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(Editor of this issue: Jerilyn G. Davis)

CONTENTS	Page	
Regulations for Professional Training of Apprentices and for the Journeyman's Examination in the Book- binders' Craft / translated by Lotte Burg	3	
Binding Practice as Related to the Preservation of Books / Harold W. Tribolet	15	
Conserving the Leather Spines of Old Books / Robert Muma	25	
Committee Reports		
Editorial / Laura S. Young Training Programs	29	
Library / Mary E. Greenfield	30	
Membership / Jerilyn G. Davis	31	
Program / Mary C. Schlosser An Exhibition of Manuscript Treasures	34	
Publicity / Grady E. Jensen	36	

The Cover: Woodcut by Jost Amman showing sixteenth-century binders at work. Reproduced from Schopper, Hartman, *Panoplia Omnium Illiberalium Mechanicarum aut Sedentiarum Artium Genera Continens. . . etc.* Frankfurt-am-Main, Sigismund Feyerabend, 1568.

REGULATIONS FOR PROFESSIONAL TRAINING OF APPRENTICES AND FOR THE JOURNEYMAN'S EXAMINATION IN THE BOOKBINDERS' CRAFT / translated from the German by Lotte Burg / condensed and revised by Laura S. Young and Jerilyn G. Davis

Note: This is booklet #24 in the German series for professional education in trades and crafts, a joint publication of the German Chamber of Commerce and the Federal Republic of Germany and of Berlin. It covers the 3 years of training that an apprentice must have and the journeyman's test that is taken at the end of this period to receive a Journeyman's Certificate. There are three areas of work: bookbinding, box and case making, and machine gilding; we have used only the section on bookbinding.

Preface: These principles are designed to give detailed professional information concerning the development of the training of apprentices as well as the intermediate and final examinations, taking as a basis the general regulations for apprentices and for journeymen of the Chamber of Commerce, and the professional rules to regulate the apprenticeship and the journeyman's test for the bookbinding trade.

Duration of training: The duration of training in the bookbinders craft is 3 years according to a law issued by the Ministry of Economics.

Working conditions: The bookbinder works standing most of the time; he works in closed rooms. His profession demands good physical and mental capacities, hand and finger dexterity, as well as a feeling for color and design. The work demands handling of leather, paper, and synthetic materials, adhesives, coloring materials (dyes), corrosive solutions and solvents. He is exposed to the strong odors of these materials.

Physical requirements: Strong physical development; healthy respiratory and digestive organs; dependable eyesight.

Medical check-up: The employers have to abide by the regulations of the Ministry of Labor concerning medical examinations according to the protective laws for juvenile workers.

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3

Educational requirements: The educational standards have to be sufficient to enable the apprentice to reach the professional goal, to practice the craft successfully, and to be able to follow the theoretical instruction of the trade school. Applicants should have a high school diploma; if they did not make the last year, i.e., if they did not graduate, the guild is allowed to request an examination.

Requirements for the training workshop: The technical setup of the shop should be geared to the jobs taken in, and the management should be competent, so as to give the apprentice the techniques and theory that are the aims of his professional career. The apprentice has to have the chance to learn to handle the bookbinder's machinery. The shop should be well-organized, clean, well-lighted, and fairly spacious. The apprentice should have an adequate working space with the necessary tools and facilities at his disposal.

Number of apprentices in a shop: The orderly training of apprentices should not be endangered by employing too many. The employer is therefore not permitted to have more apprentices than the size and type of his shop should warrant. The regulations which are issued for all the special crafts are to be heeded. The administration together with the Chamber of Commerce can by decree ask that a certain number of apprentices be dismissed. Under the same regulation, an employer can be forbidden to take more than a certain number of apprentices.

Plan for professional training

This plan shall give the foundation for the step by step practical professional training of the bookbinders' craft; it is done in the training shop and is divided into separate yearly units up to the journeyman's test. During the practical training the techniques and theory are to be taught in such a way that at the end of the training they have been acquired as is described on the following pages. The employers, who must be master binders, have to train the apprentices in a methodical manner; the selection of work and the training with practice and educational work has to be done in a manner that the apprentice goes from the easier work to the more difficult in mastering his craft.

If the employer lacks some of the job or work opportunities

required for adequate training, he is obliged to promise to give additional opportunities from the beginning of the training; this includes taking part in outside training. When the Chamber of Commerce has asked for an outside training place, the master is obliged to send the apprentice, and the apprentice is obliged to go to this training place. The time needed for this work is part of the whole training and has to be incorporated into the working hours.

The instruction in the trade school is meant to be a foundation and a supplement to the practical training for the journeyman's test. The distribution of the various theoretical topics throughout the three years follows from the practical training.

I. Keeping a diary: The apprentice is obliged to keep a diary during the training period; the master is obliged to see to it that this is done and to supervise it. The guild has to assist the master in the supervision, and is authorized to ask for the diaries at any time and also to ask the trade school to look at them. They are to be checked particularly as to whether the entries conform to the professional rules for the regulations for apprentices and whether they are signed by the master. The repeated refusal to keep a diary is, after having exhausted all means of persuasion, sufficient reason to terminate the apprenticeship and it may result in barring the apprentice from the journeyman's test. The orderly-kept diary has to be shown at the intermediate test and at the journeyman's test.

The diary serves to enrich the training period in the shop. It should be a survey of the training and should show the training in the different skills. The entries should be derived independently from the training experience. The apprentice has to describe the work done, the tools and machines he used, and whenever possible to enlarge on it with sketches and work drawings. He also has to enter what he learned in the trade school. The entries have to conform with the training development during the individual years. Entries have to be made at least every two weeks, so that at the end of each year the apprentice has dealt with 26 topics in word and design. The orderly keeping of the diary will also be evaluated in both content and form for the theoretical test.

II. Intermediate examinations: After 1½ years the apprentice has

to undergo the intermediate examination, which consists of a practical test (work sample) and a theoretical test, both written and oral. The tests are conducted by a committee selected for the examination and the regulations of the Chamber of Commerce are applied: The apprentice has to take the examinations, and his employer must give him the necessary time, tools, and equipment for the test, free of charge. The purpose of the tests is to determine whether the educational goal, practical and theoretical, has been reached. The guild has to give proof of partaking in the intermediate test. The master and the legal representative of the apprentice and the Chamber of Commerce have to be notified by letter of the result. The information has to state whether the apprentice has reached the educational goal and in which areas he has shown weaknesses.

- III. Journeyman's test: This test consists of a journeyman's piece, a work sample, and theoretical tests, general and professional. The journeyman's piece should be usable, should not put unreasonable demands on the apprentice, and should not require unreasonable time or expense. It should demonstrate that the student has acquired the techniques and theory common for his craft. For bookbinding the apprentice has to make the following:
 - a. half leather binding with gilded or colored edges and slip case
 - b. half cloth binding; perfect binding (threadless)
 - c. different types of commercial books and diaries, spirals, etc.
 - d. collar box
 - e. mounting a map on cloth (at least 16 parts)
 - f. framing a picture (restricted to certain regions)
 - g. a piece of free choice

The time for items a. to e. should not exceed 40 hours, all preparatory work included. The title on all books should be hand or machine gilded. This test is administered and judged by the committee, and if it is "watched over" by the committee, it can also be judged as a work sample. The work sample is supposed to prove that the trainee masters the skills of his craft with sufficient assurance. It has to be made in the presence of the committee in a shop and it should demonstrate that the apprentice is especially familiar with setting, running and handling of the machines, tools, and work-aids in his work area. The test should not last longer than 5 hours. If there is an obvious discrepancy between the journeyman's piece and the work sample, so as to make it doubtful whether the journeyman's piece was executed by the apprentice himself, the committee can ask the apprentice to make the journeyman's piece again, completely or in part. In this case the first journeyman's piece would be eliminated when the test result is judged.

