

Rebacking — an alternative approach

I developed this method of rebacking whilst working at The Eddington Bindery in the mid-seventies. We were asked by collectors to reback some important bindings invisibly. I was able to draw on both my trade bindery background (for the refinement of technique) and my years of conservation binding with Sandy Cockerell for the selection of strong, sound materials and methods.

This method, in my opinion, retains virtually all the original structure, materials and handling qualities of the book with minimum disturbance.

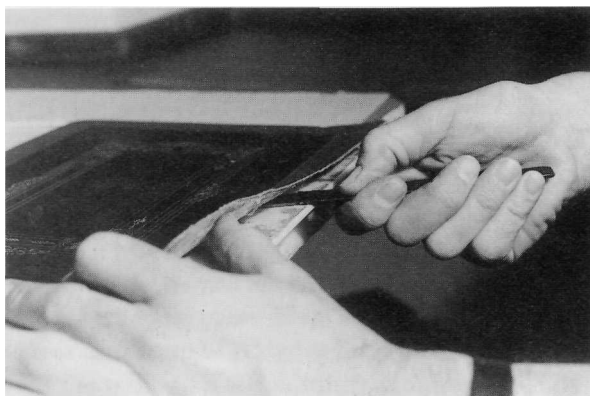
In most cases, the hidden linen joint is stronger than the original board attachment but care should be taken as this method may give too much resistance to board opening on small books. However, this can be adjusted by reducing the amount of linen/cotton used over the joint [see 28].

As with all binding techniques, it is a question of balancing strength of materials against handling and proposed use of the book.

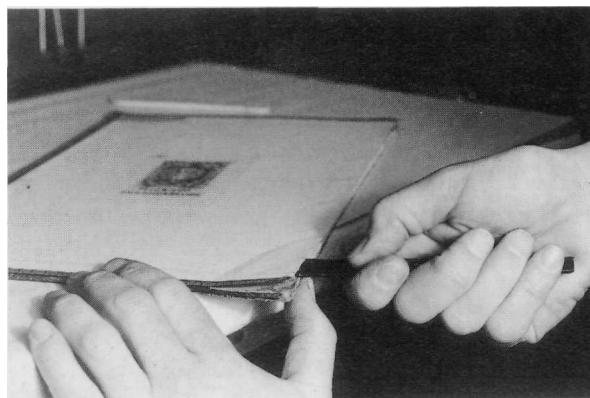
Sequence of Operations



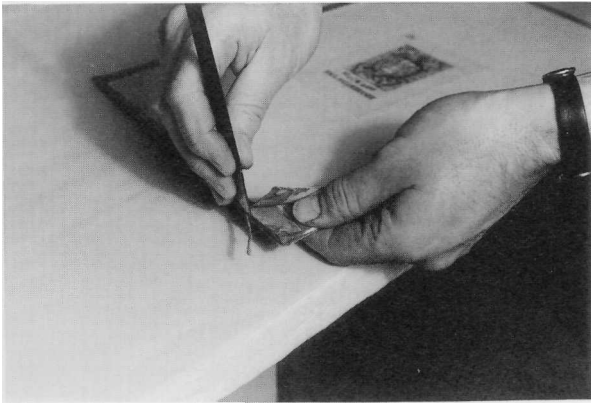
1 Milton's *Paradise Lost*, illustrated by John Martin (19th Century Morocco binding) boards off and corners damaged.



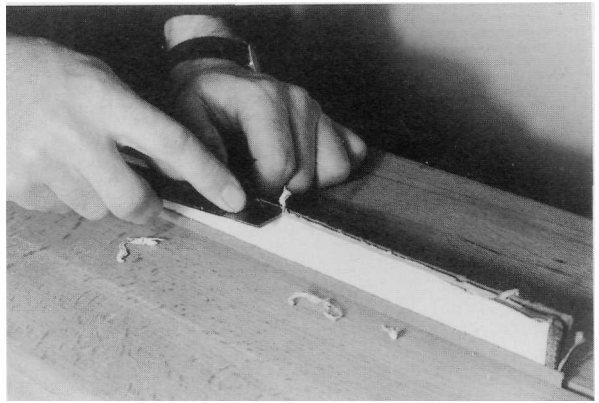
2 Lifting the board leather with a knife. The leather should be lifted a good way in, stopping at a tooled line if possible, as this will disguise the lifting. Where possible, a thin support layer of board should be lifted with the leather. Care should be taken to avoid creasing the leather as this may be impossible to remove when the rebacking is completed.



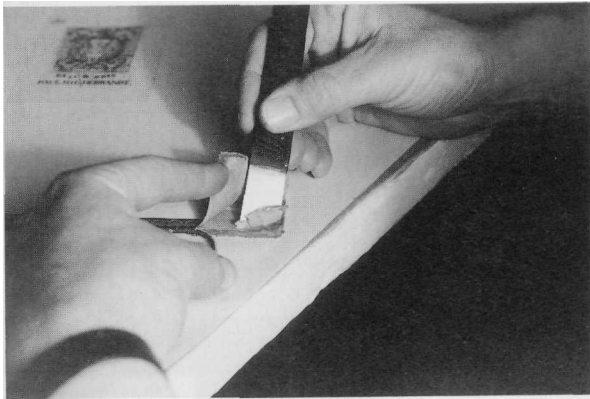
3 Lifting the turn-in leather and paste-down at the head and tail only — *not* all along the joint. The same technique of lifting a thin support layer of board, still attached to the leather and paper, is used.



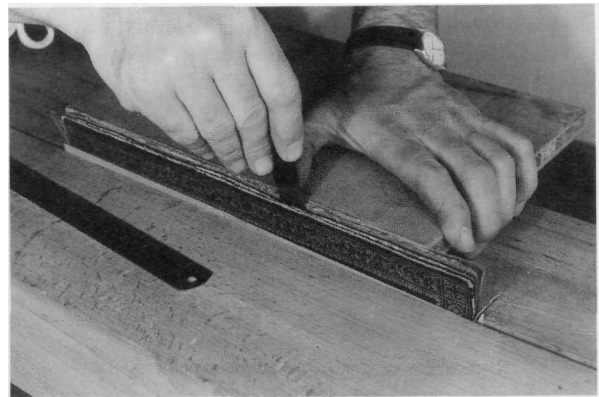
4 Lifting the leather on the board edge.



