

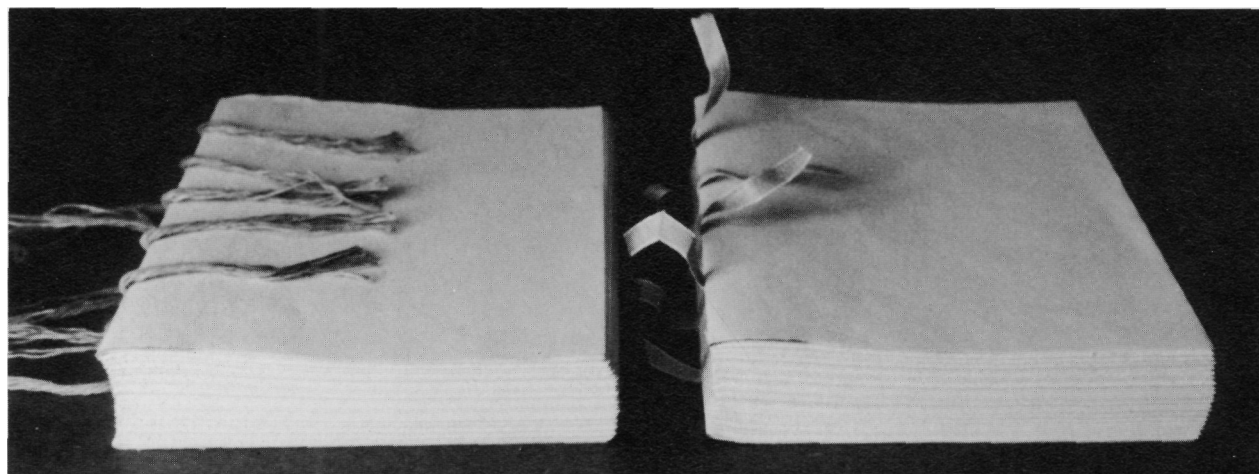
J A M E S B R O C K M A N

R e - t h i n k i n g t h e R i g i d S p i n e

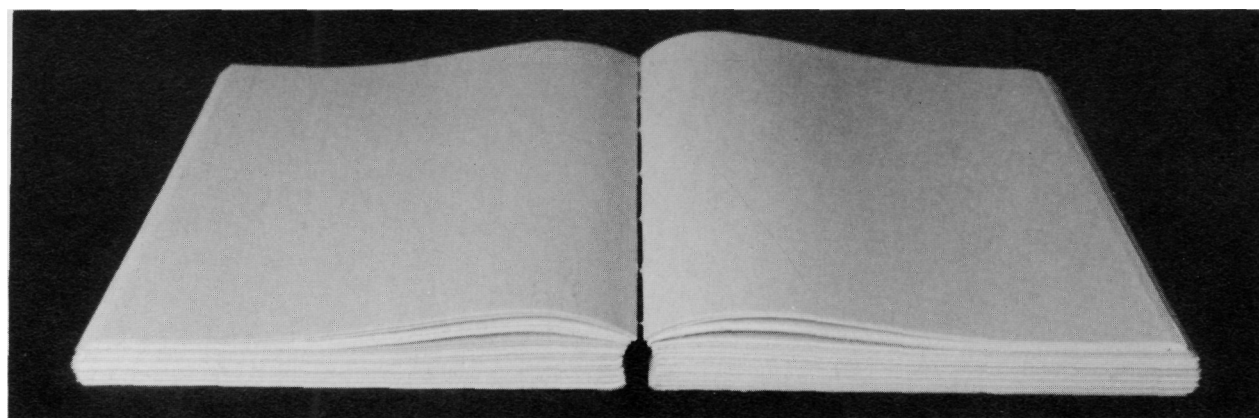
This article is based on the address given by James Brockman on 2nd September 1994 at Designer Bookbinders conference New Horizons at Oxford.

