

2022.066 - Nuovo Esperimento

Call #: PQ4406 .P7 1845

Title: Nuovo Esperimento sulla principale allegoria della Divina Commedia di Dante Allighieri

Date: 1845

Place of Pub.: Italy

Pub./Manufacturer: Novi, Tipografia Moretti

Author: Marco Giovanni Ponta

### **Textblock**

Dimensions (H x W x D, mm): 220 x 142 x 12

Sewing: sewn through the fold on 3 recessed cords; gutter is too tight to confirm sewing; the foldout map and volvelle are single leaves that are folded over and oversewn—their stubs are visible in between pages 260/61; the volvelle was knotted onto a back page with yellow string but is no longer attached

Paper type/quality: thin-medium weight, smooth cream, machine made wove paper; colored red textblock edges

Endsheets: made paper with marbled (antique straight pattern) endsheets

Inscriptions/Identifying Marks: [Edward Lorraine Walter] bookplate on upper board pastedown; [University of Michigan] bookplate on lower board pastedown; graphite inscriptions on top flyleaves and on pages 3 and 5; embossed library stamp on title page

**Image/Design Technique:** relief printed text; intaglio print for foldout (steel engraving with etching) and volvelle (etching) images

Medium: oil-based printing ink

Inscriptions/Identifying Marks:

### **Binding**

Dimensions (H x W x D, mm): 228 x 156 x 20

Covering: leather (calf)

Spine: 5 false bands; tightback—unable to see how many spine lining layers there are

Title/Label: [PONTE OPERE SU DANTE.] tooled on spine on red leather label; [858 D2dO P8 1845] handwritten on paper label pasted on spine; [NOVE 1845] tooled on spine near tail

Endbands: green and yellow silk, single core, front bead sewn endbands

Boards: laminated smooth, dense, paper-based board

Decoration: Gold tooling: double lined border with suns at corners for both boards; the leather turn-ins also have a double lined border with an additional triangular patterned outer border; the spine has lines tooled on and along either side of false endbands as well as a repeating floral pattern on panels 1, 3, 5, and 6; panel 4 also likely has tooling that is obscured by call number label

Current Housing: none

Previous Treatment: none

## Historical Context

The author of this book is Marco Giovanni Ponta (1799-1849). This book is a “new experiment” on the main allegory of the *Divine Comedy* by Dante Alighieri. Dante (1265-1321) was an Italian poet, writer, and philosopher who was instrumental in establishing Italian literature. The *Divine Comedy* describes Dante’s journey through Hell, Purgatory, and Paradise. The *Divine Comedy* was a cornerstone for developing the Italian language and helped advance the idea of the author as a single, creative voice.

This book contains a volvelle, which is one of the earliest types of movable components in books. Volvelles are composed of concentric circles of paper or parchment with rotating parts. They were introduced to Europe around the 11-12th centuries through Spain. Volvelles were most commonly used to keep time but were also used as ciphering systems and to teach various concepts in astronomy, mathematics, and other subjects.

### Sources

Blauvelt, Christian. 2018. “Dante and the Divine Comedy.” *BBC Culture*.

<https://www.bbc.com/culture/article/20180604-dante-and-the-divine-comedy-he-took-us-on-a-tour-of-hell>

Chapman, Kristine. 2019. “Volvelles: early paper calculators.” *Museum Wales*.

<https://museum.wales/blog/2044/Volvelles-early-paper-calculators/#:~:text=We%20believe%20that%20volvelles%20came,up%20and%20assemble%20their%20own.>

## Condition Report

Description of Book: The book is a full leather tight back, tight joint binding sewn on 3 recessed cords that are secured by pasting onto the outer sides of the boards, underneath the leather covering. The textblock has red colored edges and marbled pastedowns. Based on the signature marks, there are 17 signatures following an octavo format. Near the back of the textblock, there is a foldout containing two etchings of the Earth and the seven levels of Hell. There is also a page with a volvelle of a calendar, the base of which has been pasted overall to a separate leaf.

