

THE MEETING-GUARD: Its Use Historically and Its Use in Fine Bookbinding, Conservation and Artist Books

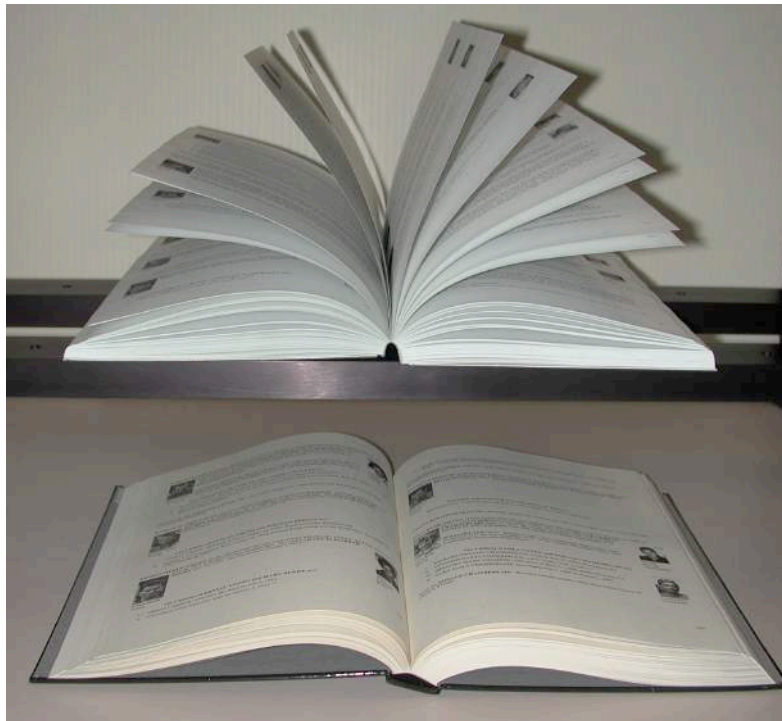
By Bill Minter

The Meeting Guard is only one term used to describe a particular style of binding that seems to have been used for more than 150 years. There are numerous examples of similar techniques that have a different name. Record books, photo albums and even rare manuscripts use a similar structure. We will be looking at a variety of these structures that share this basic technique.

First, as binders, we should strive to meet certain standards, specifically to make a book that functions well and will withstand the rigors of handling. And when we have control in the selection of the materials for a book, we should strive to meet that standard. Ideally, the paper (or other material) for every book should be strong and the finished binding should be easy for the reader to use. The size of the page should be compatible with the thickness and the stiffness of that paper. In other words, a small book with thick paper may pose a problem. At the same time, as we know, the grain direction of the paper should be parallel to the bound edge for ease of use and stability. If the end use of the book is a diary or record book, that should be taken into consideration. The reader should not have to fight the book while using it. In some cases, the meeting guard should be used.

Paper and Binding Criteria / Standards:

- Grain of paper: Ideally the grain of the paper should be parallel to the bound edge.
- Thickness and Stiffness: Paper should be of a suitable thickness for the finished book.
- Structure: The binding should be in balance with all the elements. One part should not overpower any other part. Thus, there should be harmony with all elements to allow for easy and safe handling. To achieve this, the meeting guard might be considered.



Identical book on the wrong grain and the right grain of paper

Board Book

The simple lamination of the individual leaves of a book will produce a board book. Inserting a thicker paper or board between the folded leaves can further stiffen the pages. The book will function properly as long as the cover does not interfere with the opening.

