

Pieces of Touro Synagogue

Documentation on the Restoration of Touro Synagogue's Antique Metal Artifacts 2005-2006

by Newmans, Ltd. of Newport, RI
www.newmansltd.com



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Restoring the Metal Artifacts
of
America's Oldest Synagogue

2005-2006

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Acknowledgments

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Thank you all,

Howard and Mary Newman

Introduction

The following report describes the objects we restored for Touro Synagogue during 2005 and 2006. Many of the pieces presented fascinating challenges in their reshaping and rebuilding. To completely describe any one piece's process would require many pages of images and text. Therefore, the report for each object herein includes images of the un-restored state, an outstanding detail while in process, and the finished piece. Where objects are in multiples, one set of images describes a typical piece.

For Newmans, Ltd.,



Howard Newman



Mary Newman

Main Chandelier

Before: Perhaps the most celebrated object in the sanctuary, the core, candle cups and drip plates are made of cast brass, and the arms of cast bronze. The uppermost element of the core, as can be seen in the 'After' image, was cast in the 1960s, and bears the stamp of Touro member Ben Helfner. As a result of the structural corrections done in the early 1990s by Newmans, Ltd., the only present structural issues were several bent arms. After years of service, the surface was oxidized and dirty, with accumulations of candle wax.



In process: All parts have been corrected, finished, lacquered and ready for assembly.



During reassembly



After



Pair of Brass Six-Light Chandeliers

Before: The larger drip pans were added in the 1959 restoration, and are out of character with the classic design. They have not been reinstalled.



After: Since the original bobeches are missing, and the inappropriate drip pans have not been reinstalled, we have recommended that the bobeches be replaced by new, custom bobeches which would be consistent with the original design.



The engravings, previously obscured by the surface oxides, are now visible.



Pair of Brass Eight-Light Chandeliers

Before: This set is a variation on the design of the 6-light pair at the front of the sanctuary. Note the similar arms and similar but differently placed motifs on the core. Similar to the 6-light set, the large drip pans were added in the restoration of the 1960s.



This arm had been welded on during a much earlier repair. We ground out the weld, restored the original form, and corrected the original problem by rebuilding the mount seat.



After: All arm distortions are corrected. The large drip plates (see the before image) were not reinstalled. Seven of the eight original bobechees are present (In the early 1990s, we duplicated one of these to complete the set).



In process: The separate parts have been cleaned, polished and lacquered. Here they are being reassembled.



Ner Tamid (Bronze Electrified Eternal Light)

Before: Note the broken red glass chimney, the accretions of polishing material, and brown oxides.



After: The new electric wire is concealed in the rear support chain.



In process: To conform to local building codes, a brass grounding screw has been placed at the edge, near the entry of the new wire.



Brass and Gilt-Metal *Chanukkah*



After



Before: The damage that had accrued before we set about addressing the problems was considerable. Its restoration required complete disassembly, reforming of all the arms and parts, creating internal structures for the central stem, reinforcing the feet invisibly from behind, and reassembly.

In process: The parts after disassembly.



The collapsed repoussé areas on the base were reformed by repoussé and chasing.



Brass Memorial Candlestick

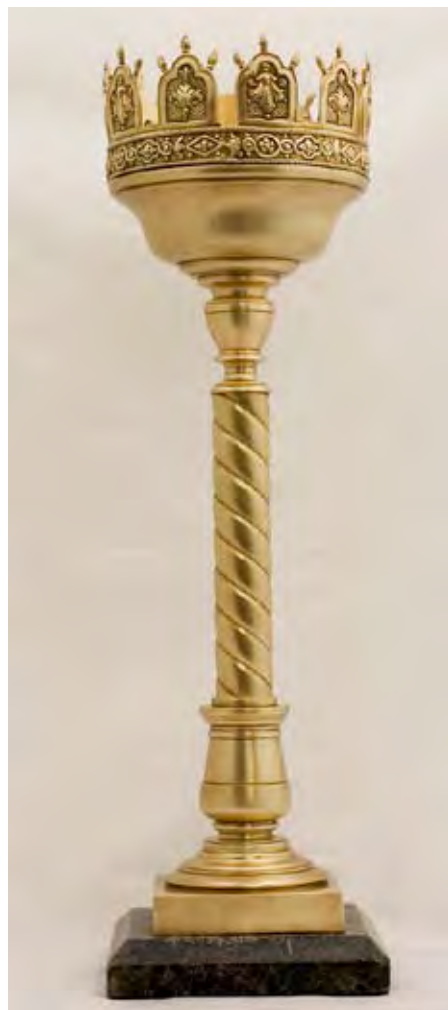
Before (Height: 24")