Having observed the function of thousands of bindings, and with my desire to increase the life expectancy of the codex form, I have experimented with various structures over the last three decades. After incorporating metals and plastics into bindings, my

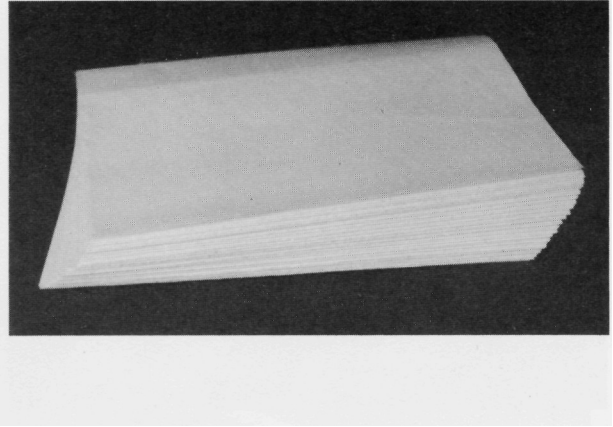
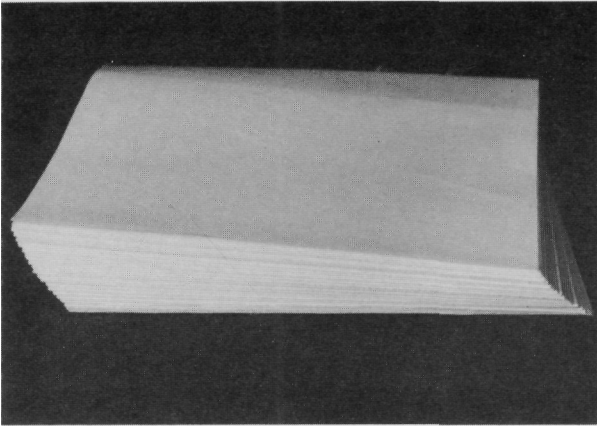
latest experiments have been with normal bookbinding materials. I have attempted to turn around the whole thinking of spine flexibility. Traditionally, the text-block is shaped by the binder to produce a convex spine, but when the book is opened the spine becomes concave. The strains imposed on the structure when this happens are enormous. How much more sensible to fix the spine in a concave, permanently thrown up shape: if the spine is unable to move, it is unable to break.



Newly sewn books, one on cords, the other on tapes. Both spines naturally assume a concave shape. Why have binders ignored this for so long?



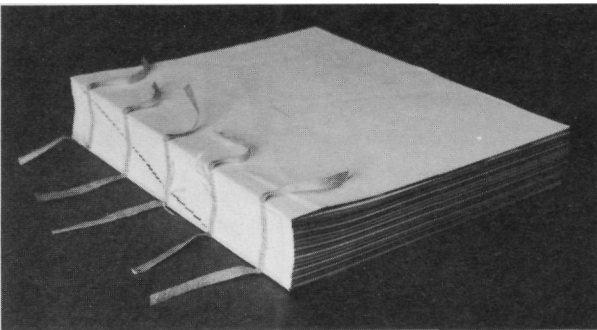
The book sewn but not glued. It opens very well, but there is considerable strain on the sewing. Eventually, with use, the sewing holes will become enlarged and the structure will loosen.



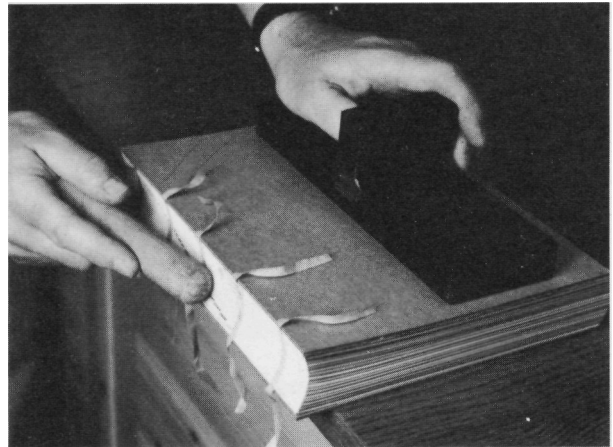
3/4. Another problem associated with the unglued, unlined spine is that the text block torques. This lateral movement produces friction abrading the leaves.