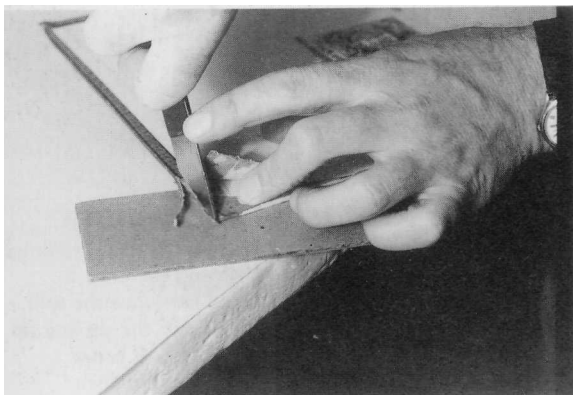
7 Shaving off the paste-down on the board edge.



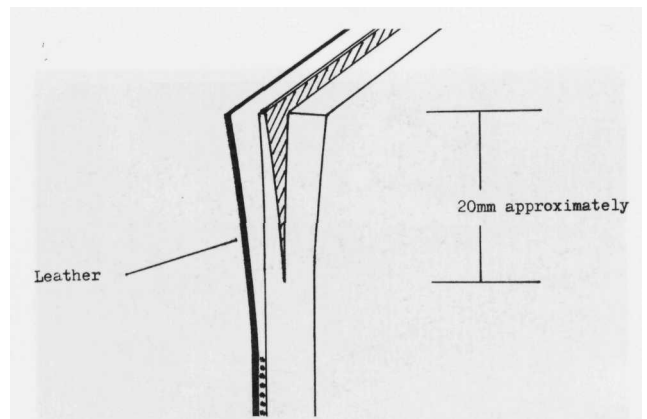
5 Shaving away some of the board to accommodate the thickness of the new leather [30 & 31].



8 The board held in the laying press and being cut open with a knife. Pressing boards are used for support on one side of the board and the initial cut is made along a straight edge held on the pressing boards, just overlapping the board edge. It is important to use a knife with a solid blade as total control of the cut is essential to avoid damaging the board edge.



6 Shaving away the board at the edge to ensure that the new leather fits flush. The shaving is bevelled to match the edge paring on the new rebacking leather [30 & 31].



8a The board should be cut as near as possible to the leather side to a depth of 20 mm approximately. Often the board will split easily along an original lamination.

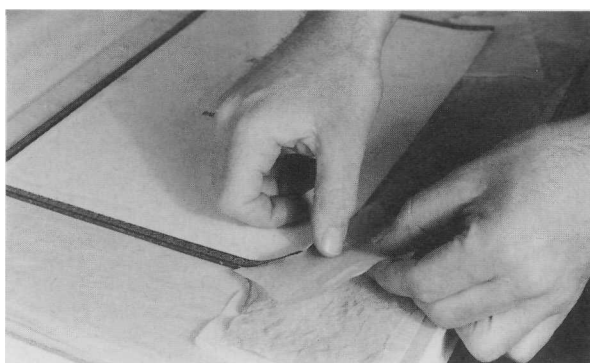


9 Unbleached Irish aeroplane linen is cut on the bias into strips (by cutting on the bias there is a 40 per cent increase in the number of threads running across the joint without adding any extra bulk). Unbleached cotton may be used for light-weight books. (See Phoenix advertisement)

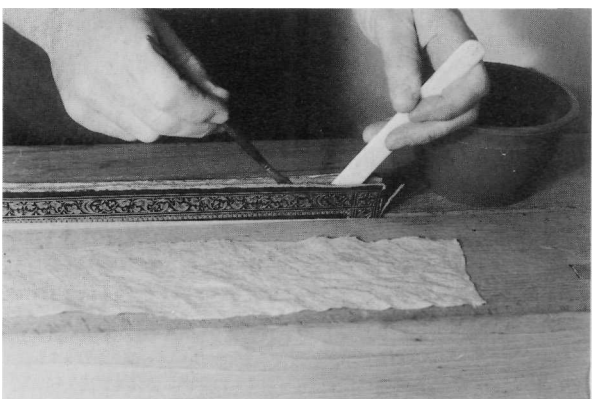
I was recently told by William Minter of Chicago that he found cotton to be more durable than linen in fold tests. He fixed strips of fabric to the local grocery shop door and after some months found the linen had split whilst the cotton was unaffected.



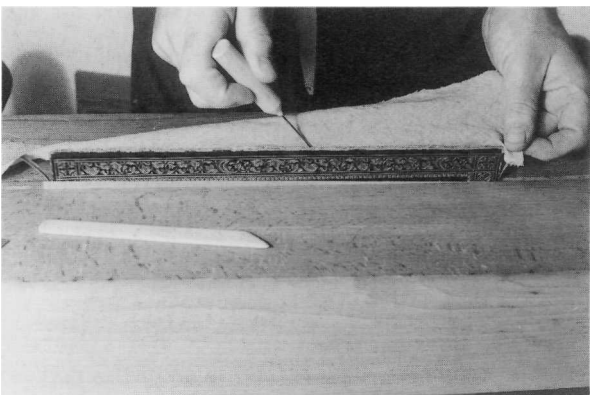
12 Protecting the leather with silicone release paper before pressing.



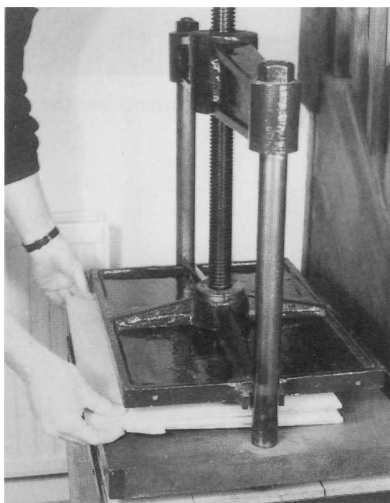
13 Protecting the turn-ins with silicone release paper.



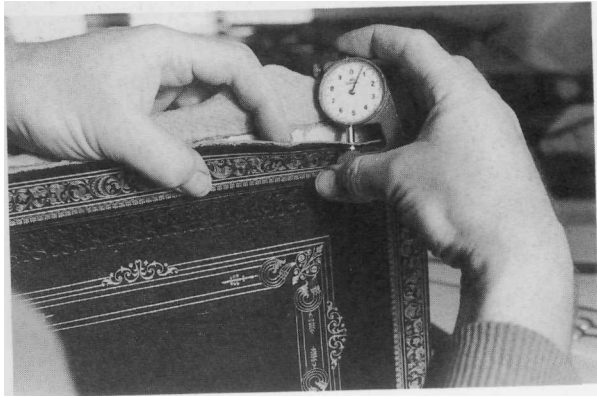
10 Working a liberal amount of PVA into the split.



