

Quarter Leather Rounded-Spine Book Box

Materials needed:

.098 Davey Red Label binders' board
.095 Davey Gold Label binders' board (or =)
Blotting paper and kraft paper
Reinforcing cloth
Stonehenge paper
.020 card stock
Bookbinding cloth or buckram
Lining paper or felt
Bookbinding leather
Decorated paper (optional)
PVA; starch paste

Instructions:

- 1. Measure height, width and thickness of the book.
- 2. Transfer the measurements to the box form (see attachment) and calculate dimensions for tray pieces.
- Cut tray pieces from .098 board (base pieces should have grain running along height)
 Ascertain that width walls are the correct dimension by setting against base and height walls. Make corrections if needed.
- 4. Attach walls to base for each tray using PVA; secure with masking tape; weight until dry. (see fig. 1)
- 5. Remove masking tape and sand any irregularities until all walls are smooth.
- 6. Cut cover pieces from .095 or = (if high density binders board is not available, line Red Label board on both sides with kraft paper, wrapping inside edges). Front and back boards should be large tray height plus 1/4" by large tray width plus 1/8". Spine piece should be large tray height (only) by large tray thickness plus one (cover) board thickness.
- 7. Cut reinforcing cloth to height of spine piece by width plus 2". Center and adhere to spine piece with PVA.
- 8. Cut strips from blotting paper. First strip should be exact size of spine piece; successive strips should be narrower by 1/8" at first, then by 1/4", and the final two or three by

- $\frac{1}{2}$ ". As the strips are cut, stack them together occasionally to assure that they form the desired rounded shape for the spine. (see fig. 3)
- 9. Adhere each strip to the spine piece with PVA, beginning with the widest, to form the rounded shape. Rub down each successive strip with a bone folder. It is also a good idea to nip the lamination in a press a couple of times while you are building the rounded shape. Weight the finished form and allow to dry overnight.
- 10. Now is a good time to cover the trays, although this can happen at any time before they are attached to the cover. The pattern for cuts and turn-ins (turn-in sequence numbered) is shown in figure 2.
- 11. After the rounded form is dry, attach it securely with tape to a brick or shape similar to the spine piece. Sand it smooth, or nearly smooth, including the ends, with an orbital sander or a sanding block. Cut off the reinforcing cloth which extends past the form.
- 12. Cut a piece of kraft paper which is longer than the spine piece and at least four times wider. Dampen the paper, glue it up with PVA, then wrap the rounded form beginning with the flat surface, continuing over the rounded surface and recovering the flat surface. Cut off the excess paper which extends past the form. Allow to dry under a weight. (see fig. 4a)
- 13. After the paper is dry, sand off the excess at the two ends. Dampen and glue up two small pieces of kraft paper, sufficient to cover the ends. When they're dry, sand off the excess.
- 14. Make sure the form ends are quite smooth; if necessary, sand them. Skive (Scharfix) pieces of leather to cover the ends. They should be quite thin and should be about 1 ½" by spine piece width plus 1". (see fig. 5)
- 15. Dampen the hair side of one piece and paste the flesh side. Attach to one form end. Trim with scissors to rounded shape and make 'ears' for turning around the board edge. Turn the extended leather around the flat surface and trim the leather extending beyond the spine width down to a ¼" extension on either side. (see fig. 6)
- 16. Remove the wet leather from the form end and edge pare the 1/4" extensions and the 'ears'. Re-paste and reattach to form end. Fold back the ears around the board edges and then fold up the extensions to cover the board edges. (see figs. 6 9) Repeat on the other end of the spine form.
- 17. After the leather is dry, cut a piece of stonehenge paper the length of the spine form and at least four times the width of the spine piece. Wrap it tightly around the the spine form, beginning on the flat surface, continuing over the rounded surface recovering the flat surface. Bone down along the edges. Remove from form.

- 18. Attach a strip of double sided tape to the area that recovers the flat surface. Remove the backing paper from the double sided tape and wrap the stonehenge tightly around the form again, attaching the tape. Cut off the extension with a scalpel. (see fig. 4a)
- 19. Cut two pieces of .020 card stock the exact size of the spine piece. Attach with double sided tape to the flat surface of the spine form. (see fig. 4b)
- 20. Place the front and back boards centered in position against the large tray with the board edges even with the height tray wall. Place in a lying press with the height tray wall facing up. Secure the spine form by placing centered in position against the tray wall and even with the cover boards. Then attach it temporarily with pieces of masking tape; attaching at ends from the inside flat surface of the stonehenge to the width walls of the tray. (see fig. 10)
- 21. If false bands are desired, mark positions with dividers and attach them with PVA. After they are dry, trim them off at the edges of spine form.
- 22. Cut the leather to allow 1" turn-ins around cover boards. Pare as for quarter leather binding; allow head and tail turn-ins to be thick enough to comfortably go around cord end-cores.
- 23. Dampen and paste up leather as for quarter leather binding. Draw over spine form and evenly onto cover boards. Nip bands as needed. Leave in press to dry overnight without doing turn-ins.
- 24. Now remove it from the press. Remove and open the cover. With a scalpel, carefully cut away the flat surface card and stonehenge laminate at edges adjoining leather. Remove the loose spine form.
- Cut pieces of cord to form end-cores. Paste up turn-ins and turn in around end-cores. Before they set, replace loose spine form and assure that the end-cores sit neatly against the ends of the spine form. Allow to dry.
- 26. If desired, the spine may be stamped at this point in a stamping press by holding the cover flat while stamping.
- 27. Trim the leather and attach cloth or decorated paper sides.
- 28. Line the inside of the cover boards with endsheet stock and allow them to dry while weighted flat.
- 29. Glue up the rounded surface of the spine form with PVA and put in position on the inside of the spine cover. Fit the cover snugly around the large tray with height wall