Note There is a question mark over the compatibility of thread and paper. Thread passing in and out of holes in paper will, in time, cut through the paper. I think of it in terms of cutting cheese with a wire. Binders discovered that sewing needed the support of adhesive and spine linings. Therefore, it follows that if the thread cuts through paper when the spine flexes, if the spine does not flex this will not happen.

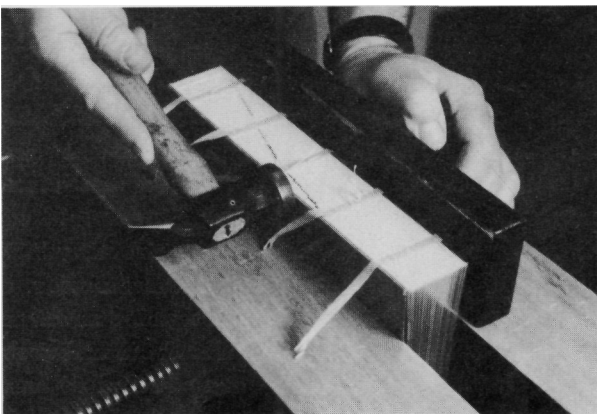
This series of photographs illustrates the main processes in the binding of *The Doves Bindery* by Marianne Tidcombe. This is the first rigid concave spine fine binding using normal binding materials.



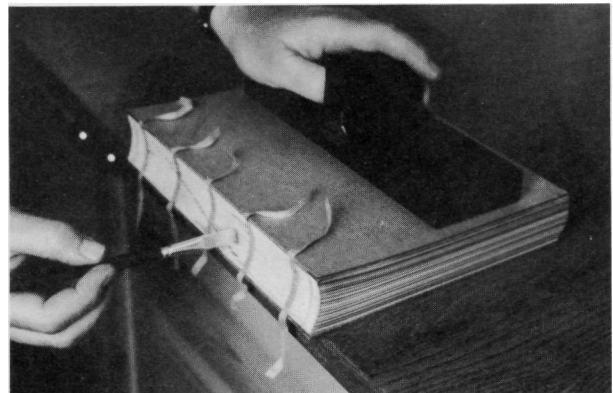
5. Text-block after edge gilding, sewn on five linen tapes.



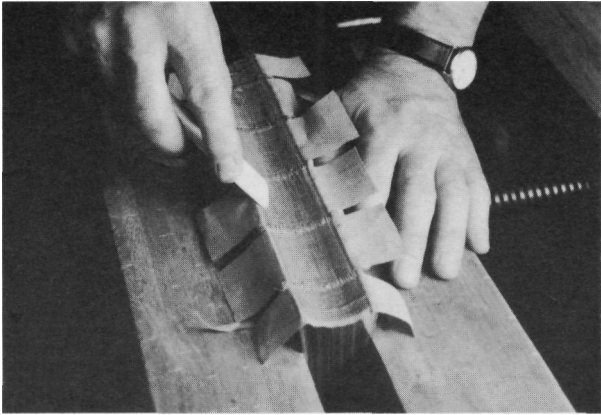
7. Gently tapping-in the concave shape with a wooden dowel.



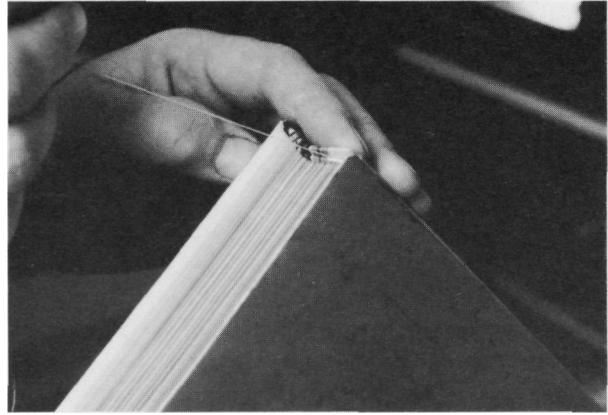
6. Adjusting the swelling in a laying press. It is essential that some swelling is retained.