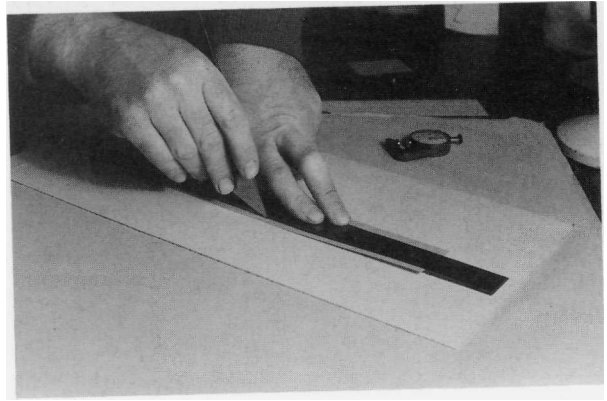
11 Working the linen down into the split.



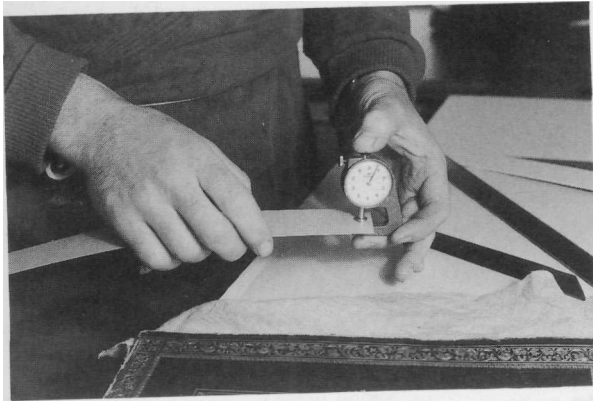
14 The board is pressed very hard. Any excess PVA should be removed after 5 minutes and the board returned to the press for 1/2 hour. A strong grip on the linen is achieved when it is glued and pressed hard into the split. The linen keys into the board each side of the slit and no extra bulk is added to the board thickness. It is not advisable to try to remove board equal to the linen thickness from the slit as this will be difficult to achieve accurately and will result in a poor anchorage of the linen with unevenness possibly showing on the surfaces of the board.



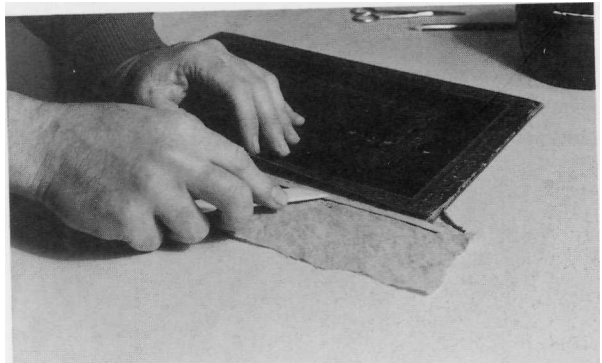
15 Accurately measuring leather thickness.



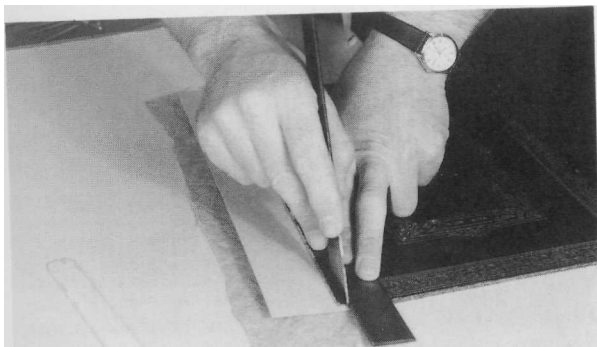
18 Cutting the compensating card to fit between the trimmed leather and the board edge.



16 Choosing a suitable acid free card, precisely the same thickness as the leather.



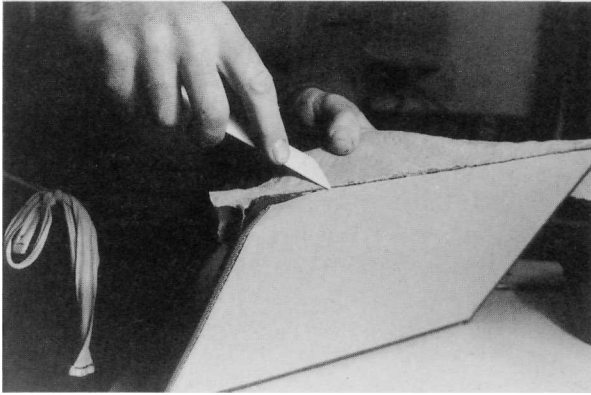
19 Positioning the glued compensating card to just touch the leather.



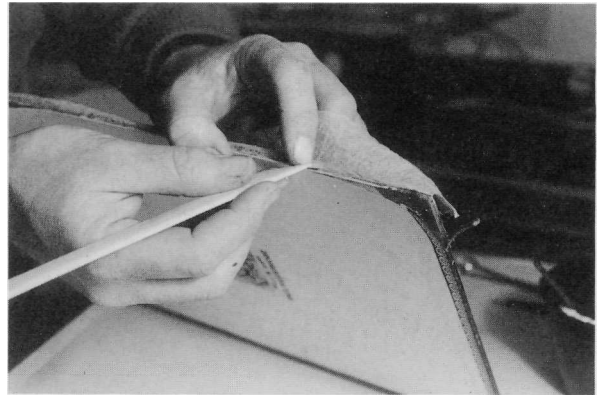
17 Trimming back the leather to the gold line. It is preferable to remove the original leather at the joint as it would most likely be acid and the acidity would migrate into the new leather at this, the most vulnerable point.



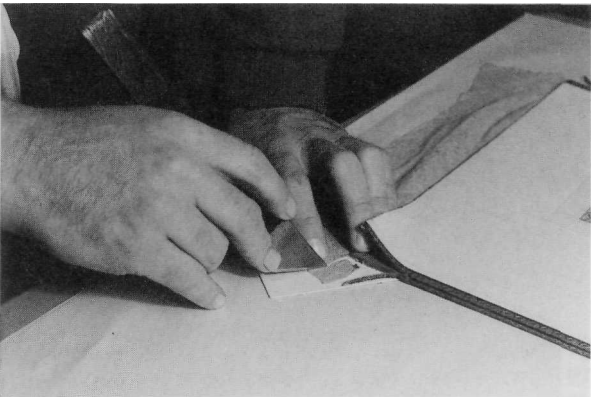
20 Gluing the back edge of the compensating card and board edge.



