Title
Report and plan for a wire suspension bridge, proposed to be erected over the Ohio River at Cincinnati

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DESCRIPTION:

General Remarks
This is the first report and plan for a wire suspension bridge over the Ohio River at Cincinnati, submitted by Roebling.

Binding
Dark beige paper cover wrapper.

Textblock
Textblock is sewn along the side with two stations.

Primary Support
White wove paper, discolored to light beige.

Medium
Black printed ink.

Attachments | Inserts
There is a foldout plate in the front of the textblock containing the bridge diagram.

CONDITION:

Summary
Currently, the book is in severe condition and cannot be handled. It has been previously repaired overall with two types of pressure sensitive tape that are aged and brittle.

Binding
The covers are heavily soiled with dirt. There are many paper edge losses that are taped over. The sewing is loose.

Textblock
The folds along the gatherings are torn from the tail, upwards. The folds are taped with two types of pressure sensitive tape; one that has a clear carrier and one that contains a paper carrier.

Primary Support
Overall, coated in dirt. Fifteen pages contain pressure sensitive tape that have been taped along edges and corners to repair tears and "fill" losses.
Medium
Stable.

Housing
Portfolio

Housing Narrative
The portfolio is made with acidic boards and needs to be replaced.

Attachments | Inserts
The foldout plate is torn along the folds and contains pressure sensitive tape along the bottom edge and folds.

Previous Treatment
Aside from the two types of pressure sensitive tape on the cover wrapper and textblock, there is no evidence of previous treatment.

TREATMENT:

Proposal
1. Surface clean the cover and textblock.
2. Remove the pressure sensitive tape on the paper wrapper.
3. Disbind the textblock.
4. Remove the tape throughout the textblock.
5. Wash the textblock to reduce staining and acidity.
6. Guard and repair tears throughout the textblock.
7. Rebind and reattach the paper wrapper.

Housing Need
Tuxedo Box

Factors Influencing Treatment
The original style of side-sewing places stress on the book leaves during handling. A more structurally sound method of guarding and sewing through the fold will be executed in order to ensure longevity of the material.

Performed Treatment
The pamphlet was documented with digital photography before, during, and after treatment using normal illumination and ultraviolet light.

1. The pamphlet was disbound by removing the broken sewing with tweezers and cutting away with small scissors.
2. The covers, textblock and foldout were first surface cleaned overall with Absorene sponges to lift away loose dirt.
3. Next, the tape carriers on the edges of the covers and each textblock page were mechanically removed using localized heat from a Zephytronic hot air pencil.
4. The textblock, fold out, and covers were surface cleaned overall with vinyl eraser crumbs. Especially dirty areas with adhesive residue were further surface cleaned with vinyl block erasers.
5. Adhesive residue was reduced from each cover and every page by rolling cotton swabs dampened with a 1:1 ratio of ethanol and acetone over the paper.
6. The foldout and covers were then separated from the rest of the textblock because of their brittle state and the foldout’s large size.

7. The textblock was washed in a total of four baths of filtered water buffered to pH 7.5 with calcium hydroxide.

8. The foldout and covers were washed in a total of three baths for 3 total hours in filtered water buffered to pH 7.5 with calcium hydroxide.

9. To reduce adhesive staining, the covers were further washed on the suction table locally with ethanol, filtered water, and ammoniated water adjusted to pH 9.

10. The textblock air dried overnight on a drying rack in between sheets of Hollytex.

11. Once dry, the textblock and foldout was sized with 0.4% methyl cellulose A4M and dried on a drying rack in-between Hollytex [CV/JE/VS].

12. To flatten, the textblock was misted lightly with a Dahlia sprayer and pressed in a blotter pressing stack overnight.

13. The textblock folios were guarded with Uso Mino Thin and Zen Shofu wheat starch paste. Tears in the text block were repaired using Uso Mino Thinnest and Tengujo kozo paper with wheat starch paste [V.S./J.E.].

14. The covers were not sized. Instead, they were lined overall with Uso Mino tissue and wheat starch paste to provide additional strength. After lining, the covers were dried in between felts [JS/AS].

15. Once dry, Uso Mino hinges were attached to the spine edges of the covers and the foldout in preparation for re-binding.

16. The losses in the covers were filled with toned Sekishu tissue and wheat starch paste using the pin-prick method on a light table.

17. The filled losses were inpainted with Schmincke watercolors, colored pencils, and book dirt.

18. The foldout was folded along its original fold lines.

19. The textblock and foldout were not side sewn as they were originally. Instead, they were sewn with a contemporary pamphlet link stitch through three sewing stations through the fold, in their original single folio groupings. Because the groupings were single folios, free guards made from Uso Mino tissue were inserted inside the folios to protect the folios from the sewing thread.

20. The spine was lined with Uso Mino tissue and wheat starch paste. The covers were attached to the pamphlet by hinging them onto the spine with wheat starch paste. The spine was lined once more with Uso Mino tissue to protect the cover hinges.

21. The spine was inpainted with book dirt to match the covers.

22. The free guards and foldout hinge were trimmed to be discrete.

**Housing Provided**

Tuxedo Box

**Housing Narrative**
Tuxedo box with Volara foam insert; to increase the tuxedo box thickness so it is less likely to get lost on a shelf.

**Storage Recommendations and Handling notes**  
The pamphlet is now stable for handling and exhibition.

**TOTAL Treatment Time**  
48 hours
Before Tape Adhesive Reduction

After Adhesive is Reduced

Filling edge losses on light table

During Surface Cleaning