8. Gluing the spine whilst it is held firmly in shape.



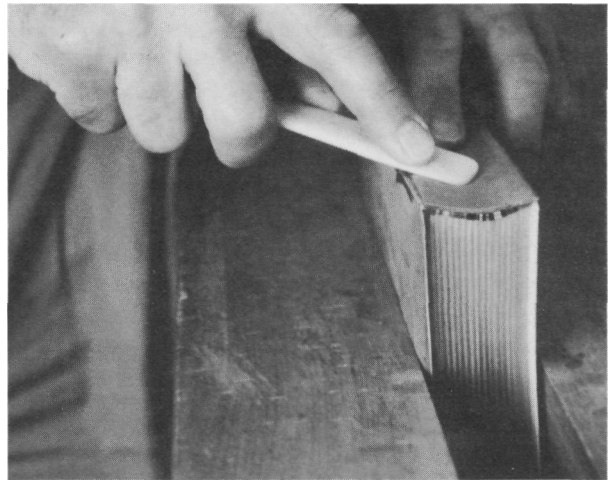
9. Lining between the tapes with unbleached Irish linen.



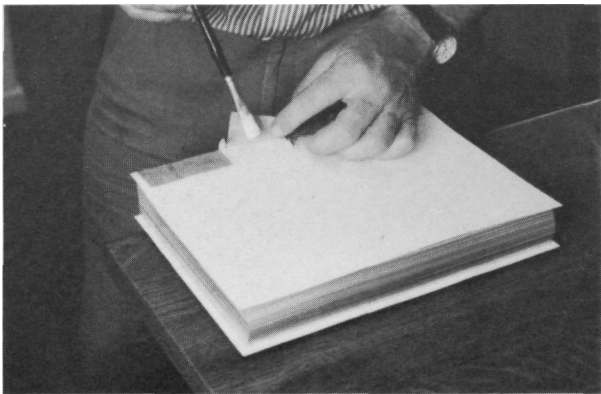
12. The endbands are sewn on to the concave shape.



10. Board construction is the split board type. The top board is cushioned on all four edges.



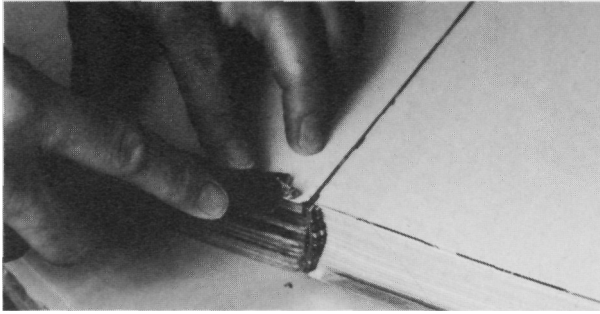
13. The spine is lined with eight layers of strong, acid-free paper. There should be enough layers to ensure that the spine cannot flex.



11. The inner board is positioned into the joint. The tapes and linen spine linings are glued down on to it. The top board is then glued on top but pitched in from the joint by 2 mm allowing room for the covering material to flex at the joint when the board is opened.



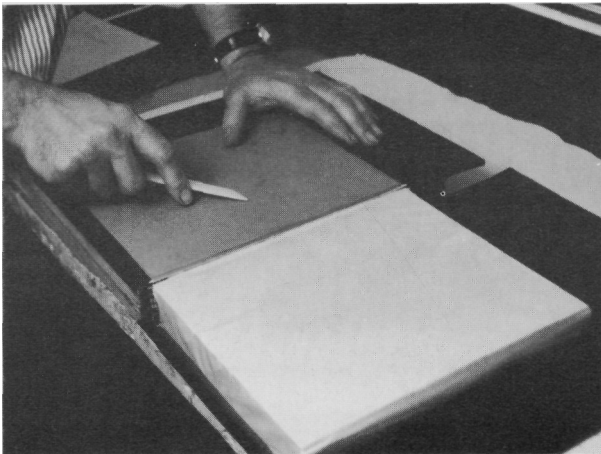
14. As there is no rounding and backing with this method, there is no joint to give support to the text-block. Therefore a yapp support edge (in this case a wooden beading) is attached to the squares on each board. This locates over the text-block when the boards are closed and ensures that the text-block does not sag when the book is standing.