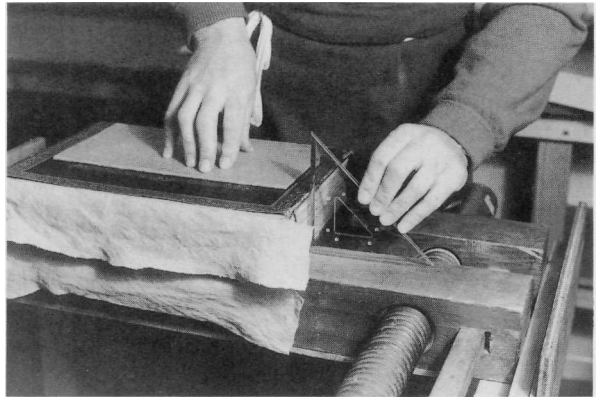
21 Rubbing down the linen on to the edge of the board. This ensures that the board will hinge from the original position.



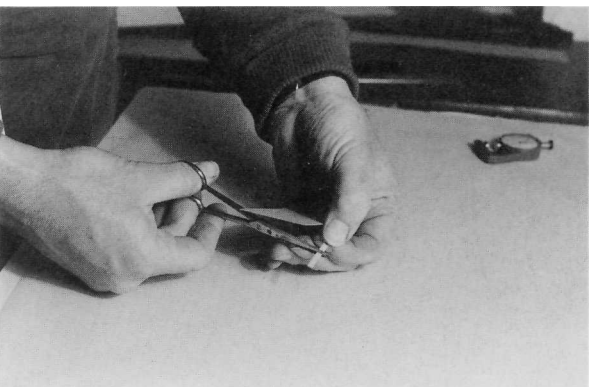
24 Sticking the small card spacers on to the back edge of the board.



22 Cutting off the surplus linen across the top of the board and at right-angles to the board.



25 Making sure the boards are absolutely square before positioning in the laying press.



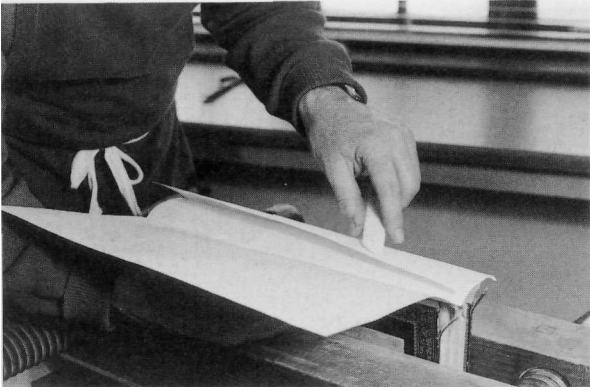
23 Cutting small 0.6 mm card spacers to hold the boards away from the joints, allowing room for the turn-ins.



26 Gluing the spine and sticking the first linen joint across. If required, headbands can be sewn on through the linen after this stage.

N.B. 1 When gluing directly to the text block use a gelatine adhesive.

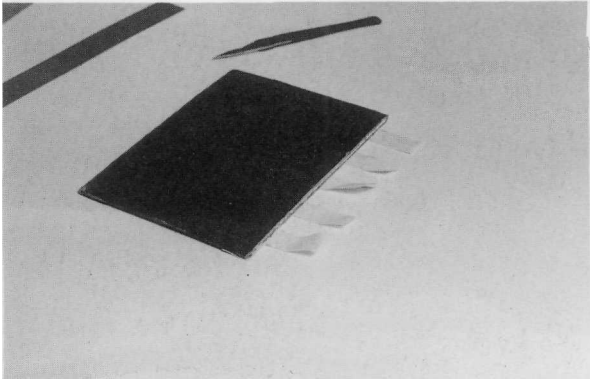
2 It is possible at this stage to sew through the centre of the gatherings and through the linen on the spine to give a mechanical fixing in addition to the adhesive.



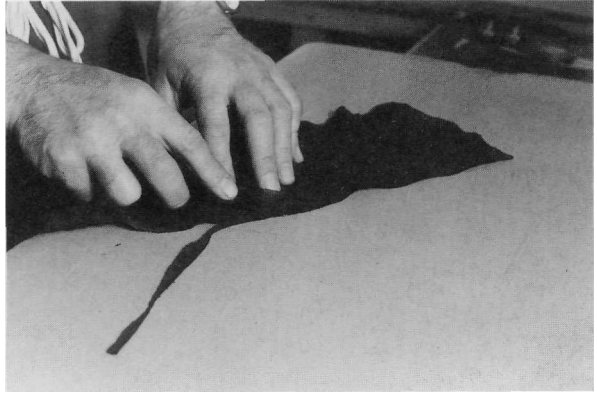
27 Making the hollow on the book for better accuracy and adhesion, using acid-free machine made paper, grain running head to tail.



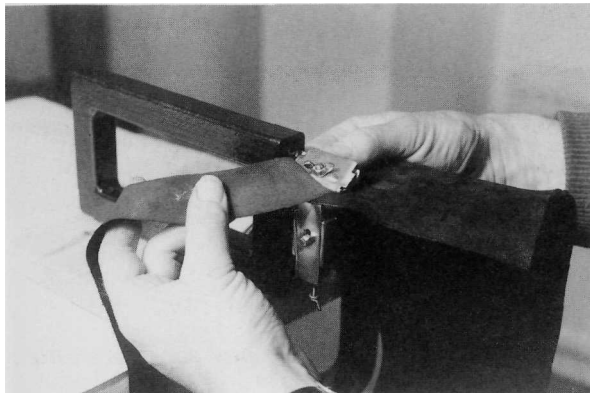
30 Paring the leather at the caps with a spokeshave.



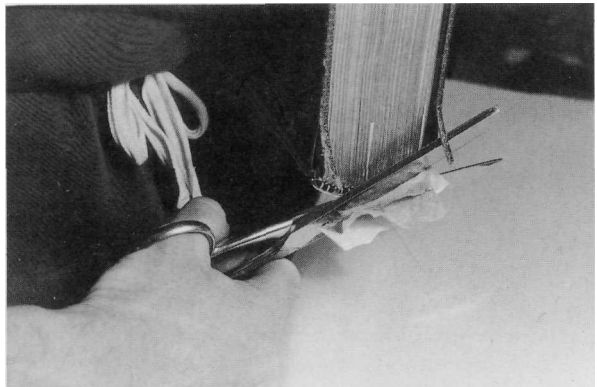
28 An alternative fixing for small books.
N.B. The ail-along joint may produce too much resistance in the board opening on small or light weight books. Therefore, the joint may be cut as shown and the strips glued across the spine. If the cut-outs are alternated on the front and back boards, the spine will be fully lined without building up too much bulk.