Bent stem section (upside down).



After: Note the filled right corner of the stone plinth.



We replaced this candle cup – clearly jerry-built sometime in the stick's history – with the new, 6" diameter bobèche (below).



Set of Six Tall Brass Candlesticks



Before:

These are good examples of the quality which can be achieved in casting decorative objects. Each candlestick is composed of fourteen parts which fit together like a precision puzzle. The structural issues we dealt with were only minor – refitting of the four-legged sections atop the columns.

In process:

All parts have been cleaned and lacquered, ready for reassembly.



After



Mahogany Wall Clock

Before: Note, on the left, the dilapidated face and worn wood. Face is open to show the hinge. Note on both views, center, the three screws of the face cover, and the support hole (bottom).



After: Note the corresponding areas, their added supports, and the corrected finish.



Rimonim (Silver Torah Finials); Set 1

Before: The crowns were crushed; bell hanger was missing; many bells were detached; and one Magen David and sphere were missing.



After: All parts are assembled and polished. The bells are coordinated and attached. Dents in the pierced forms have been removed. The duplicated Magen David and sphere are in place.



In process: To rebuild the crowns, we separated, reformed and reattached them. Here, one crown can be seen after separation, then reattached, before refinishing.



Rimonim (Silver Torah Finials); Set 2; Inscribed, 'Hayes and Meyers'

Before: Note the mismatched bells and the upside-down top elements.



After: The tiny 'cup' finials have been correctly positioned. However, note the small top detail; we were not able to determine whether the higher (left) or lower (right) was the original, so we left each as it was.



In process: The main issue with this set was the damaged ferrules. The ferrules were bent, and the core support protruding upward from the cup was partially detached and deformed. An improper earlier repair had left holes in one stem. We rebuilt all these elements, adding patches in sterling to cover the gaps in the ferrules.



Rimonim (Silver Torah Finials); Set 3

Before: Note missing bells and hangers, the bend in the central form, left, and the dent in the center section, right.



In process:
We recreated the missing bell hanger by forging and finishing the parts, then embedding them into the existing mount.

To remove the dents in the main body, we disassembled the rimonim; and, using a snarling iron, pushed out the dents. We then reassembled the parts.



After



German Parcel-Gilt Silver *Torah* Breastplate

Before: When we received the piece, the bells were missing and the silver elements were oxidized.



In process: We removed the crown to facilitate cleaning. The thin gold plate, or wash, was masked while highlighting the silver, to avoid erosion. The wire suspenders had been broken. We made new links and balanced the three elements to equally support the plate.

After: The bells are now attached, all the silver is selectively highlighted.



Jewel-Mounted Silver *Torah* Breastplate

Before: The silver had been overcleaned, reducing the contrast between the letters and the polished face, and between the frame's floral reliefs and their background.



In process: All the letters and floral reliefs were darkened and the plate itself refinished. Fasteners in the rear were missing; we made new ones similar to the originals.

After



Contemporary Animal-Motif Silver Torah Breastplate

Before: The oxidized background of the individual elements was chipped on one plate, and the highlights were unbalanced. The back-plate was overpolished.



In process: The black oxide patina was restored, and the backplate brought to a more uniform finish.

After



Pair of Silver Plated *Shabbat* Continental Candlesticks

Before



After: Included here are the porcelain followers, which partially succeed in keeping wax from dripping into the dishes.