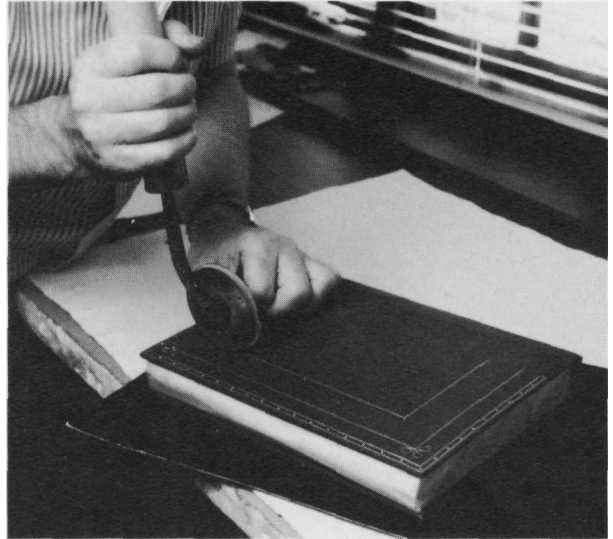
15. The yapp support edge is shaved away short of the joint edge of the board at head and tail, thus allowing easier covering.



16. The spine linings are sanded off at an angle at head and tail to accommodate the thickness of the turn-ins, giving a smooth spine.



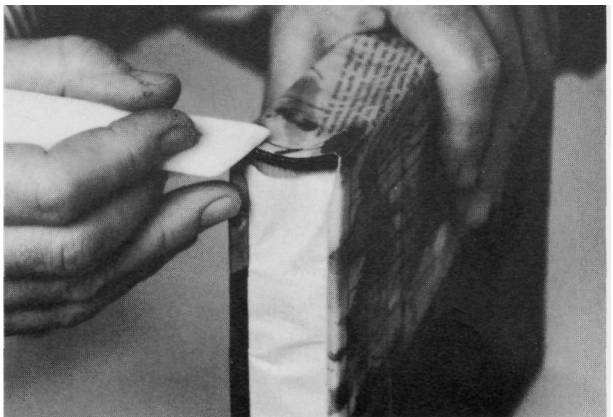
17. The boards are covered individually with red goatskin because the design incorporates a transparent vellum spine cover. The board is pulled with a strong paper to counteract the pull of the leather. The text-block is capped up to protect the gilt edges.



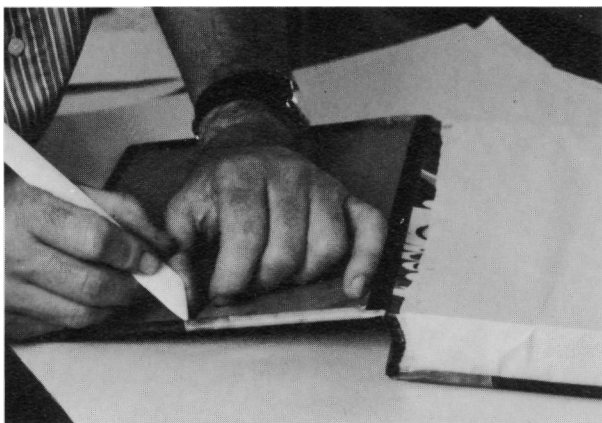
18. The boards are tooled with gold in Cobden-Sanderson style.



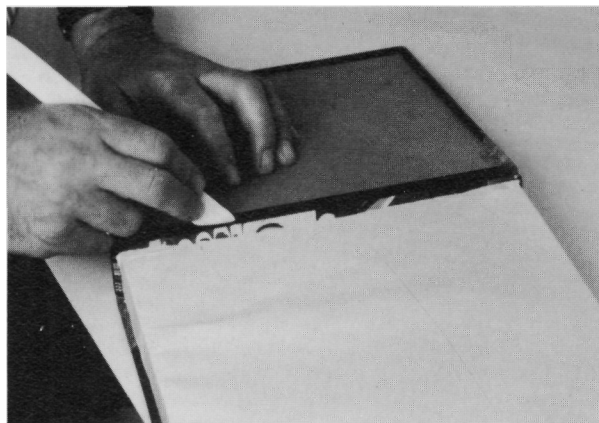
19. The transparent vellum is prepared by printing the statement at the beginning of this article on to stained paper with stylized drawings of concave spines and convex fore-edges. The vellum is then glued around the spine and turned in.



