Quarter Leather, Library Style
This style of binding is designed mainly for heavily used reference books, and the design is distinguished by the "no frills" approach to the provision of strength and utility. The book is sewn onto tapes rather than cords, and the slips are secured with a portion of the endsheet structure and split boards. The leather adheres directly to the back of the book, and is left full thickness (except of course, at the turn-in), the french joints permitting easy opening and joint longevity by avoiding acute bending at the joint (see figure 1A, B and C for examples of openability). The style is little more complex than a full cloth binding and is a good introductory leather binding for the beginner.

A. Tight Joint. Must be pasted down open.

B. French Joint. Must be pasted down closed (i.e. pressed in the normal way)

C. Supported or Harrison joint. Must be pasted down open.

Figure 1
Endsheets.

Whichever style of endsheet used, it is important to ensure that it has waste sheets on the outside to enable the forming of "tongues" for insertion into the board splits. If the normal plain white double-folio endsheet is used, additional single folios must be glued onto the outside, providing a double thickness pastedown after the waste sheet has been utilized as a tongue (see figure 2). The normal japanese tissue hinge should also be included in this structure.

![Figure 2: A single folio glued to the normal double folio structure (note the Japanese tissue strip).](image)

A strong endsheet commonly used is the "made" or "stationery" endsheet, consisting of two folios jointed by a strip of cloth and lined with a fancy paper (see Vaughan p. 105 and Burdett p. 72 for a complete description). At C.U., the style is used only for exceptionally large or heavy books.

The endsheets are sewn as normal sections but encircling the tape to show a continuous line of thread at the inner folio. If a book has sound original sewing, tapes may be glued to the back and sewn in the normal way; if necessary, the first and last few sections may be overcast into a single flyleaf before the whole endsheet is added.

![Overcasting into a single flyleaf.](image)
Boards.

The usual formula of size and thickness are used in determining the board weight, depending upon the form of split board used. A common method for smaller books is the actual splitting of a normal board along its length with a knife or sharp folder, usually about one third through the board thickness and about 7 centimeters in from the back edge. It is imperative in this method, that the grain run parallel to the back edge.

A method which is ideal for heavier books, is the laminating of boards, so that each board is made up of three boards, two thin and on thick, the thick board sandwiched between the thin the inner of which is glued to leave a split of about 7 centimeters. When gluing these boards together, it is advisable to glue the surface of the board nearest to the book (see Figure 3). If boards are "made" in this way, it should be done immediately after sewing so that the maximum pressing time may be given.

Figure 3

For very heavy and large books, the supported or Harrison joint should be used. This joint combines the rigidity of the tight joint with the ability to use thick leather without loss of joint mobility. The board is actually made up of two boards of equal thickness and height, but the inner board is flush to the shoulder and the outer is set back to a normal french joint position.
Board Attachment.

The book is glued up, rounded and backed in the normal way. The tapes are glued to the outside waste sheet, which is glued all over and folded back to the joint (encasing the tapes) and thoroughly rubbed down with a folder. The tongue thus formed is cut to about 6 centimeters in width and angled at the head and tail (see Figure 4). The boards are cut to provide the normal square of approximately 1 1/2 times the board thickness with a joint slightly wider. The sharp board edges and corners are softened with sandpaper, the split is glued, the tongue is inserted with the split close to the book, the boards positioned and the book pressed.

![Figure 4](image)

Cutting the Leather

While the book is in the press, the leather is cut to size. Generally, the leather should be a thick goatskin of second grade, chosen from the most plentiful color in stock. The leather should be cut to provide a turn-in of about 2 centimeters, and leaving no more than 7 centimeters on each board. In cutting the leather, it is usually best to first cut a scrap paper pattern, lay it on the surface side of the leather in the most advantageous position, and cut to shape. The leather is pared down the two long edges and on the entire turn-in, ensuring that these are not left too thin close to the board edge.
Headbanding and Lining

At C.U. it is the practice to sew headbands at head and tail rather than use string (see description under covering). The book is now headbanded with strong linen thread, ensuring that a bead is formed at every turn and there are frequent tie-downs. The back is now lined with an appropriate acid-free paper, and the headband tie-down impressions lightly sanded. The extent of the back lining should be based upon the anticipated ability of the bound book to arch when opened: an inadequately lined back used with thin leather tends to open acutely rather than arch (see Figure 5). A cut of about 2 centimeters is now made at the top and bottom of each joint in preparation for covering.

A. A book inadequately lined and opening too acutely, throwing all the strain of opening into one area of the back.

B. A book lined appropriately, causing the back to arch, spreading the strain of opening evenly.

Figure 5

Covering

The covering materials and tools should be assembled, and consist of: potassium lactate solution and sponge; a piece of thin strong string; thick paste; clean bone folder; clean work surface.

The leather is swabbed on both surface and flesh sides with potassium lactate, thoroughly pasted, and lightly folded over to place the pasted surfaces together. After soaking to allow the leather to absorb the paste, the leather is lightly re-pasted and laid onto the book. After correctly positioning the leather, it is turned-in, either by standing the book on its back and letting the boards drop to the bench (suitable for large books), or by standing the book on its tail, opening out the boards and forcing them away and turning-in (much quicker and more certain for smaller to medium-sized books). The turn-ins are smoothed and the joint thoroughly worked down with a damp folder, taking care not to drag the leather. The joints are now tied with a slip-knotted string and small caps set at head and tail.

When the leather is quite dry, usually after having been left overnight, the raw leather edges on the boards are trimmed straight, and vellum or cloth tips attached. The vellum tips may be take from discarded vellum covers or new pieces. The paper sides are cut, glued and attached, and the book pasted down shut, and pressed.
Finishing

In this style, finishing is limited to a blind creased line against the edge of the paper, and basic gold lettering on the spine.

At the conclusion of finishing, the book should be gradually opened lightly, a few sections at a time to ease the linings and to avoid cracking by violent opening.

Library-Style Buckram

For the buckram library style binding, the same general procedures are used, except that: (a) a stout oxford hollow is constructed after the boards are attached, with the inner portion trimmed flush and the outer portion trimmed flush and the outer portion trimmed to the height of the squares (see Manual Guide No. 4); (b) the covering is usually "full" buckram and not quarter; (c) immediately after covering, the joint is "nipped", either between rods or on the joint creaser.

*Updated 1983