The general theoretical part of the test includes business knowledge and correspondence-fundamentals of business arithmetic; knowledge of modes of payment; trade advertising and salesmanship; knowledge of civil laws, state laws, and business procedures; important types of contracts-and citizenship and economics, fundamental rights and duties of the citizen; personal, family, and state management; history of the craft, the economic and cultural importance as well as the laws of the craft; bureaucratic organization of the craft and the economy in general; defining apprentice, journeyman, and master; labor laws and social security. The professional part of the theoretical test is given orally and in writing in the following areas-knowledge of materials; knowledge of machines, tools, and equipment; arithmetic as applied to the craft; drawing as applied to the craft; special trade regulations for the book craft; accident prevention and labor laws. The written test takes place under supervision, and it should not last longer than 6 hours. The oral test should not last longer than 2 hours, and usually there are not more than 6 examinees at any one time.

Evaluation of the tests: The examiners should use the evaluation material (printed forms to be filled out) drawn up by the Bookbinders Guild in agreement with the Chamber of Commerce.

FIRST YEAR

I. General techniques:

A. Measuring, planning, and calculating needed materials Techniques: Measuring of the work materials and of the printing materials to be used; planning and calculating of the needed material for single items or editions, taking into consideration appropriate and economic use of material, also giving attention to the required direction of the grain; working aids: sketches or samples; marking and tearing or cutting printed matter

- Theory: Measurements, sheet sizes, weight of paper, binders board and other boards as well as length and width of woven and other materials
- B. Cutting by hand and by machine to the required size
 - Techniques: Checking of the cutting instructions; economical and professional cutting to size of all kinds of materials by hand and by machine, considering the direction of the grain, the surface, and square cutting of the printed sheets; sharpening of all cutting tools; changing the knife on the cutting machine; index cutting by hand
 - Theory: Nature of materials; ability to test direction of grain; sizes; knowledge of common types of machinery needed; rules about accident prevention
- C. Pasting
 - Techniques: Preparation of adhesives of all different types; choice of appropriate brushes and adhesives for the particular job at hand; pasting by hand or machine; knowledge of appropriate drying by pressing and putting under weights or stacking; mastering working with the common adhesives; lining of binders board and other materials
 - Theory: All commonly used adhesives and their application; care of brushes, adhesive containers, and pasting machines
- D. Folding
 - Techniques: Folding of paper and printed material by hand and by machine
 - Theory: The common methods of folding for printed sheets according to their page size; knowledge of the technical terms: imposition of pages, sheet signatures, protection sheets, gutter margin; knowledge of the most common folding machines and their different methods of folding; index keeping and uses of perforation
- E. Jogging

Techniques: Assembling of folded sheets and single pages;

stapling of folded sheets or of papers; proper fanning-out when counting

F. Paginating the book and the signatures

Techniques: Numbering by hand and with a numbering machine; setting of the numbering machine

Theory: Differences between paginating and folierating (numbering signatures)

G. Stapling

Techniques: One signature books; folding of the printed sheets; sewing by hand; saddle-back stitching with a wire stitching machine; oversewing multi-signature books on wire sewing machine

Theory: Application to and evaluation of types of brochures and paper-covered books, journals, magazines, catalogues, calendars, price lists, copybooks, etc.

II. Binding of the book:

- A. Preparation
 - Techniques: Professional taking apart of brochures and books to be bound; mending of torn pages; reinforcing with guards, if necessary; cutting of folded sheets, pictures, maps, and plates; folding around or hinging on if necessary; guarding of full pictures or pasting them on hinges; patent folds; assembling of single sheets into signatures; appropriate endpaper or lining for the binding at hand; assembling, collating, and preparing for binding with adhesive
 - Theory: Importance of preparation as pre-requisite for a faultless binding job; different types of endpapering methods and their uses for different bindings, always considering the proper grain direction

B. Pressing

Techniques: Adequate pressing of books and sheets in standing press

Theory: Importance of pressing before binding

C. Sewing by hand and by machine

Techniques: Methods of sewing:

- a. sewing of single sheets and documents
- b. sewing on cords
- c. sewing on tapes

- d. saddle and oversewing on wire sewing machine
- e. sewing on book thread sewing machine (desired knowledge)

Attention to the swelling of the spine during sewing; if necessary sewing with alternate stitch (two-on)

Theory: Importance of sewing to the durability of the book; choice of appropriate sewing for the type of binding at hand; correct weight of thread to regulate the swelling of the spine; differences between hand and machine sewing

D. Gluing

Techniques: Hammering down of the book with excessive swelling before gluing; readying and checking the adhesive for the different papers; gluing the spine of single books and editions; adjusting and squaring of the glued book Theory: Choice of the correct adhesive

E. Trimming

Techniques: Appropriate trimming of books, brochures and printed matter

Theory: Relationship of the top, bottom and fore-edge margins to the gutter margin (Golden Rule) (The secret canon which underlies many late medieval manuscripts and incunabula. Discovered by Jan Tschichold, 1953. Page proportion 2:3. Text and page area of the same proportions. Height of the text area equal to width of page. Margin relationships: 2:3:4:6.*)

F. Rounding and backing

Techniques: Rounding of the book with a hammer, giving attention to an even, well-rounded spine; establishing the appropriate height of the joint for the different types of bindings; adequate backing of the book in the lying press and lining-up the spine

Theory: Purpose of the rounded book and of backing; differences of wide and narrow guards

G. Edge coloring

Techniques: Mixing and applying of dyes with regard to the differences of the absorption qualities of papers; checking

*from Calligraphy and Palaeography, Essays presented to Alfred Fairbank on his 70th Birthday, edited by A. S. Osley, Faber and Faber Ltd., 1965, p. 181, Fig. 45. of color shades and adhesive power; even application of dyes; burnishing and smoothing of edges with the tooth burnisher; sprinkled edges

- Theory: Reaction of different papers to anilin dyes and earth colors; means to fuse dyes (binding substances for dyes); preparation of the edges for dying; mixing of dyes; technique of marbling
- H. Headbands

Techniques: Suitable choice of color

Theory: Leather headbands; other types of headbands

I. Case-making

Techniques: Cutting of binders boards, spine strips, and cover material; making of paper, half, and whole cloth bindings, with square or rounded corners

Theory: Adequate joint for respective material; even turn-in and expert handling of corners; choice of adhesives and proper application; different types of bookcovers, folders, and album covers; tools and machines for case-making

J. Casing-in

Techniques: Further work on the single book and edition binding; casing of half extra binding

Theory: Recognizing mistakes which can occur when making a single binding or an edition

III. Educational goal:

A. Simple brochure

- B. Hard cover brochure
- C. Half cloth binding
- D. Whole cloth binding

IV. Special jobs:

- A. Simple portfolios and folders
- B. Mounting simple placards
- C. Scored and set-together boxes
- V. Assisting jobs in group work: Counting and fanning
- VI. Hand and machine gilding:
 - Setting-up of type
- VII. Professional drawing:

