



Date: September 4, 2013

From: Katherine Kelly, Conservator, RXC

To: Mary Lynn Ritzenthaler, Chief of Document Conservation Laboratory, RXC
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Subject: Treatment Report IJA #3387
Shefer ha-Tiḵunim
שפר התקונים
Livorno, 1794 or 1795

DESCRIPTION

IJA #3387 has received full conservation treatment. The text block contains 24 gatherings of 4 pages each of laid paper text, printed in black ink with a variety of handwritten annotations. The new full paper case has a laser-printed paper label on the front cover. The treated volume is housed in a new custom box together with binding waste and the original sewing.

TREATMENT SUMMARY

Conservation of this volume was undertaken to address extensive mold and water damage and to prepare it for exhibition. The volume will be exhibited open to the title page during the exhibit “Discovery and Recovery: Preserving Iraqi Jewish Heritage”.

TREATMENT PROCEDURES AND DETAILS

1) COLLATION

The text block was collated. The leaves are numbered in Hebrew. There are no missing pages, but three mispagnations. In the 8th gathering, an intentional stub was left where leaf number 32 would be. In the 14th gathering, there is a tipped on 5th leaf (two leaves are numbered 56). The leaf numbers 45 – 48 are misnumbered as 41-44.

2) DISBOUND THE TEXTBLOCK

The text block was disbound using dry methods. Two sewing patterns were found (see diagram). The older sewing had thicker thread and was all-along with two kettle stitches and a single leather support in a middle hole. There may have been leather supports at the kettles. The second sewing used thinner thread and was 2-on at four sewing stations with cord supports at each. Only the kettle sewing station at the head of the text block was shared between the two sewings. Both sewings were broken in multiple places. There were severely compromised sewn-on end bands at head and tail with a blue and gold chevron pattern over an uncolored primary core. All thread and support placement was diagrammed and the thread retained.

The tipped on front endpaper and some binding waste was mechanically removed and retained in polyester encapsulations.

3) MOLD REMEDIATION AND SURFACE CLEANING

The volume was mold remediated with a HEPA filter Nilfisk vacuum and soft brushes in a fume hood. Each page was then surface cleaned with soot sponges.

4) TESTED PAPER AND MEDIA

Media throughout the text block was tested for solubility using deionized water, ethanol, and mixed alcohol and water. All printing and annotations were found to be stable. The testing also suggested that the staining throughout the volume was water soluble.

5) WASHED AND SIZED

The text block was wet out with a 50-50 water-ethanol solution and then washed in a series of five alkaline [Ca(OH)₂] baths, followed by dipping in a 0.5% methyl cellulose (A4C) solution to re-size the paper. The initial baths were extremely discolored and low pH, indicating successful removal of discoloring agents.

The text block was allowed to air-dry separately almost to completion, then gathered into signatures and allowed to finish drying together under restraint.

The washing and sizing dramatically improved the physical stability of the paper. The paper was significantly brighter, stronger, and more flexible. A prominent tide line across the middle of each page was almost entirely removed.

6) PAPER REPAIR

Throughout the text block, tears were mended, gatherings were guarded, and losses were filled using acrylic-toned long fiber paper (Hiromi MMN-1 Tengucho and HP-04 Usu Mino Thin) and Aytex P wheat starch paste (or a 50-50 mixture of wheat starch paste and methyl cellulose as a remoistenable tissue preparation).

7) REBINDING

The text block was re sewn on three linen cord supported sewing stations, following the all-along sewing pattern of the original sewing structure. 18/2 linen thread, toned with acrylic paint, and Clarkson linen cord were used.

The text block was shaped and then consolidated with wheat starch paste and lined with a long-fiber tissue barrier layer. This was followed by hinging on new end papers (BHN Book Weight Paper, University of Iowa Center for the Book) to the spine with PVAc (Jade R, Talas). The cords were fanned out onto the endpapers and adhered with PVAc. The spine was then lined with PVAc and a Permalife paper lining. A new case was created (Gary Frost Paper Case structure) using handmade paper (PC4B Blue Paper Case – lightweight, University of Iowa Center for the Book). The case was attached to the volume with PVAc.

The new cover and binding structure allow the text block to open flat to the gutter margin.

8) PHOTOGRAPHIC DOCUMENTATION

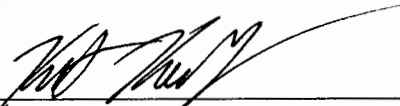
Before (February 2007 and June 2012) and after treatment (April 2013) digital photo-documentation was produced. During treatment processes were documented with a digital camera.

9) CUSTOM HOUSING

The volume is housed in an archival custom box together with the binding fragments and removed original sewing.