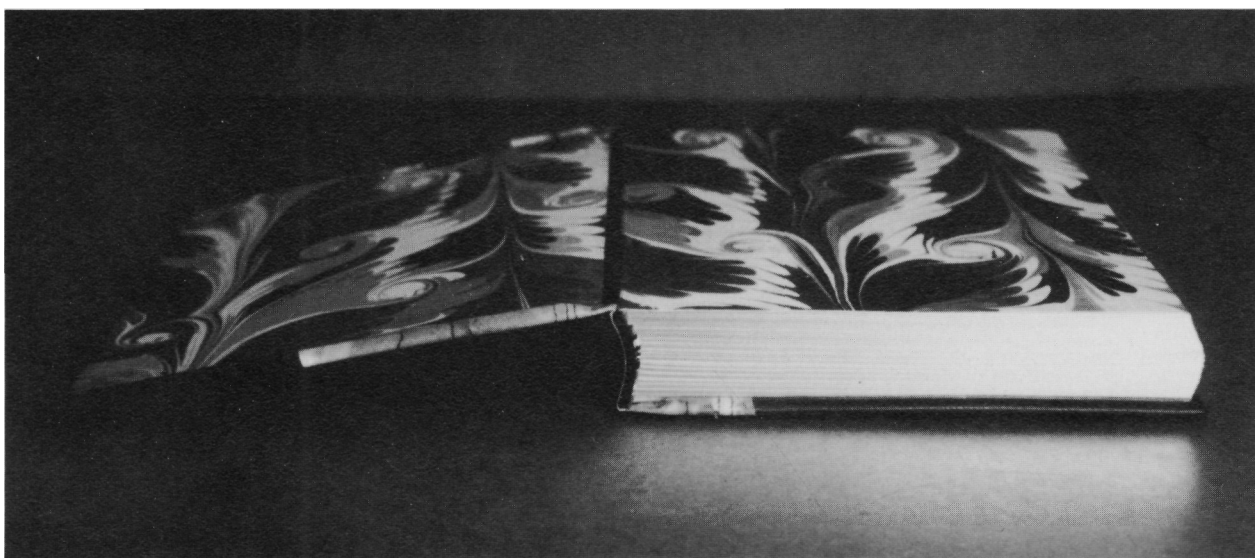
20. The vellum is stuck to the cap which had been previously covered in black goatskin.



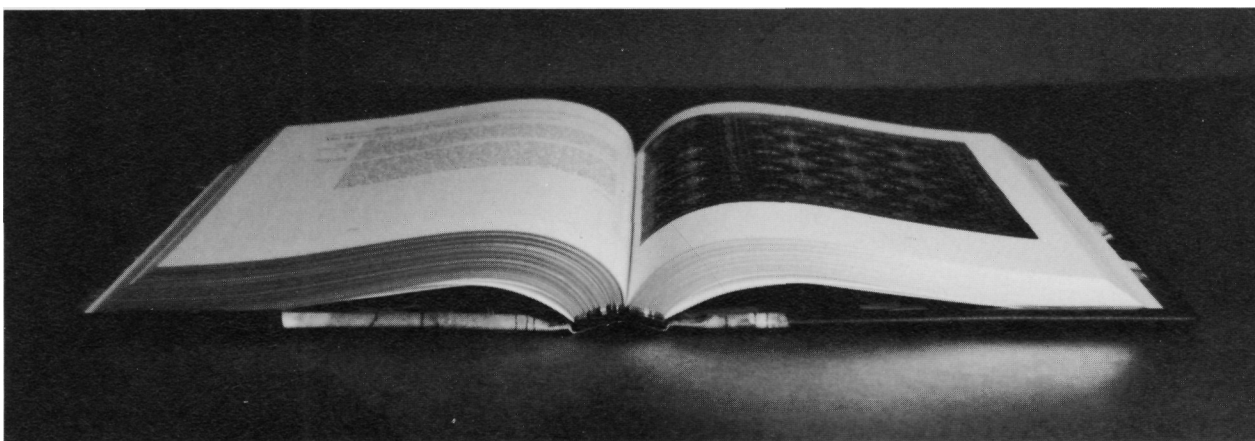
21. The vellum turn-ins are moulded over the support yapp edge.