Lettering

- I. Binding of the book:
 - A. Threadless binding: paste-plastic-spiral binding

Techniques: Appropriate preparation of the book; correct choice and mixture of adhesives; applying adhesives and attaching reinforcing woven material

Theory: Methods of binding with adhesives; knowledge of the necessary adhesives and their effects; tools and machines necessary for plastic and spiral binding

B. Paring of and working with leather

Techniques: Sharpening and changing of knives; cutting the leather; choosing of the most suitable adhesive; expert covering of leather corners; shaping of leather headbands

Theory: Characteristics of different types of leather; profit calculation; types of paring, whether beveled from thicker to thinner, or by steps, or over-all

II. Educational goal:

- A. Hardboard binding with headbands
- B. Ledger without spring spine
- C. Half leather binding

III. Special jobs:

- A. Folder with flaps
- B. Box with collar
- C. Mounting
 - Techniques: Mounting of maps, drawings, pictures, and photographs completely or in part; choice and preparation of adhesives; preparation of the material to be used taking into account the stretch and equalizing the pull; varnishing and covering with transparent material; use of self-attaching foil (pressure-sensitive)

Theory: Appropriate treatment of all mounting jobs

D. Cutting of simple mats

IV. Assisting jobs in group work:

- A. Folding
- B. Gathering, collating, and stacking
- C. Pasting of pictures
- D. Numbering

V. Machine work:

- A. Spiral binding
- B. Perforating, jogging, scoring, bending, slotting

Techniques: Working on machines for perforating; setting machines; slitting by hand and on the board shears, or on appropriate machinery

Theory: Differences among the above listed techniques

C. Punching, and drilling Techniques: Punching of paper and binders board; drilling of paper and other materials on the drilling machine; setting and sharpening of the drilling tools

Theory: Pattern making for punching and drilling

- VI. Hand and machine gilding:
 - A. Helping at hand and machine gilding and color printing
 - B. Machine tooling, color printing, gauffering
 - Techniques: Setting and spacing of letters; locking-up of type in chase; engraving and etching; setting-up of the gilding press; stamping with leaf and sheet gold; printing with bookbinder's colored foil; stamping on paper, binders board or cloth; stamping on the gilding press with stamps or brass lines or rules
 - Theory: Differences between gilding presses; knowledge of types of letters and their characteristics; preparation and sizing of different materials; adhesives and materials used to paste or glue plates or gravures; properties and uses of leaf gold, foil, colors, and sizing materials

VII. Professional drawing:

Work drawings

THIRD YEAR

I. Binding of the book:

A. Edge-gilding

- Techniques: Pressing the book expertly; preparing of the edges by sanding, pasting, and applying Armenian bole; applying gold on glaire; smoothing and polishing to a high shine with a tooth burnisher after drying
- Theory: Tools for edge-gilding; applying of glaire; preparation of the edges; types of leaf gold and sizes; fore-edge gilding

B. Handstitched headbands

- II. Educational goal:
 - A. Special binding

B. Commercial books and diaries with spring binding III. *Special jobs:*

A. Slipcase making

Techniques: Calculating and cutting binders board and paste board; scoring by hand; making of simple lined and covered cases as well as slipcases with cloth and leather edges

B. Special bookbinders jobs

Techniques: Folding boxes as book protection, folders, albums of all types; Restricted to certain regions: index and registry folders, loose sheet books, registry requirements, sample books and sample cards, framing of pictures

Theory: Choice of the appropriate work techniques and materials for the above

- C. Leather work
- IV. Assisting jobs in group work:
 - A. Cutting for larger jobs
 - B. Assisting in all bookbinding work
- V. Machine work:

Assembling and setting of wire and thread sewing machines VI. *Hand and machine gilding:*

Gold tooling by hand

Techniques: Setting and spacing of letters; tooling on flat and rounded spines with leaf gold or foil; lines on spine blind or gold tooled

Theory: Tools and equipment for hand gilding; knowledge of the basic types of letters; preparation and sizing of material to be tooled: techniques of decoration in bookbinding

VII. Professional drawing:

Drawing, designing

- Techniques: Putting the material together according to color combinations; making of decorated papers; solving problems of creative presentation and design
- Theory: Tools for drawing; geometric drawing; knowledge of all types of letters; simple knowledge of the theory of style concerning the craft; history of bookbinding

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BINDING PRACTICE AS RELATED TO THE PRESERVATION OF BOOKS

HAROLD W. TRIBOLET

It has been reported that the work assignments in the western European monasteries before the age of printing were very simple. If a monk could read and write, or possibly just write, he was developed as a calligrapher. Those who did not have writing skills were sent to the garden or were taught bookbinding. This story was probably related by a waggish calligrapher. Nevertheless, the work of the early binder is truly remarkable. He conceived sound constructional techniques, some of which have survived for 1,000 years. Unmistakable evidence of his fundamentals and ingenuity remains in much of our binding technology of today, particularly in books with rigid covers. As in the past, we continue to secure and hinge the leaves at one edge, a process which enables one to read from one page of text to another in a convenient, rapid manner. Many books have a concave fore edge together with a rounded backbone, again a reflection of early construction. The fiber boards on the sides of a modern binding, inspired by the wooden panels used in the past, give protective support to the less rigid leaves of the book. Finally, although the covering material on the exterior of most of the present-day machine-made books is unlike the leathers used several hundred years ago, its prime purpose remains to protect the underlying construction.

Shortly after the invention of the printing press, book production grew rapidly in Europe. The binders, unlike the newly trained compositors and pressmen, were not required to master a new craft, for they simply continued the time-consuming traditional techniques developed earlier for the binding of manuscript leaves. As the demand for printed books increased, it is apparent that the quality of binding suffered because inexperienced help with questionable talent was recruited to supplement the output of the skilled binders.

Shortcuts followed, and by the eighteenth century one can see evidence of these in the construction and materials used for binding. The evolution of the mass-produced binding to its presentday form reflects the continuing struggle of the binder to keep pace with the printing press and the demands of the publishers. Perhaps the most significant breakthrough came with the creation of the case binding, estimated to have occurred about 1825-30, shortly after the introduction of cloth for a covering material. Case binding illustrated the prefabrication concept. It involved a group of sewn signatures, glued, rounded, and backed, to be put in a cover or case made of two boards and a covering material produced as a separate unitboth held together with an adhesive. Although this binding was designed to be produced by hand, it was actually the prototype for the machine-made binding introduced shortly before the turn of this century. It was a departure from the costly hand binding of the past; now books could be made available to the millions who wanted them at reasonable prices; the binder in collaboration with the engineer had learned

to accept the tools and conditions of an industrial society. But the basic fashion of binding was not changed. Many evolutionary variants in binding styles have developed during the past several centuries; yet, as Klinefelter reminds us: "If Christopher Columbus were to return to earth today, one of the things in daily use that he would easily recognize would be a book" [1, p. v].

The structural success of a book is dependent upon the satisfactory function of the construction and all of the material involved. An elegant or simple binding on a book made of paper with a very limited life, or with leaves that do not open easily because the paper is rigid or badly sewn, is an inexcusable waste of skill and money. When a new book is being conceived, the binder should be involved in the planning stage, since he is responsible for an important component of the construction. The kind of paper, its thickness, the direction of grain, signature size, dimension of the gutter margin, type of sewing, edge treatment, style of binding, covering material, and related details should not be the undivided responsibility of the designer. If rebinding or restoration is necessary, it is imperative that the binder or conservator fully understand the purpose of his craft in providing a workable extension to the life of the book.