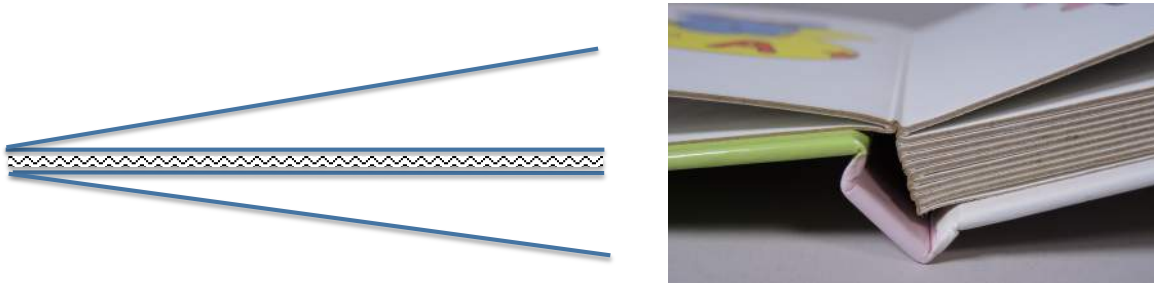
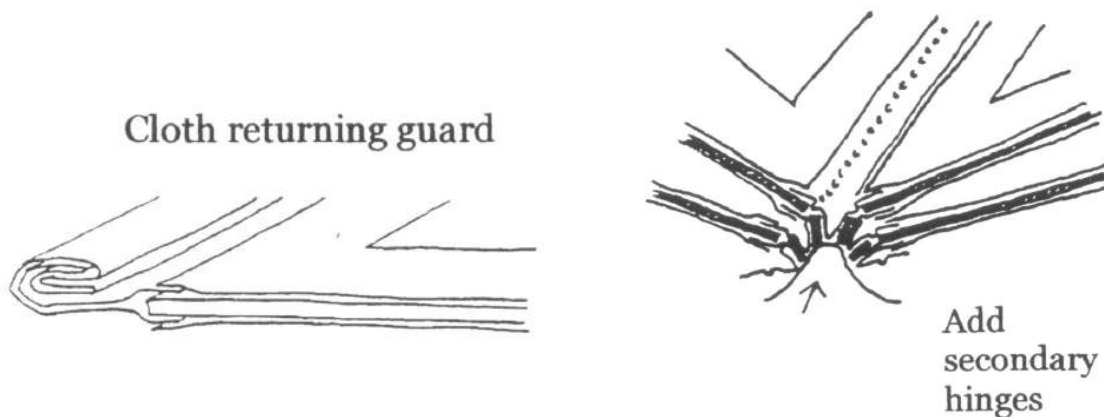


Illustration of a board book where folded sheets are adhered together and bound.

Photo Album Guards

Victorian era albums used thick and stiff leaves, similar to the board book, to support photographs and the carte-de-visite. In order to meet our criteria for easy opening and stability, the binder used a cloth hinge along with a secondary hinge.

In his book **A Hand Bookbinder's Guide to Making Photo Albums** (2012) Richard Horton describes the photo album "*Type 3: Hard pages and cloth hinges*". He explains that these were "*most common from 1860 to 1900 (and) had hard pages hinged together with cloth. The leaves usually had secondary hinges one-half inch from the sewing.*" And in the "*Type 4: Hard pages with hollow mounting compartments*" a "*somewhat thick page was faced on both sides with paper having in it a viewing window that sat directly over a larger mounting compartment hollowed out of the substrate.*" All of these albums used a cloth guard to allow the pages to function smoothly.



A Hand Bookbinder's Guide to Making Photo Albums, 2012, Richard Horton

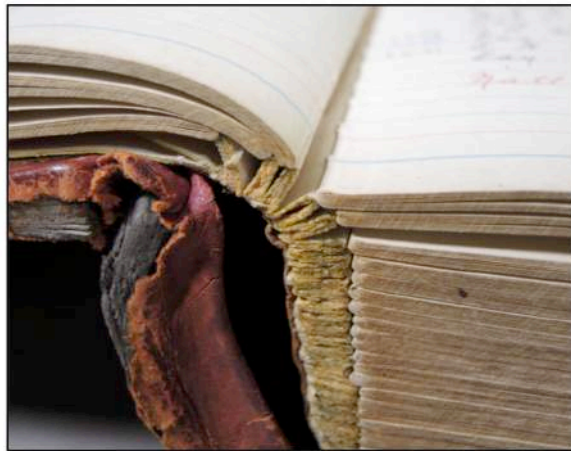
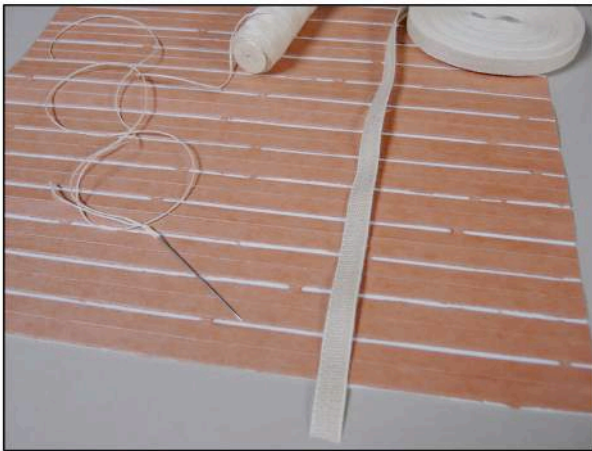
"Portland Guard" Record Books