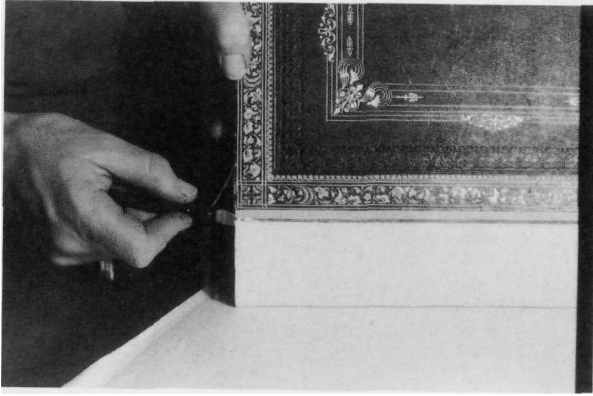
31 Paring the edge of the leather to an even and gradual bevel, with a fine feathered edge. The corners should be rounded to make turning-in easier.



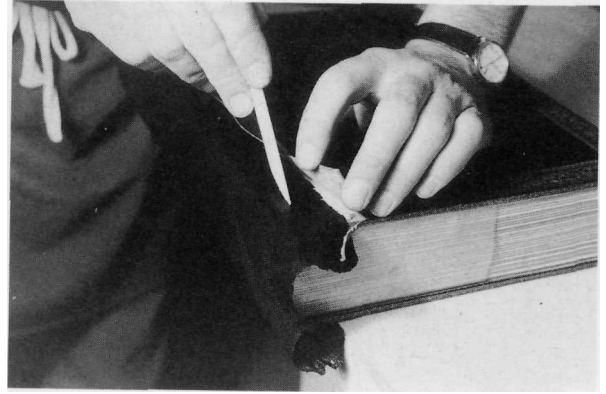
29 Reducing the leather to the required thickness in the Brockman Paring Machine.



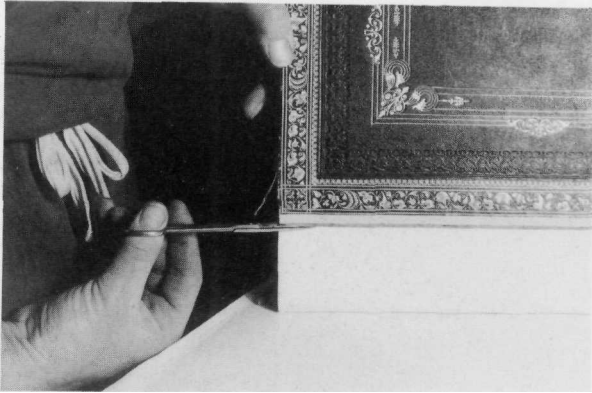
32 Trimming off the surplus linen and hollow.



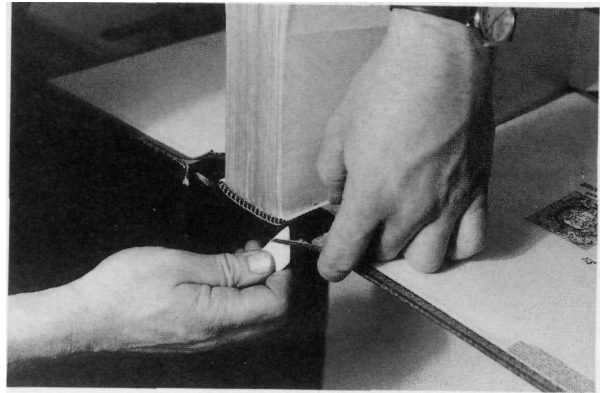
33 Splitting the hollow for the turn-in.



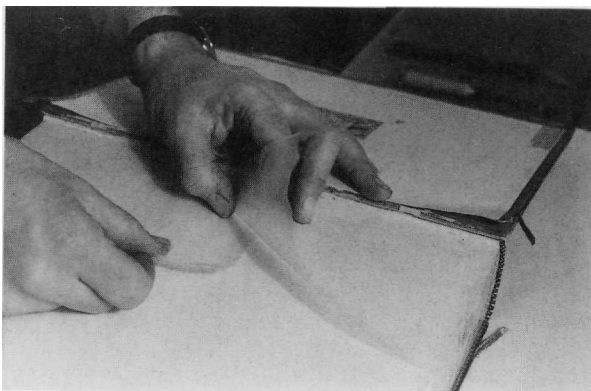
36 The dampened and pasted leather being moulded against the compensating card. The boards and spine as well as the new leather are pasted to make moulding and positioning of the new leather easier.



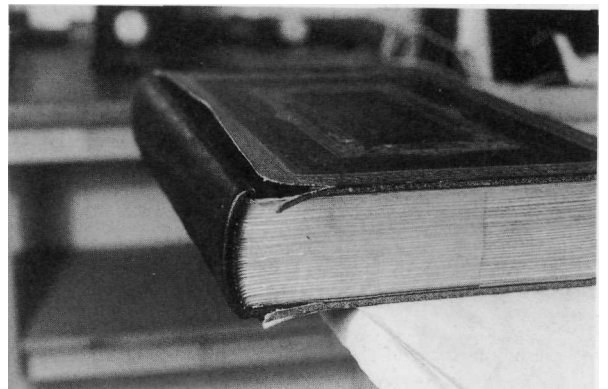
34 Cutting the linen joint to allow for the turn-in. Back cornering should be done at this stage if required.



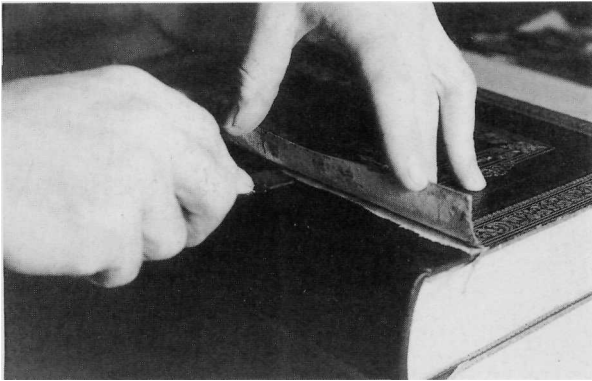
37 Turning in a cap.