In planning a new book, the selection of paper should be made after consultation with a person who knows binding. The paper in existing books that require rebinding or restoration, however, presents another problem; here the mistakes of the past are frequently seen and must be resolved. The binder must carefully decide whether the leaves require washing, deacidification, sizing, total physical support with a supplemental material, repair of the folds of

the signatures—decisions that he should make after discussing the problems with the owner of the book or the librarian, who are best qualified to judge the importance of an item and the manner in which it is to be used. Although paper is the most important element of the physical book and the binding is a protective shell, often the binding outlasts the paper, a condition too frequently seen in many books produced during the past century.

Middleton, in his thorough book on binding techniques, describes the stabbing of papyrus leaves with thread through one of the margins as the most primitive form of consolidation [2]. Today some mechanized sewing is not unlike this early process, and these kinds of curious similarities can be seen in many other variants of the sewing operation.

Another example of the effect of the past is the raised thong or cord sewing, probably developed in the tenth century, in which the thread is inside the signatures, parallel to the folds and anchored to the thongs or cords positioned outside the signatures at the backbone. This sewing has stood the test of time and is still used today by many hand binders who are determined to create durable bindings. Furthermore, the basic concept undoubtedly inspired the inventors of the Smyth sewing machine and similar ones developed during the latter half of the last century, which automatically introduce thread to the signatures as in the raisedcord sewing, then knot them together. but without the protruding cords on the backbone. This type of mechanical sewing, used on millions of books being manufactured today, provides strength and flexibility. On heavy books subject to frequent handling, cotton tapes are usually included at the backbone,

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through which the sewing is passed. The tapes, longer than the thickness of the book, are anchored to the inside of the case as part of the endsheet.

This sewing is employed in some European countries for rebinding circulating books, after the folds of the signatures are repaired, because of the flexibility advantages. Library binders in our country have not adopted the process, claiming that the preparatory work on the signatures is too expensive.

Prior to the invention of the sewing machine, the pressures of production brought about compromises in sewing that enabled the binder to produce books rapidly, though hand labor was still employed. He found that hand sewing a book on a few hemp cords recessed in the backbone was faster than sewing on the traditional five raised cords. Frequently the covering material on publishers' bindings sewn in this way was paper or cloth, used as a substitute for the more expensive leather.

Some of the present-day hand binders involved in leather binding also favor recessed cord sewing, combined with a hollow backbone. This backbone is a tubelike, partially laminated paper lining, to which are sometimes attached artificial raised bands made of strips of cardboard or leather. The hollow backbone makes it possible to open a book to the farthest point of the gutter margin, and it also provides a relatively inflexible area for gold tooling.

The advantage of easier opening in the recessed-cord, hollow-backbone construction, as in a book with abnormally stiff leaves, is offset by significant defects. Saw cuts across the folds of the signatures are necessary to accommodate the sewing cords, a form of mutilation that weakens the paper in a critical area. When the book is opened, a severe arch forms at the backbone, opposed to its normal shape, thus causing a strain on the sewing cords. Then, as the binding ages, the leather wears away in the joint area, followed by the disintegration of the paper folds of the hollow backbone. Finally, the entire backbone comes loose from the binding, thus creating the need for an immediate major restoration operation.

The edition or publishers' binding will withstand normal usage in the private library, but it suffers when given heavy use in a circulating library. Frequently the leaves become detached, the case loosens from the body, and the covering material breaks down. Prolonging the life of the book is the logical objective in most instances. However, the manner in which this is done requires intelligent judgment. If the book is a rarity it should be set aside for special treatment in the hands of a skilled binder, who would have the competence to restore or rebind it. An intermediate category should be recognized for those books too significant for the so-called library binding, yet not qualified for the special treatment. The third category should include books that justify simple rebinding.

Within each of the three categories mentioned, there are many routes to follow in deciding precisely what should be done with a particular book. Sorting a collection of books in need of attention requires the knowledgeable judgment of the librarian, or book owner, who understands the advantages of consulting a qualified binder or conservator.

Simple rebinding could mean the utilization of the existing sewing, new endpapers of durable, permanent, acidfree paper, the relining of the backbone, and a strong case binding of cloth or a suitable material. If resewing is necessary, overcasting or oversewing is generally used, done by machine or by hand. Here the folds of the signatures are cut away, and thread is introduced through the gutter margins of the leaves, consuming the last one-quarter inch of each leaf. Unless the paper is thin as well as flexible, a binding sewn in this way opens poorly, and one must exert force on the pages during the reading process. It is, however, a strong sewing technique.

Side sewing (not to be confused with that used on pamphlets and slightly related to overcasting), used on many new, mass-produced school and reference case-bound books destined for heavy use, is undoubtably the most distinctive innovation in commerical binding. Holes are drilled at high speeds through the gutter margins of the leaves at a ninety-degree angle, and thread is drawn through the entire book in one operation. Again reflecting the traditional form, side-sewn books are frequently rounded and backed. Although the sewing goes through a portion of the gutter margin, books manufactured with this construction in mind are designed with a larger-thannormal binding or gutter margin, so they can be comfortably read.

Considering simple rebinding, Grove [3] points out that some binderies use the adhesive binding techinque (also called "perfect," "threadless," "unsewn," or "flex") rather than overcasting, particularly if a book with unusually narrow gutter margins is being rebound. The folds of the signatures are trimmed off, and the single leaves are then held together with an adhesive, applied to the binding edge so that a small amount of it holds each leaf to the adjoining one. In some instances

the binding edge is serrated to increase the surface, and hemp cords are placed in saw cuts across the backbone. Additional strength is gained with linings of cloth, paper, or a combination of the two materials. Adhesive bindings can be rounded, backed, and put into covers as a case binding, or treated as the familiar paperback. Flexibility and durability at the backbone can be expected if the paper is pliant and, of course, if the correct adhesive is properly applied. The process has its place, and many new and old books have been successfully bound in this way, but it should not be used on valuable and rare books.

Adhesive binding is not new. Over 100 years ago gutta-percha and other rubberlike substances were used on a large number of new books. Some of these were rather elegant publications. By now, most of these books have probably broken apart as the bonding material crystallized. The process was, however, a beginning; its survival is due chiefly to the improved adhesives made available during the past fifty years.

Shortly after the turn of the century, the eminent hand bookbinder, Cockerell, focused attention on the rebinding of books in the intermediate category. He described them as "books of permanent interest, but of no special value, that require to be well and strongly bound, but for which the best and most careful work would be too expensive" [4, p. 94]. Such work must be done by hand, and the materials, which are a minor part of the total cost, should be stout as well as free of injurious ingredients that would shorten the book's life. Books of this kind should be bound to open easily, which excludes overcasting in most instances.

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Sewing with linen thread over cotton or linen tapes, combined with split boards on heavy books, is a desirable preliminary treatment. Strong cloth or the most durable leather, or a combination of the two as on a quarter binding, should be considered for the covering material. Unfortunately, too frequently books in this category are subjected to casual treatment at the lowest possible price, resulting in irreversible damage.