While there are many examples of the "Spring-Back" account book structure, there are also many of another binding using a guard. Numerous libraries have an assortment of late 19th and early 20th century Record Books that were undoubtedly bound using a commercially available material. The "Portland Guard" is described in the #119 Gane Brothers and Lane catalog as follows:

(Catalog #119 is perhaps from 1965 -- Thanks to Greg Campbell of the Campbell-Logan Bindery for sending this information. Catalog #125 is from 1971 when Gane Bros. celebrated their 125th year; it did not include information about the Portland Guard.)

Portland and Perfection Guards:

"When sections are sewn to these guards, a flat opening is produced in blank books, record books, registers, etc. Made of heavy, white muslin, to which thin ribs of cardboard are pasted in equal distances apart. Furnished in two styles: Old Style- for use with sewing on tapes and New Style - for use with sewing on cords. Put up in rolls of 25 yards in assorted widths.

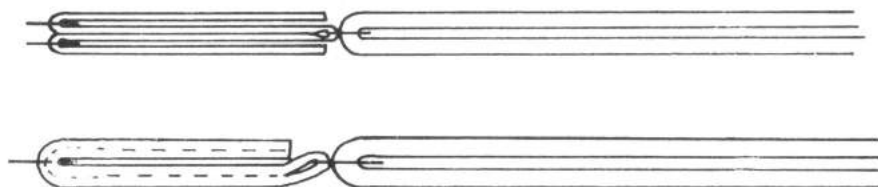


Portland Guard Material from Gane Bros. and Lane

Thanks to both Matt Johnson and Bob Roberts for sending Portland Guard samples

Meeting-Guard or Reversed-V Guard

In the **History of English Craft Bookbinding** (1963), Bernard Middleton writes about the Meeting Guard: *"These are otherwise known as a 'reversed-V Guards'. In this method each section is sewn to a folded guard with the two folds meeting in reverse..."* (see below for further description)



Meeting-Guard (Middleton, 1963) and Reversed-V Guard (Etherington, 1982)

In **Bookbinding and the Conservation of Books – A Dictionary of Descriptive Terminology** (1982), Don Etherington & Matt Roberts describe the Reversed V-Guard, identical to Middleton's description of the meeting guard:

A folded GUARD (ed. a strip of cloth or paper) to which a section is sewn, the folds of the guard meeting in reverse. The guard consists of several strips of paper folded with the two open ends being folded back on the guard, either together or in opposite directions; the guard may be folded over in one direction on itself and the section sewn at either end, or it may be folded over in opposite directions on itself and one or two sections sewn to it, depending on the thickness of the sections and amount of sewing swell required. Generally, the paper used for the guard (before folding) should be one-fourth the thickness of the section, so that when it has been folded it will be of equal thickness. The reversed V technique is used if the paper of the book is too thick to be sewn in the usual manner, and if it is not possible or desirable to hinge the leaves on linen guards, such as in an album. In addition, such a guard may be required because there is writing in the folds of the sections, which would be made inaccessible by the usual manner of sewing and binding. The reversed v-guard technique places considerable strain on the sewing thread and folds of the section, particularly if the guards throw out far from the spine.