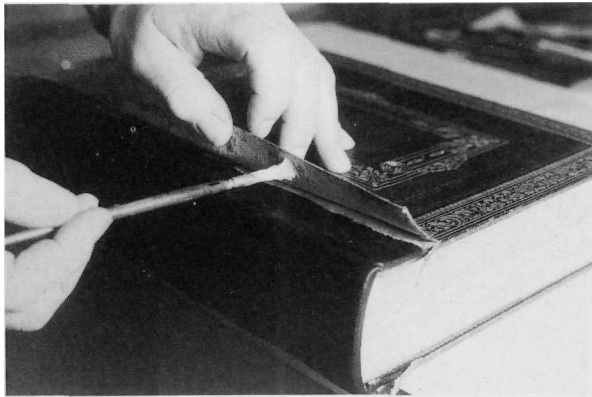
35 Wrapping up the book with polythene.



38 The book is left to dry on the edge of a surface as the old leather may stain if it is against the damp new leather. When the leather is dry the joints are lightly dampened and the boards are carefully opened by easing them down into the joints.



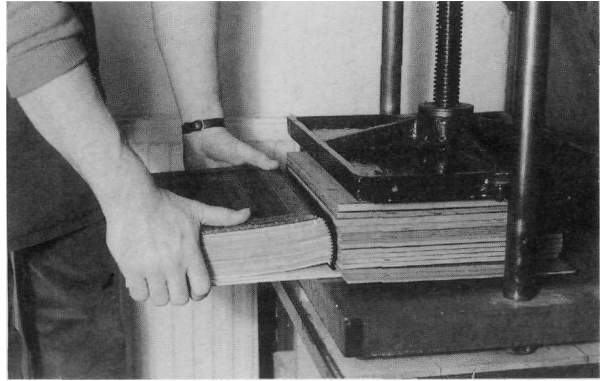
39 Uneven areas on the new leather are pared away and lumps under the older leather are removed.



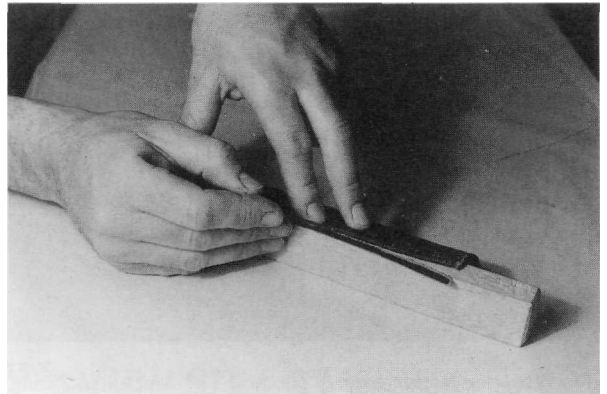
40 Gluing down the original leather with PVA. PVA is used in preference to paste, as paste may stain the leather and, being an adhesive that penetrates, it will usually cause the original leather to compact more than the rest of the leather on the board. This makes the lifted area more noticeable. With regard to reversibility, it is not likely that the original leather could be lifted successfully by dampening, therefore, any subsequent lifting would be done dry with a knife and, with PVA being a surface adhesive, the leather would be looser and easier to lift. It is possible to line the original leather with a thin tissue before putting the leather down. The tissue will split apart upon subsequent rebacking, supporting the original leather and making the operation easier.



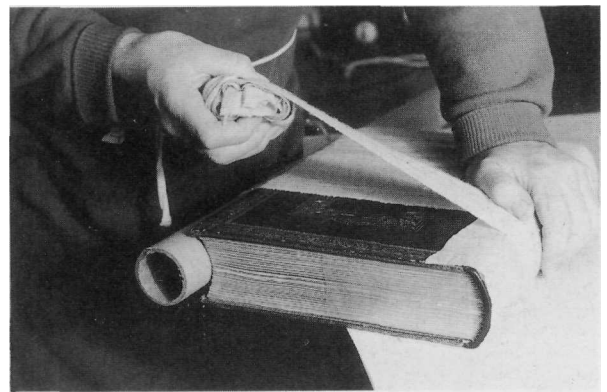
41 Feeding the leather hard up against the compensating strip.



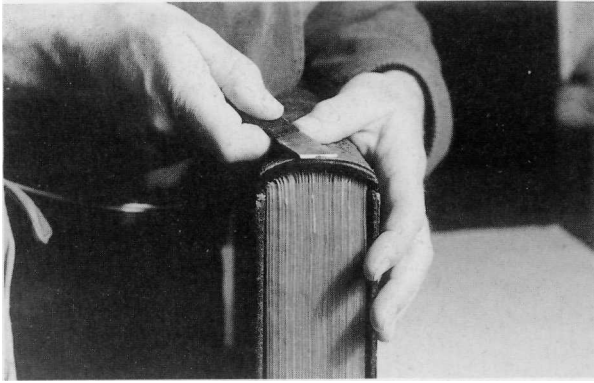
42 Pressing the boards individually. A tin is placed under the board and a metal plate protected by silicone release paper is placed against the leather. Pressing boards are used to build up to the thickness of the spine. The book is pressed lightly at first, checking after a few minutes to see that the leather is not staining. As the PVA dries, pressure is increased until all signs of lifting are removed. The board may be pressed for as long as necessary.



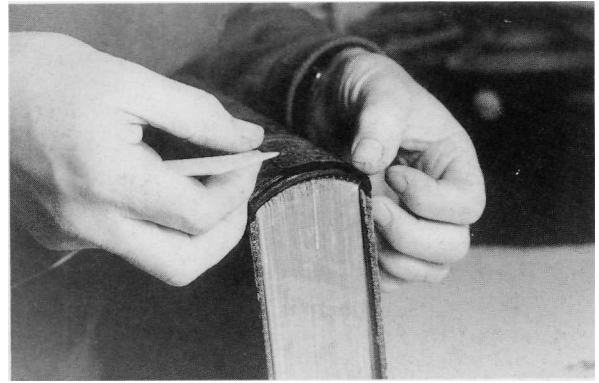
43 Edge paring the original spine with a scapel.