The rare, valuable book in need of rebinding or restoration in a collection should be given to a professional who not only has the skills to bind well but who fully understands the characteristics of *all* materials involved—those he is asked to work on as well as the ones he will add. He is professionally obligated to recognize the great wealth of knowledge gathered over the centuries of good bookbinding and to accept new techniques and materials only after they are carefully tested and proven. Constructional innovations have appeared in extra bound books, some of which are excellent, but the traditional laced-in raised-cord, sewn-headband, tight-backbone binding, with a covering of leather free of excessive acid, is generally accepted as best. In some instances, replica or period bindings are produced when none or very little of the original binding exists and it is desirable to recreate the early appearance. Here, too, the materials should be carefully selected, the historic construction observed, and skilled craftsmanship maintained.

Although the uncut deckle edges one sees on some books is usually viewed with appreciation, this irregular surface of white paper is the conservator's burden. The edge is not under compression, so dirt and other atmospheric pollutants easily creep into the leaves and cause discoloration. The trimmed edge, burnished, stained, marbled, sprinkled, or gilded, provides a relatively solid surface from which dirt can be readily removed, and some of these treatments protect the paper from the penetration of contaminants.

The wooden panels used on the sides of early manuscripts and printed books served their purpose extremely well. Their weight and rigidity, together with the fore-edge clasps frequently used, kept the books under favorable compression. As books became smaller and were produced in greater numbers, a more manageable and cheaper substitute was found in fiber board, which is now used everywhere in most bindings. Today, there are interesting variants of the use of individual boards front and back. Some cases consist of a single board which continues over the backbone from the sides; another is made of an extruded plastic sheeting which is stiff enough not to require boards; but all give the traditional protection to the leaves of the book.

Although, in earliest bindings, the boards did not always extend beyond the leaves, evidence of the intentional square or projecting board was seen by the middle of the fifteenth century, according to Middleton [2]. This custom has undoubtably survived because the extra dimension of the board provides a degree of protection to the edges of the book. In modern construction, by hand or machine, we should minimize the size of the square, for it creates a problem that affects the life and appearance of the binding. A book placed vertically on a shelf will sag in a clockwise direction, that is, the leaves at the fore edge will drop the distance of the square until they rest on the shelving, exerting a strain on the joints and the

backbone. As a result, the backbones of most books become slightly more convex at the bottom than at the top, and the joints of casebindings usually loosen.

In the earliest bindings, leather, either tawed with alum and salt or tanned with vegetable products such as wood and bark, was applied to the book to protect the backbone construction and to serve as a supplemental hinge over the laced-in cords or thongs. The binders sought a flexible material that could be made durable, and it is obvious their choice was excellent, for much of the leather has lasted for centuries. During the last century, tanners made an effort to expedite the process and at the same time gain an unnatural evenness of color by the application of acids that have proved to be injurious and have resulted in an inferior product. The decline of quality tannage is particularly evident in many bindings produced during the latter half of the nineteenth century.

In 1900, the Council of the [Royal] Society of Arts of England established a Committee on Leather for Bookbinding to investigate the problem and make recommendations for improved tannage as well as binding techniques. Although this was a commendable beginning, it was apparent that further scientific work had to be done. As a result, in 1932, the Printing Industry Research Association and the British Leather Manufacturers' Research Association, with the strong support of R. Faraday Innes, the distinguished English leather chemist, continued the investigation. Briefly, the group determined that protective organic salts found in early vegetable-tanned skins were being washed out in the modern processes, and that potassium lactate

should be applied to newly tanned skins. The purpose of the potassium lactate is to prevent the sulphur dioxide absorbed from the urban atmosphere from causing early disintegration in vegetable-tanned leather. While other salts have been found to have good protective characteristics, most binders involved in treating bound books use potassium lactate. The peroxide test was also introduced for determining the durability of leather, and it was proposed that skins tanned in the approved way be stamped "Guaranteed to resist P.I.R.A. [Printing Industry Research Association] Test." This superior leather is available today.

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Canal Links

Skins converted into leather by another process, known as chrome tannage, have had a very limited use in binding. Although it is more resistant than vegetable-tanned leather to fungal growth and deterioration from injurious atmospheric gases, leather created in this way is not easily fabricated. A combination of chrome and vegetable tannage, which is supposed to have the advantages of each, is now being applied to goatskins.

Vellum, also made of animal skins, has been a strong and enduring covering material for centuries, although it is sensitive to humidity and temperature variations, which results in warping. It is a hardy material that has a natural resistance to the atmospheric gases and only requires an occasional cleaning with an eraser or saddle soap. Books bound in vellum can be kept more or less compact with fore-edge clasps or ties, but they should also be shelved under moderate pressure.

Although various fabrics have been used as book-covering materials for centuries, the popular use of cloth for publishers' bindings developed during

the early 1820s. This was a woven cotton material prepared with a gelatine size or starch to prevent the penetration of the glue used for bonding. The advantages of an inexpensive massproduced covering material were obvious to the publishers and the binders. and cloth manufacturers soon responded with a variety of textures, finishes, and base fabrics in various weights. Today, we have plain starch-filled cloths that give excellent service, as well as a variety of impregnated and coated fabrics that can be easily washed and are usually resistant to vermin. As a conservation measure, it is important in rebinding or in planning a new binding to select a cloth (if that is the preferred material) with a suitable base fabric that is strong and will adequately support the book.

Currently, nonwoven covering material's are being used on bindings, but it is too early to judge their lasting properties. One is made of granulated leather and paper fibers bonded with latex. Another is composed of impregnated paper fibers. A product that deserves special attention consists of matted polyethylene fibers and is remarkably strong even in its thinnest form. Compositions of this kind are usually treated with a pyroxylin or the superior acrylic coating, are colored, and can be grained or textured in an unlimited variety of patterns. It is also possible to print or hot-stamp designs on the surface. I have described some of these modern materials science has made possible, for it appears they offer economic advantages and can be made strong. The materials are now on trial. and later we will know more about their permanence.

Only recently has the craft of binding restoration been recognized as one that requires the skills of the highly competent hand binder, coupled with ingenuity and a thorough knowledge of materials and constructional techniques. Everything possible should be done to retain what remains of the original, and added materials should be functional, chemically safe, strong, durable, and unobtrusive. I do not support the idea that added materials should be obviously unlike the original. for too frequently this theory becomes the crutch of the haphazard worker who cannot or will not trouble to produce a good restoration. The restorer is interested not in deception, for little can be done that would escape detection, but rather in a sensitive, pleasant result.

Should an important book that is disintegrating only be preserved, or should it be restored? Such an item could be wrapped in acid-free paper, or placed in a protective container, which would preserve it somewhat, but it would be little more than a museum piece with a very restricted life. A book, in my opinion, should be made usable, and restoration is the logical solution. If it is important to retain evidence of constructional details, photographs and other records can be made before the repairs are begun, then kept with the book. In addition, such a report should include information regarding the new materials used, the operations performed, the date, and the name of the restorer.

First-aid repairs by a well-meaning person unfamiliar with materials and techniques frequently result in serious problems that cause irreversible damage to a book. Not many years ago the useful polyvinyl acetate emulsion adhesive was advocated for the reattachment of loose boards on leather bindings. The adhesive was spread over the surface of the leather adjoining the joint area, so it included a portion of the backbone as well as the board. Upon drying, it appeared that the hinge had again been made functional and that a minor miracle had been performed—but this was a temporary and false impression. Ultimately the adhesive peeled away, taking the surface of the weak leather with it, thus making a sophisticated restoration impossible. A parallel illustration involves the familiar, handy, pressure-sensitive tape which has also been misused on valuable bindings.