Binding: The lower board has completely detached and is at risk of loss or dissociation. All four corners are bent inwards towards the textblock. They show signs of abrasions from use, with the paper-based board being visible at three of the corners. There are abrasions to the leather covering overall, particularly along the board edges, the spine, and the outer hinges. The abraded leather tends to offset when handled. There are scratches across the upper and lower boards, resulting in some loss to the leather grain layer. The lower board also has some minor water-based staining on the leather covering and an adhesive accretion with associated skinned

paper at the lower fore-edge corner. Overall the gold tooling is largely intact with areas of loss mostly found on the floral tooling on the spine.

Textblock: The textblock is fairly stable. The volvelle has completely detached because the hole it was originally threaded through has become too large. There is some minor distortion of the textblock near the tail due to pressure from the bent corners of the boards. There is minor surface dirt overall, particularly along the head fore edge. There is foxing of the pages overall, with outer pages showing somewhat more pronounced discoloration as well. There are two stickers pasted on the inner lower board, one of which is a U-M barcode. There is a strip of paper adhered on two sides to the lower pastedown that has darkened.

### **Treatment Proposal**

- Surface clean with cosmetic sponges where appropriate.
- Reattach volvelle.
  - Repair hole with an appropriate paper patch and wheat starch paste.
  - Repierce hole just large enough for thread to pass through.
  - Rethread original thread through hole and knot.
- Reattach the lower board via joint tackets (based off of method detailed by Emma Fraser in *Journal of the Institute of Conservation* article).
  - From the middle of a gathering 2-3 in from the detached board, with an awl, pierce a hole out through the leather covering to the left of the first false endband and to the right of the second false endband.
  - Place needles on both ends of the thread, and thread through the holes starting from inside the textblock through the fold.
  - Reenter the holes at an angle to tunnel to the apex of the textblock at the board edge, and thread the needles through to the spine edge.
  - Repeat for holes at the left of the fourth false endband and the right of the fifth false endband.
  - Use a small awl to create a tunnel from the edge of the board out through the endpaper about 10-15mm from the board edge. Create another tunnel parallel to the board under the endpaper that meets at the exit hole of the first tunnel.
  - Repeat for other three attachment points.
  - Lace on the boards with the thread supports.
  - Adhere a v-hinge of toned mulberry paper along the inner joint and mulberry paper to the outer joint with wheat starch paste. (optional).
- Apply wheat starch paste to lifting leather around corners and dry under weight.
  - Spot test for sensitivity to moisture first.
- Remove barcode and sticker on lower pastedown (optional).
  - Because the adhesive is pressure sensitive, heat and/or organic solvents will probably be necessary. Spot test for efficacy of the solvent and solubility of media.

## Treatment

- Surface cleaned with cosmetic sponges where appropriate.
- Reattached volvelle.
  - Repaired hole mulberry paper and wheat starch paste.
  - Attached small disk of medium weight western paper as a spacer between the volvelle and the knotted thread.
  - Repierced hole just large enough for thread to pass through
  - Rethreaded original thread through hole and knotted with linen thread to hold in place.
- Reattached the lower board via joint tackets (based off of method detailed by Emma Fraser in Journal of the Institute of Conservation article).
  - From the middle of a gathering 2-3 in from the detached board, with an awl, pierced a hole out through the leather covering to the left of the first false endband and to the right of the second false endband.
  - Placed needles on both ends of the thread, and thread through the holes starting from inside the textblock through the fold.
  - Reentered the holes at an angle to tunnel to the apex of the textblock at the board edge, and threaded the needles through to the spine edge
  - Repeated for holes at the left of the fourth false endband and the right of the fifth false endband.
  - Used a small awl to create a tunnel from the edge of the board out through the endpaper about 10-15mm from the board edge. Created another tunnel parallel to the board under the endpaper that meets at the exit hole of the first tunnel.
  - Repeated for other three attachment points.
  - Laced on the boards with the thread supports.
- Adhered mulberry paper to outer joint and spine underneath lifted leather at head and tail of reattached board.
- Inpainted mends on spine and pierced holes through pastedown with watercolors.
- Applied Klucel G to lifting leather around corners and spine and dried under weight
  - Spot tested for sensitivity to moisture first (leather darkens easily with water).
- Treatment photography.
- Rehoused in clamshell corrugated board box.

### Materials:

- Linen thread 20/3
- usugami (12 g) – mends
- wheat starch paste
- Klucel G
- watercolors

Time: 9.5 hrs

Start Date: 7/10      Finish Date: 8/14

# Treatment Photography

Before Treatment



After Treatment