Middleton also writes that the inventor of the meeting-guard is unknown. And he states that Douglas Cockerell used the meeting guard for the first time in 1935 when he bound the 4th century **CODEX SINAITICUS** that is in the British Library. There is also the statement: "*The method of sewing employed is not a common one*".

For more information about the **CODEX SINAITICUS** and the binding by Douglas Cockerell, see:

http://codexsinaiticus.org/en/project/conservation_codicology.aspx

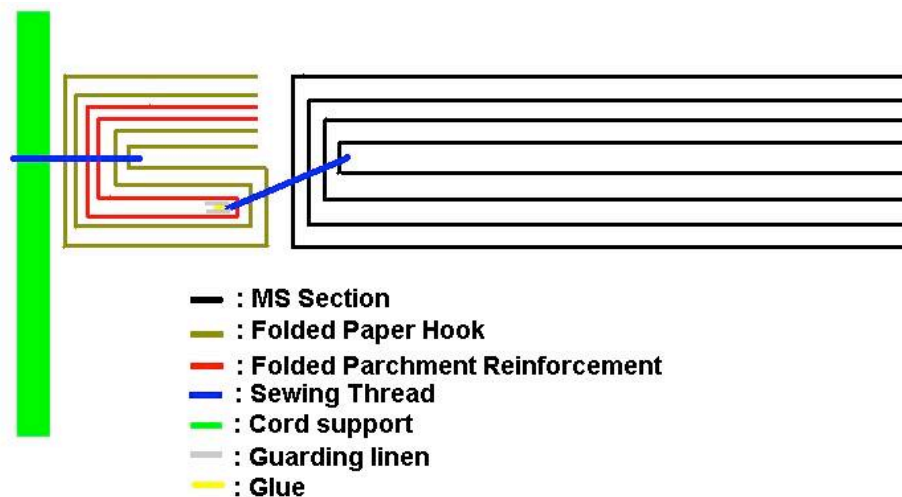
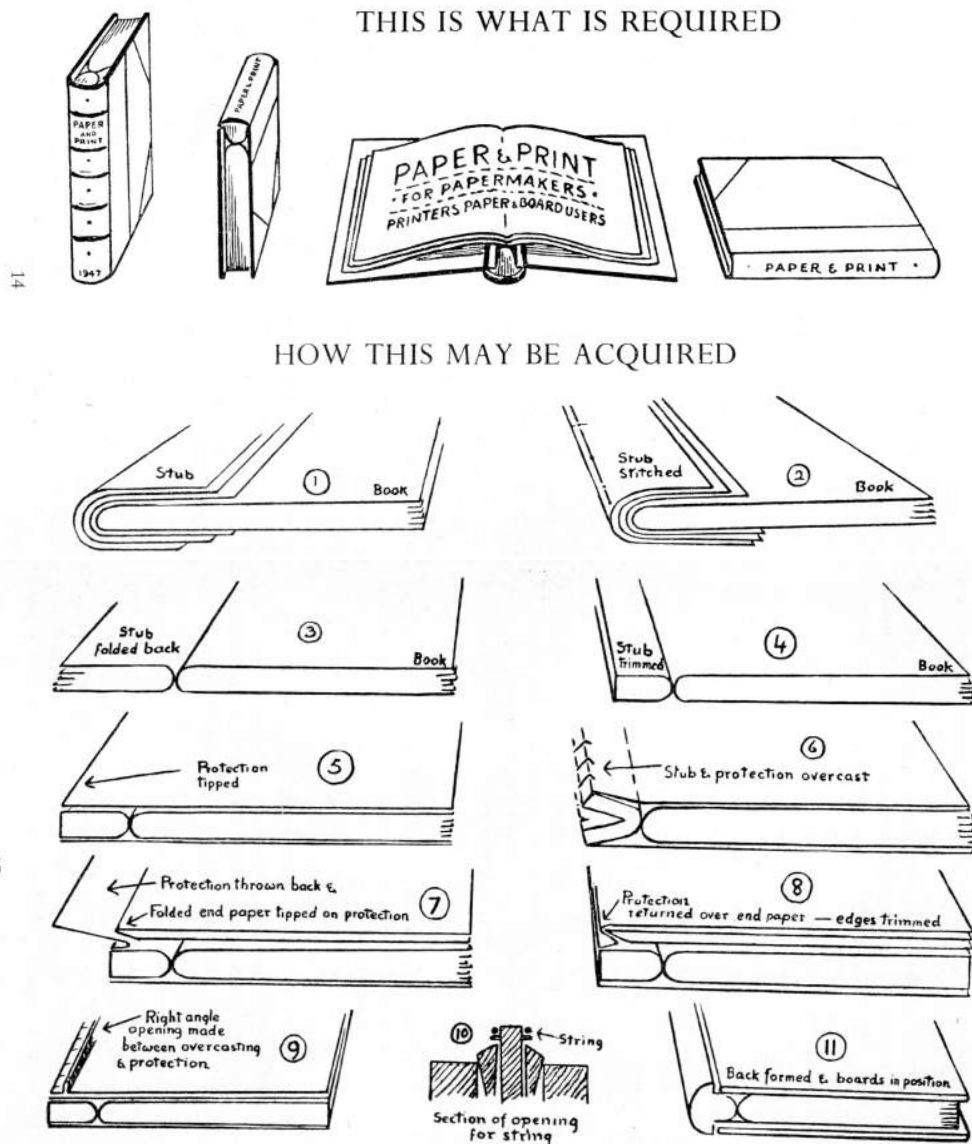