Many book materials are attractive to vermin and insects, support mold spores and bacteria, degenerate in the presence of ultraviolet light, require favorable humidity and temperature controls, suffer in a polluted atmosphere, support combustion, and create major problems if they become wetvet it is within the scope of human ingenuity to minimize or eliminate these weaknesses. The problems of book conservation are not new, and a multitude of solutions have been proposed and developed over the years, but we must learn to reject or accept them with caution. Too frequently the well-meaning scientist, publisher, manufacturer, supplier, binder, or conservator, or the urgency of the problem, causes to be brought forth a material a process that has not been or thoroughly tested under realistic circumstances. We are, however, in an exciting age of innovations and synthetics, and a healthy relationship exists between the scientist and the practitioner, all of which should bring us closer to our goal.

What can you do, as a conscientious librarian or book owner, to fulfill your responsibility as a custodian? Here are a few suggestions: 1. Should you find evidence of vermin or insects, enlist the help of an exterminator or entomologist to undertake a professional control program. Poison baits can be used, and you can find reference to many of them, but it is best to employ a specialist.

2. If you suspect or see evidence of the development of mold, initiate plans for an air-conditioning system, with positive control over humidity, temperature, and acidic urban pollution. If such a system is not immediately possible, excessive humidity, in some instances, can be reduced with mechanical or chemical dehumidifiers. Early sterilization should be considered for important books. Of course, one should not wait for mold to develop to use controlled air, for all materials in the book will live longer in a favorable environment.

3. The problem of ultraviolet light can be diminished by painting over clear glass windows, by installing drapes or blinds over natural light openings, and by using plastic filters on light fixtures or fluorescent tubes with built-in filtration properties.

4. Understand binding, restoration, and preservation techniques, not as a practitioner, but as an informed person who can request intelligent help from the specialist.

5. Become familiar with approved book-cleaning and leather-treatment methods. The booklet *Cleaning and Preserving Bindings and Related Materials*, by Horton [5], is highly recommended.¹ This is the first of a series of manuals on the conservation of library materials, made possible by a grant from the Council on Library Resources, Inc. Other manuals yet to be produced will be equally useful.

¹A selected bibliography of materials on book preservation appears below.

THE LIBRARY QUARTERLY

Over the years we have progressed in many areas; books are being produced more efficiently, conservation techniques are becoming more sophisticated, but we are also becoming increasingly aware of our ignorance. Many questions require the undivided attention of the scientist and the binder/conservator. Finally, we must increase training facilities for the hand craftsman who will continue to establish the quality standards important to those involved in the mass-production of books.

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CONSERVING THE LEATHER SPINES OF OLD BOOKS / Robert Muma*

When I became involved in book restoration about ten years ago it seemed like such a forest of frustrations that must inevitably lay ahead. However, these frustrations became stimulating challenges that often resulted in rewarding solutions. As a specialist in leather techniques for many years, I became especially interested in this phase of book conservation.

But instruction books seemed weak on conserving or restoring the outside of a book. A "never mind the body as long as you can save its soul" attitude. Yet if "the face reflects the soul" and the spine is the face of a book when it is on the shelf, how many old book "faces" reflect the real soul? In other words, how many old books still have their original spines? Any book restorer knows the answer. So often tight backs are utterly impossible to remove intact, or in pieces large enough to replace on the new spine. This is particularly true of thin calf, and especially with raised cords. The book finisher has lavished his most painstaking care on this part of the cover. How often a client implores, "I hope you can fix it without destroying the back."

This has been my greatest frustration. Textbooks seemed to avoid it. And none of the hand binders and restorers who have called on me from half a dozen countries in these years could offer much help either. The few suggestions I had accumulated seemed useful only for special cases. I decided that either there is still no satisfactory method of removing a spine regardless of its condition, or else it has been a very well kept secret. But surely there must be some way of doing it. Obviously I was on my own.

Most of us have had books to restore which had a loose board rejoined at the hinge by means of a transparent rubber-like preparation sold for this sort of book repair. These come under various brand names such as "Book Saver", "Liquileather", etc., and all seem to be basically PVA adhesives. Sometimes a whole spine has been treated with it to prevent any further deterioration.

*Mr. Robert Muma is a professional binder in Toronto and a former member of the GBW.

And next to pressure sensitive tape, it seemed to me the worst sin one could commit against a book in the name of conservation. But I remembered how tough and pliable the spine was when I removed it. If only that flexible film could be removed again after the leather is pasted onto the new spine. Alcohol or acetone *will* erase it so it is less conspicuous, but not without some damage to the surface of the leather.

For many years I have used a polyvinyl acetate latex adhesive made and sold in Canada as Lewiscraft Leather Cement. It has all the characteristics of the PVA adhesives except that it dries on leather with a transparent rubbery film that is shiny, thinner, and more elastic than any of the others I have used. I still use the same bristle brush I have used for this cement for over 18 years. Although I rinse it well after every use, it repeatedly fills up until it is hard and unusable. Then I soak it in alcohol, squeeze out the slippery "goo" and rinse under a water tap. Immediately the semidissolved latex coagulates and pulls out in white strings. It took only a few minutes, armed with this knowledge, to prove I could also remove it from old leather.

It was a tough one I had to start with—a tight back of thin but flawlessly smooth calf without a paper lining. Just a single stroke of the knife in attempting to lift it left half a dozen pieces of crumbled leather. But with a coat of Lewiscraft Cement it came off intact. Of course the blade cut through occasionally, but the cement closed the wound immediately and paste later sealed it on the new back. Then with alcohol and water it rolled off as easily as rubber cement.

That was a year ago and I have done quite a number of tight backs since then without any real failures. During that time too, I have continued to refine the technique until now it seems virtually foolproof and is safe and effective in as wide a variety of circumstances as I am aware of. I have also experimented with several other adhesives of a similar nature with very limited positive results. Only the Lewiscraft Cement so far, is dependably safe and effective. Following is my procedure, step by step. (Be sure to practice it first on old leather from discarded covers.)

1. (Optional) Give the whole book an application of British Museum Dressing. The beeswax in this preparation consolidates the driest and tenderest leather surface as well as offering a slight

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resistance to the PVA latex, both of which will facilitate removal later on. It also inhibits moisture absorption from the cement before it sets. Wait for a few hours before proceeding with No. 2.

2. Using a small varnish brush, paint the whole spine with the PVA latex. If you have done No. 1 proceed down the sides just beyond where the leather will be lifted to receive the new leather spine. Also protect the worn leather on any corners that need repairing. If you haven't used the Museum Dressing the leather protected by the latex will probably be a shade darker after it is removed. If the oil and wax resists the initial application, give it a second coat. A lacy or grill-like covering is alright as long as it encompasses the whole surface and is not too open. In most cases you will get complete coverage. It sets quickly but allow several hours to toughen.

3. Start lifting the spine with a knife along each side and from each end. I use a flat-handled, heart shaped, double edged knife, moving back and forth from side to side, cutting as close as possible to the book without damaging the paper. The PVA latex doesn't make the cutting any easier except by binding the surface in a rubber-like film which prevents the leather from shattering under strain or accidental break-through of the knife.

4. When safely removed, lay face side up along a cardboard mailing tube. Wrap with wax paper and secure with rubber bands. If left flat, a slight pull of the latex on drying tends to curl the leather outward which may then crack when this curve is reversed to its normal position on the book.

5. Proceed as usual in rebacking with new leather. When finished, be sure it is stained or antiqued to match before the next step.