- against the spine form. Hold in position with a weight and rub down the spine from the outside, to assure adhesion. Allow to dry.
- 30. Tooling may be done now. If it is done after the box is finished, it will be necessary to fill the box completely with board in order to furnish a solid surface on which to tool the sides.
- 31. To attach the trays, place the cover on the bench with boards to support the front and back covers without the rounded spine touching the bench surface. Apply PVA to the large tray base and set onto the front cover. Hold in position with a weight and immediately draw the back cover up in order to check the fit. The spine form ends must set perfectly against the width walls of the large tray. (see fig. 11) Adjust the position of the large tray if necessary, then weight it down securely to dry. Adhere, position, attach and weight the small tray.
- 32. After the trays have dried overnight, they may be lined. The spine lining is the same as the cloth which covers the trays. Cut the spine piece to fit within the small tray and to extend across the spine form onto each tray by 1". Apply PVA (or 'slow-dry' mixture) and bone it down, pushing the cloth down slightly into the joints. Allow to dry no more than 15 or 20 minutes before closing the box and boning smooth the outside joints to avoid ridges. Allow the spine lining to dry, with the box closed under a weight for at least one hour.
- 33. If paper tray linings are desired, it is advisable to trim out the turn-ins inside the trays and fill in with a paper or card that matches the thickness of the tray cloth. Cut the paper linings to fit within the trays and attach with PVA or 'slow dry'. Allow to dry open with light weights in the trays.
- 34. Felt linings are often appropriate for this box. As indicated on the box form, the thickness dimension should include an additional 1/16" to accommodate the thick -ness of the felt lining. Polyester felt can be lined with cover weight paper of a roughly equivalent color ahead of time (I use black paper for both black and dark brown felt). After it is dry, it cuts cleanly in a board shear. Measure for a lining to cover the inside of the small tray. Cut BOTH linings this size. When attached, the extra space around the lining in the large tray will permit the small tray to close completely. I like also to cut a piece for the spine. This lining is the same height as the other two linings by the thickness dimension of the book.
- 35. Any tooling of the leather spine may be completed now, as well as labels, etc. If the paper sides require it, mask the leather spine and protect them with a fixitive.

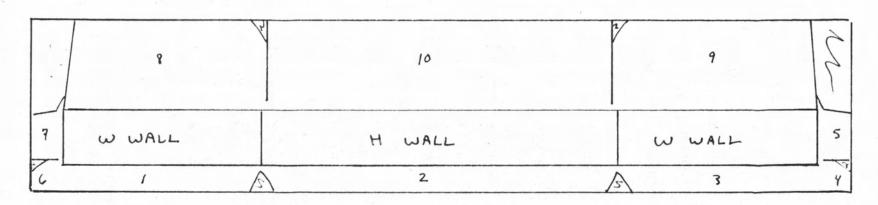
Basic instructions for this box style were from the late Bill Anthony, passed down to me through Mark Esser who apprenticed with him. I have not seen it in any manuals, although it may exist. Scott Kellar 10-99

This form is for a conventional drop-spine book box. Use only the tray calculations for the Quarter Leather Rounded Spine Book Box.

DROP-SPINE BOOK BOX 10/99 S. Kellar Book height (H) ___ Book width (W) ___ Book thickness* (T) ___ Small Tray (.098 bd used for all parts) Base = $(H + 6/16) \times (W + 3/16)$ ___ x ___ H wall $= (H + 6/16) \times (T + 1/16)$ x ____ W walls = $(W + 1/16) \times (T + 1/16)$ (x2)___ x ___ Large Tray Base = $(H + 11/16) \times (W + 6/16)$ ___ x ___ H wall = $(H + 11/16) \times (T + 4/16)$ ___ x ___ W walls = $(W + 5/16) \times (T + 4/16)$ ____ x ____ (x2)Height = large tray + 4/16Case Boards: Width = large tray + 2/16Spine: Height = large tray + 4/16Width = large tray thickness + one board

Note: If double wall box is required, add 2/16 to H dimension and 1/16 to W dimension for small tray only. Attach .074 board walls with PVA to fit inside of small tray walls after tray is formed.

^{*} Add 1/16 to this dimensions if felt linings will be used.



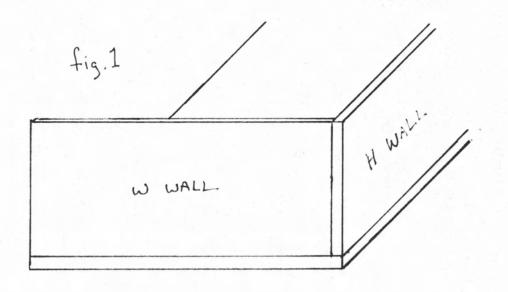


fig. 3