Diagram of the meeting-guard used by Douglas Cockerell in 1935 for the binding of the 4th century **CODEX SINAITICUS** that is in the British Library.

Variation on the Meeting-Guard -- single-section binding by Thomas Harrison
 Middleton further describes "a rather ingenious" variation of the meeting-guard. "This method was adapted, apparently by Thomas Harrison, to the binding of single-section books so that the spine could be thickened and lettered in the normal way".

The following diagram of this technique should be self-explanatory:



M-Style Meeting-Guard

While there may be another name for this style of guard, I will call it the M-Style Meeting Guard since that is precisely how it looks in a cross-section. While I have used this style for many years, I recently learned that Monique Lallier teaches a similar style. Perhaps others use this M-Style Meeting Guard. It can be used for fine bindings, for conservation and may have application in artist books.

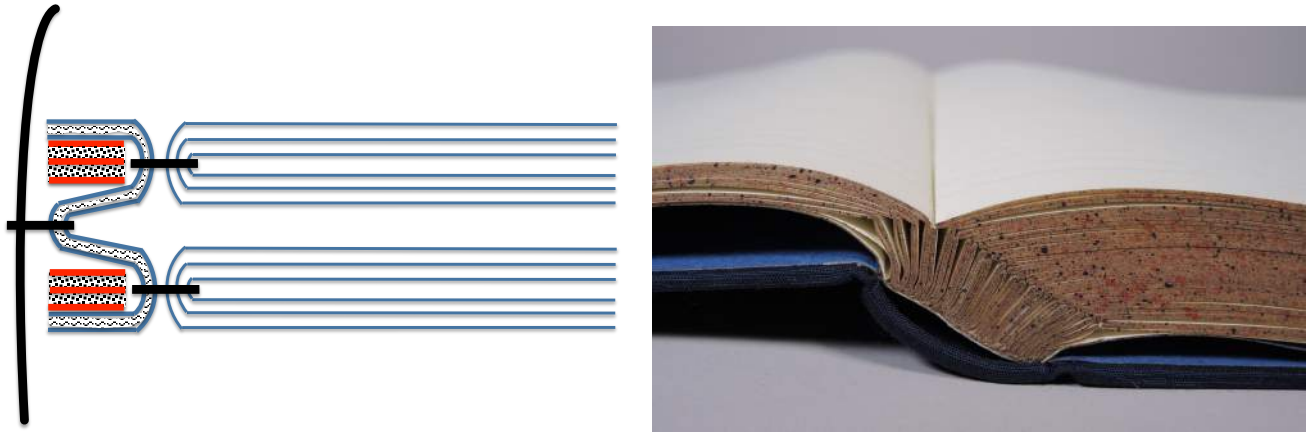
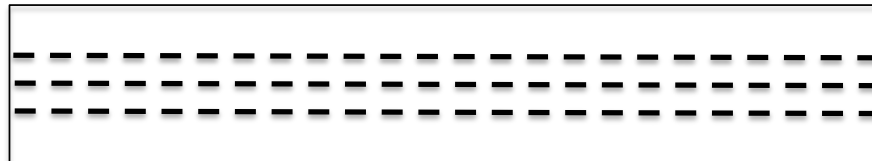