6. Trim the old spine so it will not interfere with the functioning of the new leather joint. Remove any paper from the under side and trim away the turn-in leather from the head and tail. Skive all edges carefully with a very sharp knife. Don't be afraid. The latex prevents the usual crumbling or breaking away. A surgeon's scalpel is ideal.

7. Paste the back of the old spine and moisten the new leather well with potassium lactate solution. Quickly fit old leather in position. Press down well all over. Cover with wax paper and bind tightly with an elastic bandage round the book from head to tail. Rub with a bone folder. Leave only 15-20 minutes. This is enough to imbed the edges of the old leather into the new leaving a barely perceptible join. Allow at least a day to set and dry.

8. If you have done step 1, the latex may only need a gentle rubbing of thumb or finger tips to roll or peel it off. If it doesn't, or if you started with No. 2, then have a water-moistened sponge handy and some alcohol and cotton swab. Wet cotton with alcohol and swab no more than 2-3 square inches of the latex—just enough to make the surface slippery. Quickly sponge with water to coagulate it and start rubbing with finger tips. At just the right moment the latex film will blister and roll off like rubber cement. Continue this process until finished. In a few minutes it is all clear and you have a sound book with the spine just as it was before removal.

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9. Touch up any worn places on spine to match rest of book. Use water dyes of required density to minimize number of applications necessary. Water and alcohol can both be harmful to old leather but with care neither one need have touched anything but the latex.

10. Apply a final coat of leather dressing to the whole book.

Note: Do not put the PVA latex on the leather until you know you can continue the process through its removal in a reasonable length of time such as two or three weeks. Beyond that time the latex becomes tougher and, unless you have done step No. 1, may not be as easy to remove.

This technique when used in repairing corners makes the process so much easier and more professional looking. By preserving the thin and worn edges of the leather while it is lifted and then pasted down again it is sometimes almost impossible to detect the repair. It can also be used with old cloth, and is a substitute, in most cases, for PVA with the advantage that it can be removed.

Materials used: The British Museum formula has been in disfavor lately because of the hazards from inhalation of hexane fumes. Since this would seem to be a valid objection mainly in institutions where it is used extensively, I have continued to use it and prefer its greater versatility. This technique is one place where

it is definitely an advantage. Oil alone only tends to soften the leather surface allowing it to roll away with the latex. Perhaps an application of liquid wax over the oil might correct this limitation.

The alcohol I use is methyl hydrate in Canada, methylated spirits in England, and methyl alcohol, methanol, wood alcohol or Columbian spirits in the U.S.A.

Lewiscraft Leather Cement is described by the manufacturer as "a polyvinyl acetate latex, plasticized into a 53% total solids water base cement. This compound is made to a viscosity of approximately 100 cps, allowing complete application freedom with spray, roll transfer, or even by brush. This material is suggested for use in wood gluing, textile laminating and other miscellaneous work. It is particularly suited to craft type application using paper. leather, ceramics or other miscellaneous materials". Personally, I have found it preferable to any of the other PVA products I have tried because of its fluidity in application and its flexibility on leather. Besides it can be removed. It is manufactured by Dewey and Almy which is a Canadian subsidiary of W. R. Grace & Co., an American firm. But it is not manufactured in the U.S. It is available by parcel post from Lewiscraft Supplies, 284-286 King Street West, Toronto 2B, Ontario. It comes in 4 oz. jars - 50¢; 8 oz. - 85¢; 15 oz. - \$1.35; or 1 gal. - \$9.95. Add 50 ¢ on all orders under \$3.00 and add 15% for postage. It is damaged by freezing and should be ordered accordingly.

EDITORIAL / Laura S. Young

Training Programs

In this issue of the Journal we are publishing a condensed translation of the training program required of apprentices up to and through the examinations that qualify them as journeymen in the field of bookbinding, as set down by the German Chamber of Commerce.

In the absence of any organized training facility in this country the Executive Committee has discussed on a number of occasions the desirability of bringing to the attention of our members specific information regarding the training programs available or required in other countries. If this article proves of interest, we shall endeavour to cover other localities from time to time.

We are grateful to Mrs. Lotte Burg, one of our members, for her interest and efforts that have brought this first undertaking to fruition. On a visit to her native Germany about a year ago she acquired a copy of these regulations. She translated this booklet in its entirety and has worked closely with Miss Davis in its revision and condensation.

Upon learning of our intention to publish this information a Guild member of long standing who is highly respected in the field expressed the opinion that its publication was a mistake; that it would serve only as a deterrent to young people who might be thinking of going into the field.

To be sure, it points up quite quickly that the proper training of a bookbinder cannot be accomplished in a few easy lessons or by the use of a "do-it-yourself" manual. Anyone aspiring to a career in the field, however, should be made cognizant of what is involved in the way of study, practice and experience before they can hope to become proficient in its many facets.

If it deters the faint of heart, it will be of use in a negative way. Hopefully, though, it will be useful constructively as a guideline or study outline to any one who is a serious student in the field whether on an amateur or professional basis.

We cannot expect the general public to show the hand book crafts the respect we would like to see them receive unless we the practitioners treat their mastery with the seriousness that they deserve and demand.

LIBRARY / Mary E. Greenfield

The Library received the following book, the gift of Herbert L. Frankel:

Aldis, Harry G. *The Printed Book*. Cambridge: The University Press, 1921. 155 pp. Illus.

The following publications may be of interest to members:

Restaurator. International Journal for the Preservation of Library and Archival Material. Restaurator Press, Postbox 96, DK 1004 Copenhagen K, Denmark. \$17.50 a year. Four issues a year are planned for this truly international and

extremely interesting journal. Two have appeared so far.

- Coremans, Paul. Problems of Conservation in Museums. George Allen and Unwin Ltd., Park Lane, Hemel Hempstead, Hertfordshire, 1969, 224 pp. \$12.60. Sections on the deterioration of cellulose, deacidification, and lamination.
- Silver, Rollo G. *The American Printer 1787-1825*. Charlottesville: The University Press of Virginia for The Bibliographical Society of the University of Virginia, 1967. 200 pp., 24 plates. \$7.50.
- Bennett, H. S. English Books & Readers 1475 to 1557 Being a Study in the History of the Book Trade from Caxton to the Incorporation of the Stationers' Company. Cambridge: at the University Press, 1969. 351 pp. \$7.20.
- Reliure-Brochure-Dorure. Hotel du Cercle de la Librairie, 117 Boulevard Saint-Germain, Paris VIe. 11 issues a year. 40 francs. Although this publication is concerned mainly with machine binding, they do usually publish one picture of a contemporary binding each month and this March have an article on the restauration bindery of the Bibliothèque Nationale.

