed down from master craftsmen to apprentice among the gilding shops of Europe.

There are several variations in manufacturing the grille pattern of these frames. One method consists of a wire mesh covered with a thick gesso (pastiglia) built up and dripped onto the thin metal wire to form an ornamental shape (Fig. 5). As this method must have been laborious, another type of grille appears that is made from "compo"* reinforced with a paper backing (Fig. 6). This latter type is the subject of the following conservation and fabrication discussion.

Brief Summary of the Conservation of Thomas Dewin Frame for "The Lute Player" (1905); Freer Gallery of Art; Smithsonian Institution; Washington, D.C.

This Stanford White frame had been damaged from impact during shipping and handling. As a result, the grille was broken and pieces were missing in numerous areas which required treatment. Another problem was that the original surface had been covered with a bronze or "radiator paint" as a feeble attempt to refurbish the gold. In order to bring the frame back to its original condition, the bronze paint was removed using chemicals, to reveal traces of the original gilding. Prior to this stripping process, the grille was lifted from the frame by carefully removing the small brads originally used to affix it to the panel. By taking an impression with a rubber mold and pressing compo into the mold, the broken areas

of the grille were easily repaired. The surfaces were re-gilded, patinated and the object reassembled and finished as the artist and, architect originally intended.

Fabrication of Stanford White Frame for Thomas Dewin 's "Self Portrait" (1906); Freer Gallery; Smithsonian Institution; Washington, D.C.

Dewing's "Self Portrait" needed a frame. The challenge was to replicate a Stanford White grille frame. The original design was re-created with exacting detail because the rubber mold made for the repair of "The Lute Player" was already at hand. The first step was to take a profile measurement, or cross-section drawing, of the frame and hire a local milling company to produce a quantity of running feet of each shape (Fig. 7 drawing). Next, a method of producing the compo grille was the greatest obstacle, as the existing formulas proved inadequate for this unique, free-floating pattern. The main problem was that the compo would shrink and warp to unsuitable proportions. After some experimentation and consultation with Stanley Robertson of the National Gallery of Art, the addition of balsam of fir, or burgundy pitch, minimized shrinkage and produced the desired results. The bead design was obtained from a manufacturer and the gilding was done working with the traditional technique of water gilding. The frame was then toned with pigments to create a patina resembling years of age. The gilder has to be careful when toning the gold as the old adage holds true, "one man's dirt is another man's patina".

Composition

After the Adam period (1760-1810), a substitute for the laborious method of carving a design into wood and then covering the surface with gesso, bole and gold leaf was widely used in the form of a composition material, or mixture of chalk and resins. "Compo", as the material came to be known, was pressed into a mold of carved wood, and then was removed and applied to the structure of the frame, thus eliminating the need to carve each frame individually. One fault in this method of construction is the deterioration and eventual loss of compo ornaments due to changes in atmospheric conditions. While the frame's wood shrinks and expands with the climate, compo remains hard and brittle, causing fissures in the frame and reduced adhesive qualities. Like wood, compo can be carved and gilded, but its longevity is dependent on the life of the materials from which it
is made.

Papier mache (a pulp and glue mixture) and numerous other products are used as compo material. Recent innovations in formulas for compo, such as the addition of asbestos fibers, have tended to increase its flexibility and life; (asbestos, a recognized carcinogen, should be used only with the proper safety precautions). Flexible polyester resin has also been used recently as a type of compo. This proved to be unsatisfactory for the Stanford White grille as the synthetic materials have no proven record of stability.

Compo Recipe

150 grams rabbitskin glue (sheet form)
750 grams hide glue (granular form)
450 grams rosin (crushed)
400 mls. boiled linseed oil
Few drops venice turpentine
1100 mls. water
5 kilograms whiting (50/50 whiting and French chalk)
9 grams burgundy pitch (balsam of fir)

Break rabbitskin glue into small pieces. Put rabbitskin glue and hide glue into separate containers. Cover rabbitskin glue completely with water. Use remaining water to cover hide glue. Soak glue until water is absorbed. Mix rabbitskin glue and hide glue together. Add approx. 20 mls. water to this mixture. In another container, melt down rosin completely, so no substance remains on bottom of container. Mix melted rosin with warmed linseed oil, venice turpentine and burgundy pitch. Add rosin mixture to glue mixture and mix thoroughly. Put whiting in large container. Add liquid mixture to whiting. Knead mixture until dough-like consistency (mixture should not stick to hands). Wrap unused compo in plastic and refrigerate. When needed, warm compo over steam heat to soften. (For further information see Jonathan Thornton's paper on compo; AIC Preprints, 1985).