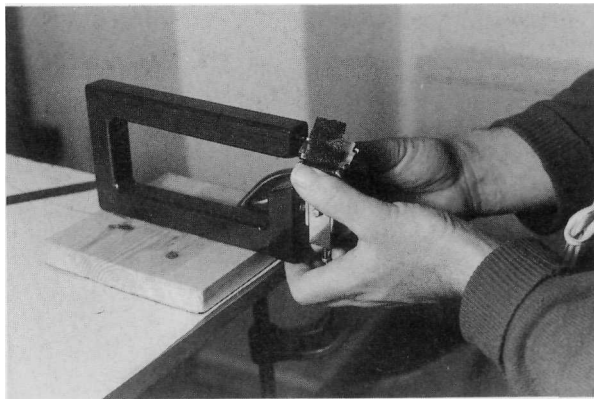
44 The spine is lightly pasted at the edges and glued with PVA down the centre to stop it slipping. It is held in position until dry with an elastic bandage over silicone release paper. A tube is used to support the fore-edge. The leather is checked to make sure it is not stained by the paste.



45 Surplus old leather is pared off at the cap.



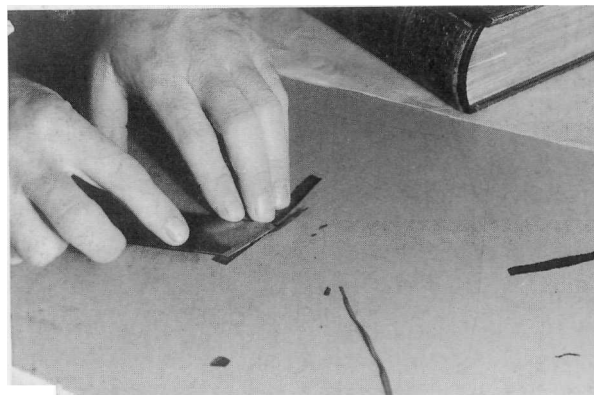
48 Pasting on a cap patch.
N.B. All the edges of the original leather may be patched in this way to produce a virtually invisible rebacking.



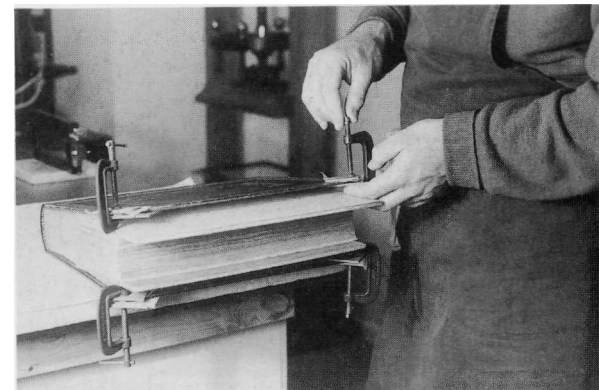
46 Preparing leather for cap patches. The Brockman Paring Machine is used to reverse pare (pare off the grain side) tissue thin patches.



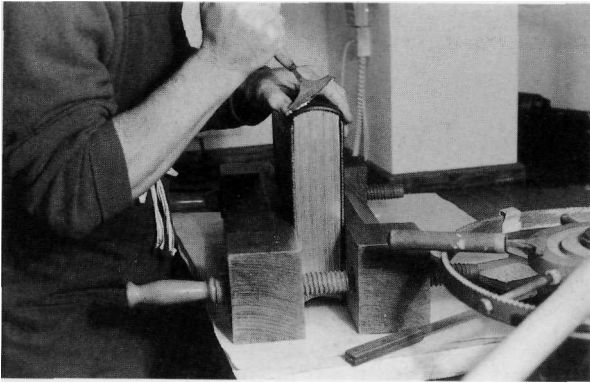
49 Injecting the damaged corners with a thin paste.



47 Edge paring the cap patches with a knife.

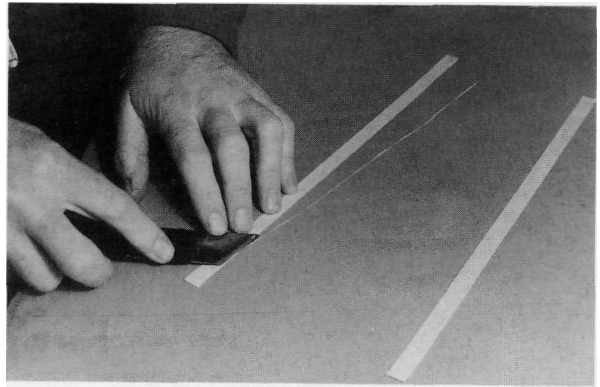


50 The corners being clamped and left to dry.

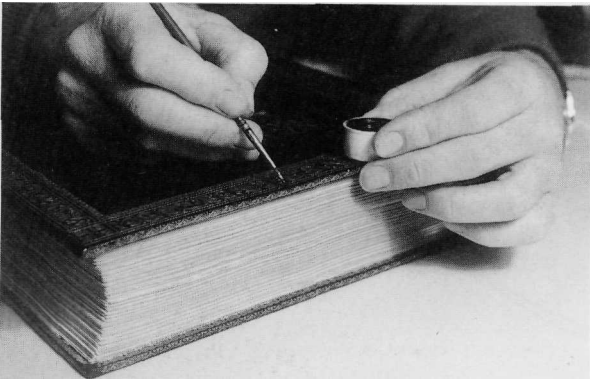


51 Retooling a cap.

N.B. Decorative tooling may be painted in with gold ink or gold acrylic paint. Areas of new tooling may be "aged" by carefully painting with a mixture of spirit based leather dye and paste.

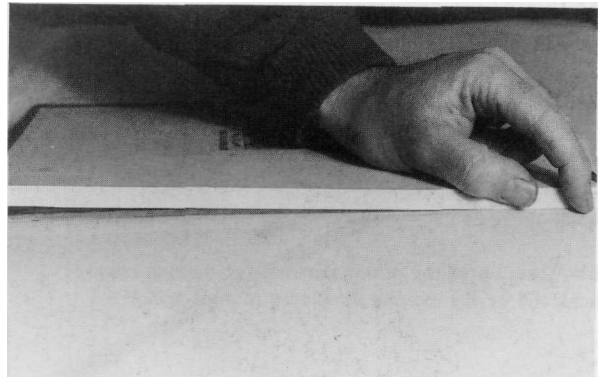


54 Edge pairing the paper inner joints.



52 Retouching scuffed leather.

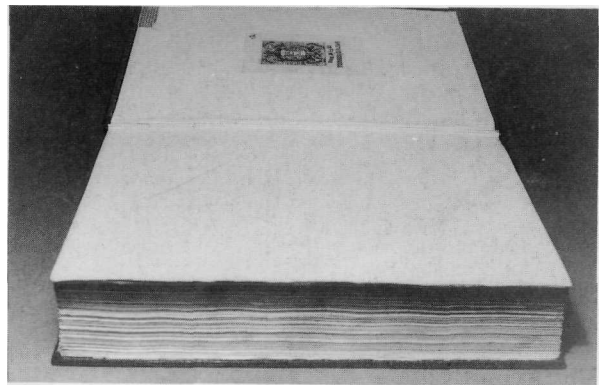
N.B. Spirit-based leather dyes may be used on porous leathers, which may then be parchment sized (check for possible staining). Cellulose paint gives good results on non-porous surfaces.