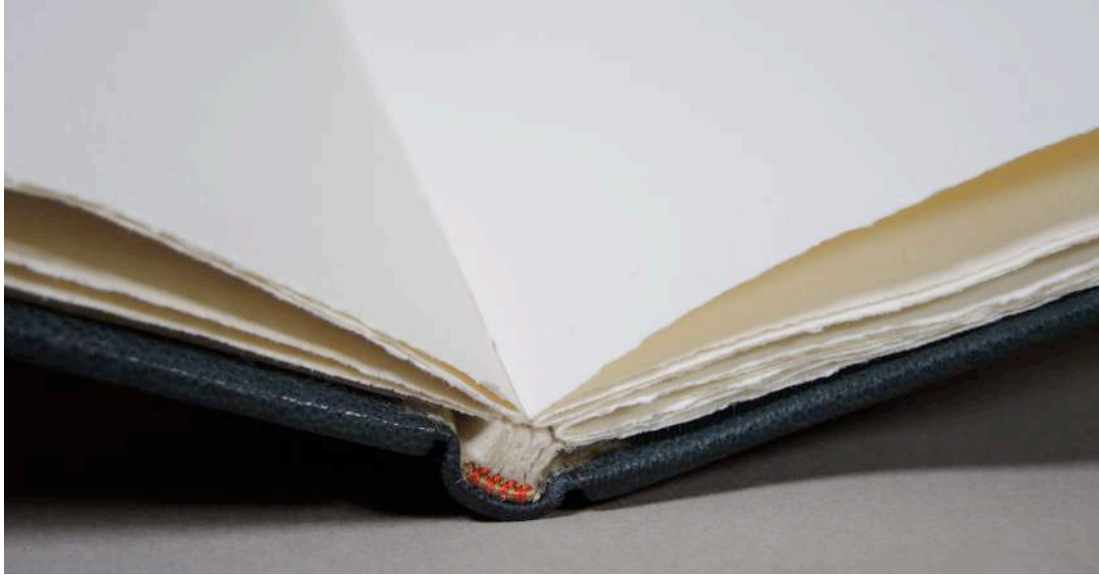
Diagram of the M-Style Meeting-Guard with fillers and sewing support. And its use on a Diary.

Procedure for making and using the M-Style Meeting Guard:

- 1) Prepare paper and cloth used for the guard -- in other words, line the paper with cloth. Also laminate two and three sheets of paper that will be used to compensate or fill the guard.
- 2) Cut and score the guards. Note: score the paper side in three places; for very narrow guards, one can use the metal from a hanging-file-folder as a jig to space the score lines uniformly.



- 3) Stab the signatures using a jig.
- 4) Align the first score of the guard to one signature, stab and sew. Note: to help with this operation, use a small binder clip at each end.
- 5) Align the second signature to the third score -- the center score is not used at this time; stab and sew.
- 6) Align the two signatures and set the fold of the center score of the guard, then reverse-fold the extensions and set the folds.
- 8) Use a paper micrometer to measure the thickness of the two signatures and also the thickness of the folded guard to determine how much is needed to compensate. Cut and adhere the fillers to the extension to make a uniform thickness. Mark and trim the extension with the filler flush to the spine-fold of the guard.
- 9) After all the paired-signatures are assembled on the M-guards, sew the paired signatures in a standard manner, forward and cover.



The M-Style Meeting Guard used to bind a thick, artists print paper.

Conclusion:

The Meeting Guard, by any name, has a variety of uses and is suited for older and many modern books that might have thick and/or stiff paper. This binding style should also be applicable to books with other added materials. The bottom line is that the book will function well, and this should be one of the Standards of Excellence in all bookbinding.