In process: The disassembled parts show that these were made in the Industrial Period; the parts were built around a central, threaded pipe similar to that used for electric lamps during the 20th century.



Yadim (Silver *Torah* pointers)

After: These yadim were in good condition. They needed only to be lightly polished.



Wrought-Iron Chandelier Hangers, Gilded Wood Canopies, and Spheres

Before: The surfaces of the canopies and the spheres were worn and chipped, with many gaps.



In process: The spheres offer a prime example of the perils of restoration, and how 'thinking outside the box' is essential.

What appeared to be a straightforward disassembly revealed that the two halves had been 'toenailed,' or, connected with many diagonal, interlocking nails. After their skillful separation by the contractor, our challenge was to devise a reversible assembly system – one which, should it become necessary to once again remove them, would be as unintrusive as possible.

We added magnets to the spheres' inner faces (note the dark disks). To precisely relocate the hemispheres, we clipped the nails to 5 mm above the faces, so they would slightly enter their original holes when we snapped them together.



After



Marble Gilded Plaque and Accompanying Bronze Rosettes

Before: The marble surface and incised letters were covered with oily soot from burning candles. This had attracted dust, which had also become affixed. The rosettes were heavily corroded.



Detail, finished rosette



In process: The surface was washed with a non-ionic detergent and distilled water. The incised letters were washed with a soft brush. A layer of museum quality paste wax was applied to all surfaces.

The corrosion on the rosettes was removed by immersion in an acid bath, highlighted, lacquered and waxed.

After



Wooden *Tsedakah* (charity) Boxes

Before: The wood in many areas was chipped and the surface eroded. The silver escutcheon and nameplate were tarnished. The donation slots had been eroded from use over the years.



In process: To preserve the historic character of the slots, we chose not to alter their form, but only to consolidate the raw wood with lacquer. We also filled the missing gaps in the boxes' joints with colored resin, and blended eroded areas to reduce their contrast with the overall finish, taking caution not to erase the wear – evidence of the boxes' history.



After



***Bimah* (Torah podium) Hardware and Finials**

Before; finials: Note the detached neck and dowel.



In process: We cleaned all surfaces with mineral spirits. One dowel, which connects the finials to the table, was loose. We replaced it with a correct one.

After



Before; Bimah hardware: The surface was rusty and caked with paint. The hasp which accompanies the brass handle was missing.



In process: We duplicated the hasp based on an extant one on the opposite door, refinished and lacquered the parts.

After: Note the new hasp under the escutcheon.



Brass Sanctuary and Women's Entry Box Locks

Before: View of surface and key prior to shortening. The deadbolt disabling screw has already been inserted.



After: Here are the finished parts, before the key was shortened.



In process: Mechanism showing one bolt removed, and one missing.



Bolt from second lock, used to make duplicate.



One key before shortening to reduce interference with traffic through door; and one cut to size, before assembly.



Brass Electrified Wall Sconces

Before: The sconces were heavily oxidized, many were distorted. Yellow electric wire was substandard and unsightly.



After: All surfaces were cleaned and received a heavy layer of lacquer. The electric elements and candle sleeves were replaced.



In process: As can be seen in the 'before' image, the exposed wires were unsightly. We introduced a 5 x 10 mm long flared tube to cover this wire between the base and the arms.



The central support screws were understructured. Here, before most of the work has started, we began by putting in new, stronger supports with a large washer to distribute the stress. On some bases, a larger hex-head cap screw was used instead (not pictured).



Brass Electrified Main Portico Exterior Lantern

Before: The entire steel structure was rusted; parts had fallen off.



After: The entire structure is rebuilt with bronze, a new glass insert installed, the hinged door rebuilt; new electrical elements installed; and all surfaces balanced and integrated with original patina.



In process: The rusted steel structure was replaced with bronze rods; missing 'roof tiles' were replicated and installed.



Brass Electrified Women's Entrance Exterior Lantern

Before: The steel structure had corroded and destroyed the brass shell. One glass panel was missing, the electrical elements were decomposed.