55 Sticking in a paper inner joint.

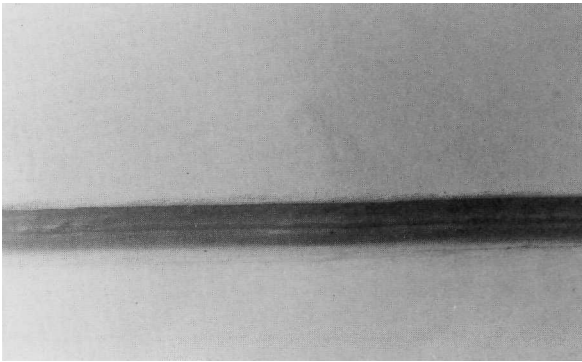


53 Removing the 0.6 mm card spacers.

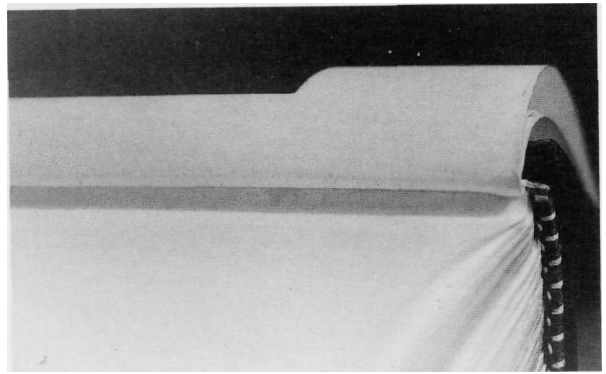


56 Inside of the completed rebacking.

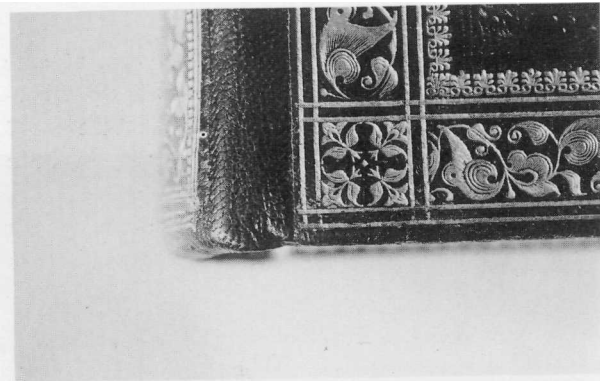
N.B. Pieces of thin matching paper should be used for the inner joints, alternatively, a thin white paper can be painted to match the endpapers after being stuck in.



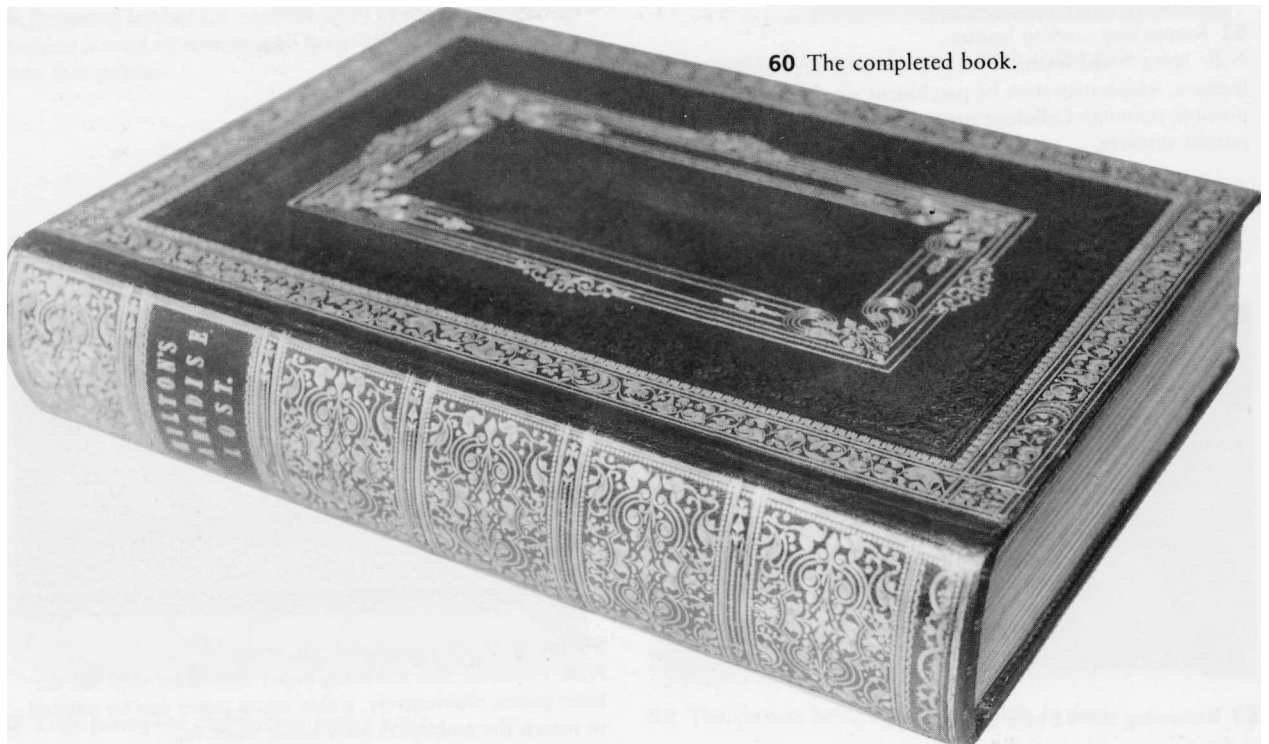
57 Close-up view of the inner joint showing undisturbed original lacing in marks.



59 The first few leaves open, showing that the rebacking has no detrimental effect on the original functioning of the book.



58 Close up of the board showing the parallel edge achieved by the shaving illustrated in photograph 6.



60 The completed book.