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Article: Vacuuming in Tight Spaces: An Initial Report on the Design of a Homemade Suction Table for Paper and Photographic Conservation

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VACUUMING IN TIGHT SPACES: AN INITIAL REPORT  
ON THE DESIGN OF A HOMEMADE SUCTION TABLE FOR PAPER AND  
PHOTOGRAPHIC CONSERVATION

Submitted by Holly Maxson

Last Fall, Anne Clapp, Holly Maxson, Debora Dyer Mayer, Debbie Hess Norris, Franklin Shores, and Marilyn Kemp Weidner, all paper and photograph conservators from the Philadelphia and Wilmington area, met to discuss the feasibility of designing and building suction tables together.

Recognizing the need to maximize the use of lab space, the participants wanted to design a table that was:

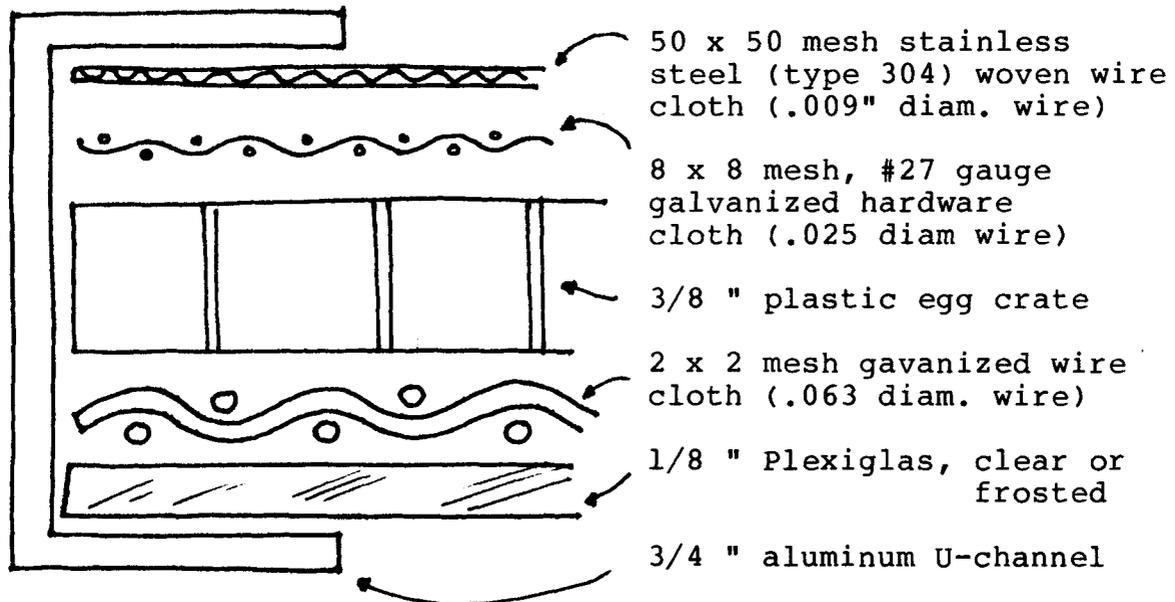
1. inexpensive to construct,
2. lightweight and easily hung on a wall when not in use,
3. able to sit flush with a tabletop (requiring a hose attachment along one side), and
4. sufficiently thin to allow for transparency during light table application

The collective experience of the seven conservators was invaluable in planning the table. Based on their contributions, Franklin Shores and Holly Maxson completed the final design and assumed responsibility for obtaining the necessary materials in the Philadelphia area. (Sources are listed at end of this article.) In short order, Franklin Shores assembled and tested a prototype.

A general description and cross section of the table's construction was mailed to the participants. Each was asked to approve the design, specify a size, and forward a deposit to cover the initial cost of materials. The price of the tables was estimated at \$40 per square foot, with a minimum cost of \$200. John Mayer, currently Curator of the Rockwood Museum in Wilmington, Delaware, is currently assembling the tables which range in size from 1' x 1' to 3.5 x 5'. Each participant is responsible for providing their own air flow source which will differ depending on the size of the table and its principle use. The methods and materials used to join the corners of the tables and attach the air flow source will be outlined in a subsequent report.

## Vacuuming in Tight Spaces

The cross sectional diagram below illustrates the use of materials in the final design. The finished version is 7/8" thick and a 3 x 4' table weighs approximately 30 pounds.



### SOURCES

#### WIRE MESH\*

American Wire Works, Inc.  
3380 Tulip Street  
Philadelphia, PA  
(215) 744-6600

Edward J. Darby & Son, Inc.  
9th and Dauphin Streets  
Philadelphia, PA  
(215) 236-2203

\* Note: The definition of mesh is the number of openings per lineal inch. It is counted by starting from the center of one wire and counting the number of openings to a point one lineal inch distant.

#### ALUM. U-CHANNEL

American Metal Moulding Corp  
Cambridge & Leithgow Streets  
Philadelphia, PA  
(215) 627-2800

#### PLEXIGLAS and PLASTIC EGG CRATE

E & T Plastics  
Ed Godshalk  
(609) 665-0444