After: The entire structure was rebuilt with bronze; a new glass Panel (not pictured) installed; hinged door rebuilt; new electrical elements installed; and all surfaces balanced and integrated with original patina.



In process: Rusting of the steel framing contributed to the breakdown of the brass vault. The composite vault was removed and replaced with heavy gauge brass with reinforced edges. The frame of the lower structure was entirely rebuilt.



Aron Kodesh (Ark) Door Hardware

Before: All the parts were heavily caked with paint. Leather washers were used under the nail heads; the originals were completely decomposed, and covered with paint. Structurally, there were minor distortions.



In process: All parts were cleaned of paint and rust, straightened, and made functional.

After



Wrought-Iron Deadbolts

Before: Surfaces were rusted and caked with paint. the mounting plates were bent.



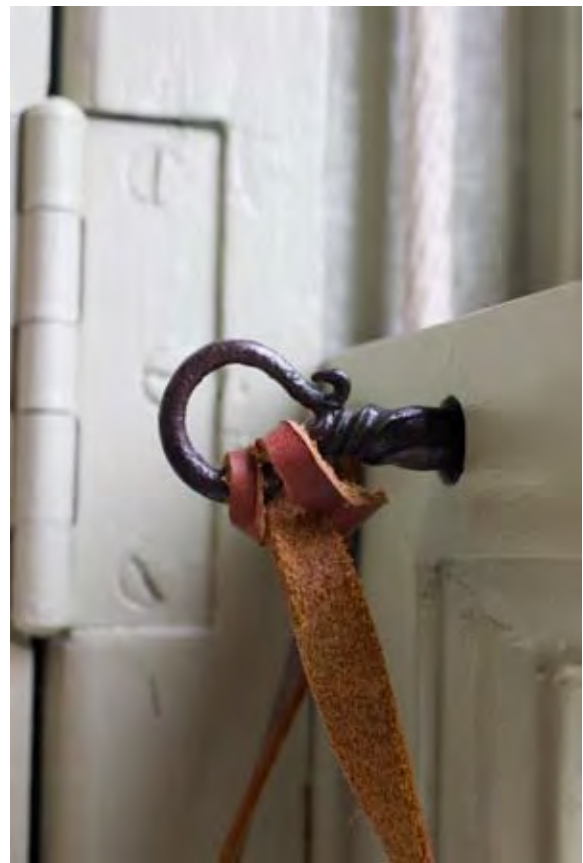
In process: To comply with the fire code, the locks had to be disabled – we installed set screws to lock the bolts open. We removed all rust and paint.

After: Note the small screw at the base of the bottom deadbolt on the immediate right. (The screw on the upper deadbolt is on side opposite the picture).



Wrought-Iron Window Pins; creation of additional pins

The design of the pins indicate that they were made in the restoration of the 1960s. We succeeded in locating the same blacksmith, who then made the replacement pins for us. The leather straps were supplied by Shawmut Design & Construction.



Brass Candle Lighter/Snuffer

Before



After



Complimentary Additions to the Restoration Project

Newmans, Ltd. restored several objects that did not qualify as part of the Touro Synagogue Restoration Project, but belong to the Congregation Jeshuat Israel. Unless otherwise specified, most complimentary work consisted of cleaning, hand polishing and lacquering the surfaces. Standard maintenance applies for all of the following objects.

Before



Wrought-Iron *Besamim* (spice) Container

After



**Silver Beaker *Kiddush*
(wine blessing) Cup**



**Silver Footed *Kiddush*
(wine blessing) Cup**



*Before Image
not Available*

**Silver *Kiddush* (wine blessing)
Cups & Tray**



Complimentary Additions to the Restoration Project, cont.

Before



**Silver *Torah* Breastplate
("Klein - Fastiff")**

After



**Silver *Torah* Breastplate
("Dannin")**



**Silver *Torah* Breastplate
("Teitz")**



*Before Image
not Available*

Silver *Rimonim*; Set 4