After treatment measurements: 19.4 cm H x 12.6 cm W x 2.0 cm D

TREATMENT HOURS: 38:45 hours



Katherine Kelly, Conservator
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9/4/2013

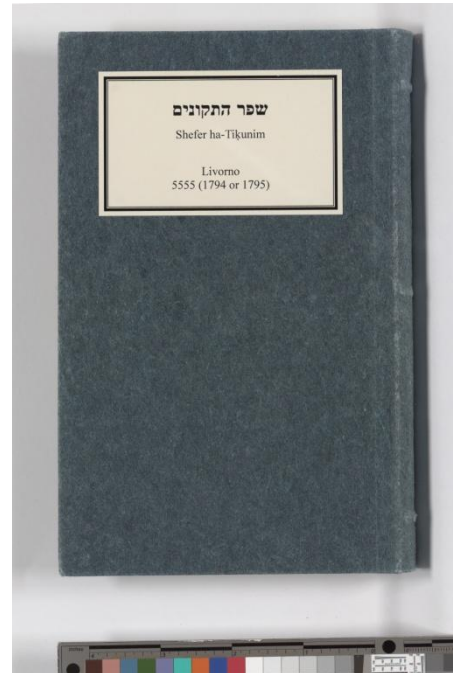
Date

Before Treatment:



Digital photograph. Conservation Lab. February 2007.

After Treatment:



Digital photograph. Digital Imaging Lab. April 2013.

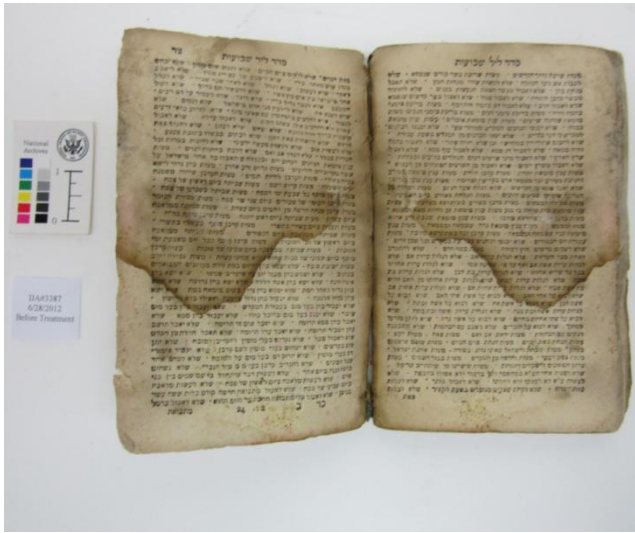


Digital photograph. Conservation Lab. June 2012.



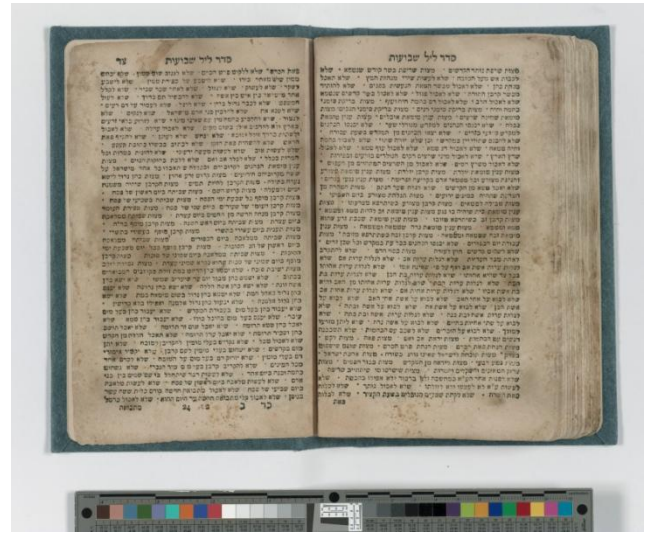
Digital photograph. Digital Imaging Lab. April 2013.

Before Treatment:



Digital photograph. Conservation Lab. June 2012.

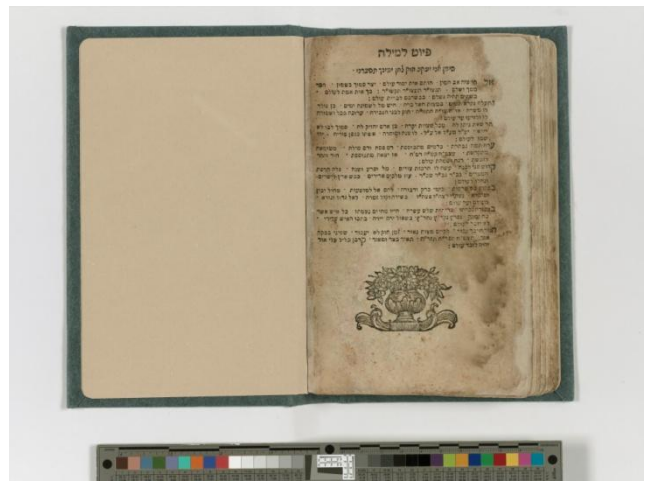
After Treatment:



Digital photograph. Digital Imaging Lab. April 2013.



Digital photograph. Conservation Lab. November 2012.



Digital photograph. Digital Imaging Lab. April 2013.

During Treatment:

All images taken digitally in Conservation Lab 2012-2013



The mold was removed in a fume hood with a HEPA-filter vacuum and soot sponges.



The broken sewing and end bands were documented, removed, and retained separately.



After thorough media testing, the pages were wet out with an ethanol and water solution and then washed in a series of alkaline baths. Each page was then re-sized to strengthen the paper.



Tears were mended and losses were filled with tissue toned to match the original paper.



The volume was resewn and rebound into a paper case structure.