Addendum: Adhesives

Adhesives are obviously an important part of our work. Over the years new adhesives have been introduced and on occasion there might be a study showing the advantages or disadvantages. One such new adhesive is EVA (Ethylene-Vinyl Acetate), which is widely used in Europe. At other times, we might hear about a problem with a trusted adhesive, such as a mold in PVA *. In many ways, using a known wheat paste and animal glue would seem to be much safer rather than relying upon a manufacturer who makes claims and then readily alters the formula without advising us. There is so much more to know and understand about adhesives.

My interest in adhesives has a long history. Many years ago, during my apprenticeship with Bill Anthony, we used flexible, hot animal glue. The only other adhesive at the time was wheat paste. Shortly thereafter, we started to use Jade 403 - PVA. Within a few years, Bill formed a partnership with Elizabeth Kner, where we were introduced to Jade 454, which was named "Non-Warping Paste". We used this adhesive for most of our case-making because it had a long open time and good tack. In some instances, the 454 would remain workable, as I recall, for about 6-8 minutes. Upon completing my apprenticeship and starting my own business, I knew that I needed to have a better understanding of adhesives.

The GBW Journal Vol. 10 (1) had published a 1971 report by Norbert Baer: **Evaluation of Adhesives for Use in Paper Conservation**. This included a study of the Jade adhesives. At the time, the Jade 403 looked very good and many of us still use this same PVA even though there

may have been changes in the formula over the years. Sadly, there has been minimal follow-up testing. The Baer report also mentioned that Jade 403 could be mixed with methylcellulose and that the test results were positive. The same report also stated that the Jade 454 showed signs of turning brown with aging.

We all know that straight PVA dries quickly and is difficult to use over larger areas. Mixing PVA with methylcellulose is acceptable. However, when I used that mix, the resulting adhesive was either wet or dry with minimal tack time. Remembering the nice working properties of Jade 454 and knowing that it was called a "non-warping paste", I tried adding wheat paste to the mix. The end result is a mix of 50% - Jade 403 PVA*, 25% - wheat paste and 25% - Methylcellulose A4M**. This mixture has served me well for many years and others have used a similar concoction.

Obviously, known adhesives, such as wheat paste and animal glue, should be used for all conservation work. Again, there is a much more to be known about the adhesives that we use.

* Jade 403 PVA adhesive:

The manufacturer has indicated a shelf-life of 90-Days. As far as I know, none of our suppliers provide a date. We should date all adhesives upon receiving. Perhaps this is a factor with the mold questions that have been posted on our Lists. Another possible cause of mold, may be that the stock solution is getting contaminated during handling.

**Methylcellulose:

Cathleen Baker in her book **From the Hand to the Machine: Nineteenth-Century America Paper and Mediums.....** (2010) writes about the differences between the various cellulose ethers, such as methylcellulose. Every bookbinder and book conservator who uses methylcellulose should know and understand the differences with these products. This is especially true since some suppliers do not designate which type is being sold. You should know that:

- Dow Methocel A4C is a low viscosity grade (400cPs) that can be used as a sizing or re-sizing agent; typically used in concentrations of 0.5 to 3%. (Note: At a 3% concentration, this grade is quite thin in comparison to a 3% concentration of A4M.)
 - Dow Methocel A4M is a high viscosity grade (4000 cPs) that can be used as an additive with paste and PVA; it is typically used in concentrations of 1 to 4% and sometimes higher. (Note: At a 3% concentration, this grade is quite thick when compared to a similar 3% concentration of A4C.)
- Cathy also discusses SCMC -- Sodium Carboxymethylcellulose -- which has good adhesive properties when used in concentrations of 4%.

THE MEETING GUARD

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Thanks to Karen Hamner, Maureen Sharp, Sue Kellerman, Harry Campbell, Matt Johnson, Bob Roberts and Greg Campbell for their assistance with materials for this presentation. And special thanks to Eric Honneffer of Bowling Green State University for allowing me to examine numerous record books with the meeting guard.

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