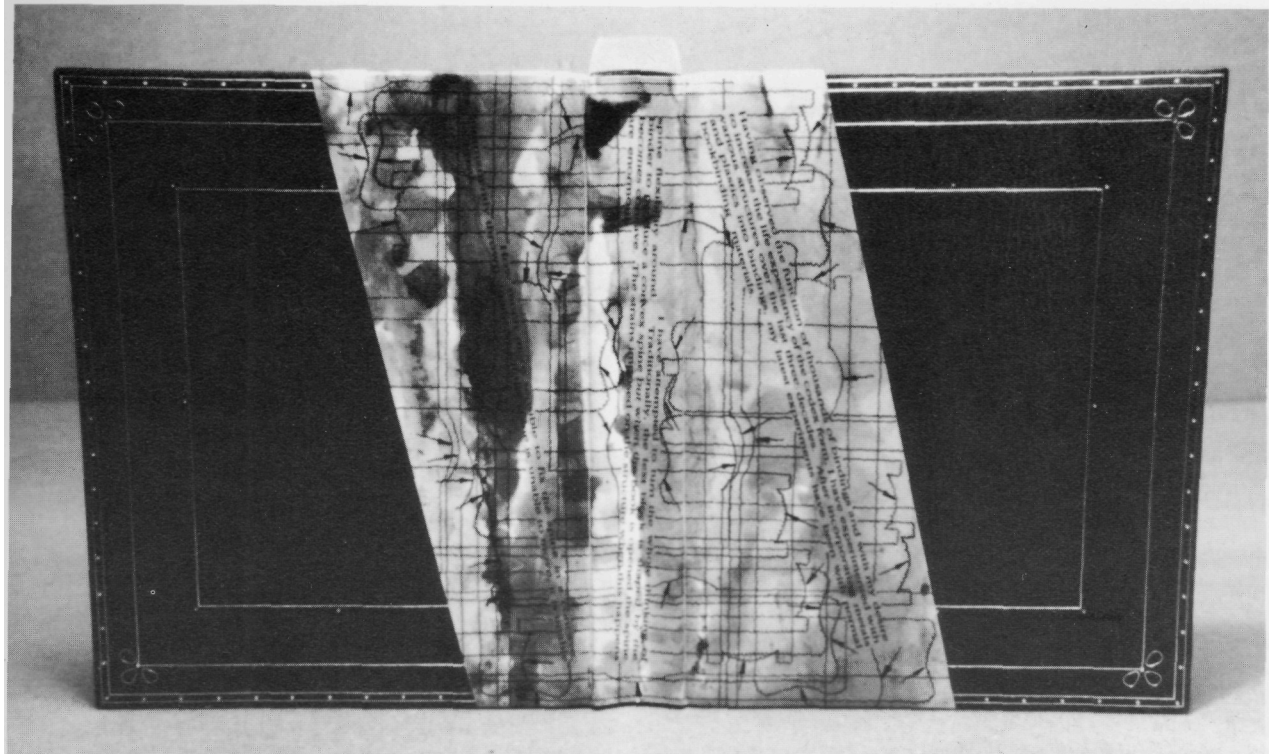
22. Putting down the leather joints.



23. The finished book showing the front board open. The endpapers are from a sheet of marbled paper identical to that used by T.J. Cobden-Sanderson at the Doves Bindery.



24. The book open at the centre showing the fixed concave spine.



25. The completed book.

The Doves Bindery by Marianne Tidcombe. The British Library, London 1991. 28.9 x 22.8 cm. Bound 1994. Collection: The Lord Wardington.

Rigid concave spine binding with gilt edges, double endbands, boards covered in red Morocco with Cobden-Sanderson style gold tooling, stained transparent vellum over-cover and yapp support edges for the text block. Leather joints and Doves Bindery marbled endleaves.

The method used for binding this book was developed after binding six prototypes. Why have binders for centuries forced the book spine into a convex shape

when the spine naturally adopts a concave shape?
Could *it just* be aesthetics?