MEMBERSHIP / Jerilyn G. Davis

November 16, 1970

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Mr. James B. Sullivan The Old Book Corner 137-A E. Rosemary St. Chapel Hill, N.C. 27514

Mr. Robert W. Wiest Bark River Press 503 Wisconsin Ave. Delafield, Wisc. 53018

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Mrs. William M. Zinn (B,RC-A;L) 1530 Fifth Ave., #102 San Francisco, Calif. 94122

Former members who have rejoined:

Mrs. C. Stevens Marshall (B-A)	
490 Rivervale Rd.	
River Vale, N.J. 07675	

Mr. Raymond P. Wallace (B,IL,RC-A;Coll) 77 Orange Rd., Apt. 85 Montclair, N.J. 07042

Resignations:

Mr. George Baer, Mrs. St. George Burke, Mr. C. Allan Carpenter, Jr., Mr. Harold F. Coates, Mrs. Lucy S. Crump, Miss Deborah Evetts, Mrs. Whitney D. Goubert, Mr. Harry B. Green, Mrs. Charles D. Greenwald, Miss Patricia Harber, Miss Clara A. Hatton, Mrs. Louise R. James, Mr. Murray Lebwohl, Rev. Frederick E. Maser, Mrs. Robert Noel-Bentley, Mrs. Janet Lowe Palmer, Mrs. Florence H. Pierce, Mrs. Natalie P. R. Sirkin, Mr. Donald V. Vento, Mrs. Lucille J. Wedner

Name, Address & Classification changes:

Mr. Duncan Andrews	Miss Dale S. Coleman
Chase C-38	315-F South West Ave.
Harvard Business School	Elmhurst, Ill. 60126
Boston, Mass. 02163	
	Change Mrs. Maggy Mager-
Miss Norma E. Bradford	stadt Fisher to
25 Neptune Dr.	Mrs. Joseph Rosner
Old Saybrook, Conn. 06475	-
- -	Mrs. Robert Fougedoire
Mr. Norman V. Carlson	103 Rue Perronet
323 Monte Vista Ave., Apt. 106	Neuilly s/Seine 92, France
Oakland, Calif. 94611	

Mr. Harold Goodwin Claridge's Hotel Brook Street London, W. 1, England

Mr. Arthur Hillman 50 Duff St. Watertown, Mass. 02172

Mr. Joe B. Holmes 815 Revere Rd. Glen Ellyn, Ill. 60137

Miss Margaret A. McFadden 5633 S. Kenwood, 1B Chicago, Ill. 60637 Mr. John F. Reed 10 Springvale Rd. Croton-on-Hudson, N.Y. 10520

Mr. Ivan J. Ruzicka 27 Pinewood Rd. Avon, Mass. 02322

Miss Marianne von Dobeneck Lee Lane Redding, Conn. 06896

Mrs. Gilbert M. Weeks 106 Corson Pl. Ithaca, N.Y. 14850

An asterisk (*) should be placed in front of Mrs. Joanne Isaac's name.

Death: We sincerely regret the death of Mrs. J. S. H. Newell on April 15, 1970.

Total Membership: 202

PROGRAMS / Mary C. Schlosser

An Exhibition of Manuscript Treasures

The third meeting of the 1969-70 season took place at 5:30 P.M. on Thursday, March 26, 1970, and found us in the handsome quarters of H.P. Kraus, the internationally famous rare book dealer. There we had the opportunity of viewing an exceptional exhibition, "Masterworks of Medieval and Renaissance Painting and Illumination."

After we had all assembled, Mr. Kraus welcomed Guild members and guests and introduced his associate, Mr. John S. Kebabian, who gave us a short scholarly commentary on the special attributes of the various works in the exhibition.

The books were beautifully displayed in a warm panelled room with the gracious atmosphere of a private library rather than a showroom, and because large lighted transparencies were mounted along with the individual books, it was possible to see not only the pages lying open, but others in the books, and in greater detail than is usually possible in such exhibitions.

The exhibition covered a wide span, both in time and geography. The earliest works were Greek alphabetic copper plates, probably from the 8th century B.C., showing the Greek alphabet in its most primitive form. We then passed in time to an Italian 6th century text in uncial hand of the Gospel of Matthew, and then to more rarities of the 10th, 11th, and 12th centuries. Unfortunately, some of the most important items of the 12th and 13th centuries were on loan to the Metropolitan Museum of Art's exhibition "The Year 1200", but I hope some of our members saw them there.

The illuminated manuscripts, of course, are always the most fascinating to the eye, and the main body of the exhibition focused on such treasures as Vincent Beauvais' "Speculum Historiale" with 708 miniatures executed by Jean Bondol and his atelier in Paris, about 1370-1380, for Charles V, King of France; or the "Visconti Hours", whose 22 full-page miniatures were executed in Milan by Michelino da Besozzo sometime before the death in 1402 of Gian Galeazzo Visconti, Duke of Milan. Turning further north, one would find the Llangattock Hours, Ghent, about 1450, with 27 Flemish miniatures of Van Eyckian brilliance.

Nor did the scope of the exhibition neglect Spanish, English, or Persian treasures, all of which were there to intrigue the eye with their beauty, individuality, and freshness.

In addition to his hospitality in inviting the Guild to a special viewing of the exhibiton, Mr. Kraus had also set out, just for the evening, a few rare bindings from his shelves, including early blindstamped examples, a fine example of the black and brown Grolierstyle bindings done for Grolier's English counterpart, Thomas Wotton, and several brilliantly tooled later works. Among Guild members and guests present for this most enjoyable occasion were: Mr. Anderson, Mrs. Burnham, Mrs. Coryn, Miss Davis, Mrs. Eldridge, Mr. Wayne Ely, Mrs. Fisher, Mrs. Gordon, Mrs. Greenfield, Mrs. Haas, Mr. Hill, Mr. Holmes, Mr. and Mrs. Horton, Mr. Jensen, Miss Manola, Mrs. Pennybacker, Mrs. Perkins, Miss Pimont, Mr. Ploschek, Mr. Reed, Mr. and Mrs. Schlosser, Mr. Welsh, and Mrs. Young. and the second sec

PUBLICITY AND NEWS NOTES / Grady E. Jensen

An eight-weeks course in bookbinding was given at the Bindery of the Gibbes Art Gallery (Charleston, S.C.) from January 12 through March 6, 1970. GBW member Inez Pennybacker was the instructor. Classes for beginners were held on Monday and Tuesday mornings, and on Thursday and Friday mornings for experienced students. Enrollment in each class was limited to four. Two years ago, Mrs. Pennybacker gave a special course at the Gibbes Gallery in book restoration.

Last October 4 GBW member Carolyn Horton gave a half day lecture-demonstration on book preservation techniques for the combined meeting of the Upstate New York and New England Regional Groups of the Medical Library Association. About 200 attended the lecture.

Mrs. Margaret Lecky was guest exhibitor at the 23rd Spring Exhibition of the Allied Craftsmen of San Diego, May 24-July 5, 1970.

Late in 1969 The Pierpont Morgan Library published A Review of Acquisitions, 1949-1968. A handsome volume of 186 pages plus 49 full-page, black and white illustrations, it includes a review of acquisitions of medieval and renaissance manuscripts, printed books, bindings, autograph letters and manuscripts, and drawings and prints. The chapter on bindings lists and describes 92 acquisitions, from Belgium, Bohemia, Denmark, England, France, Germany, Holland, Hungary, Ireland, Italy, Mexico, Scotland, Spain and the United States. Six full-page illustrations of bindings include:

- -France, c.1560. Binding for Thomas Mahieu on Peter Martyr's "De rebus oceanicis"
- -France, 1560-1570. Claude de Picques binding for Marcus Fugger
- -France, c.1564. G. B. da Vignola's "Regola delli Cinque Ordini d'Architettura"
- -Italy, early 15th Century. Binding executed at the monastery of Sancta Justina at Padua.
- -Italy, c.1543. Della Casa "De officiis" originally bound for Paul III

-Mexico, 1597. "Carta Ejecutoria" for the Nava family. The period covered by the *Review* almost precisely spans the years (1948-1969) that Frederick B. Adams, Jr. served as director of the Morgan Library and the volume is, to a great extent, a tribute to Mr. Adams.

Sector Contraction