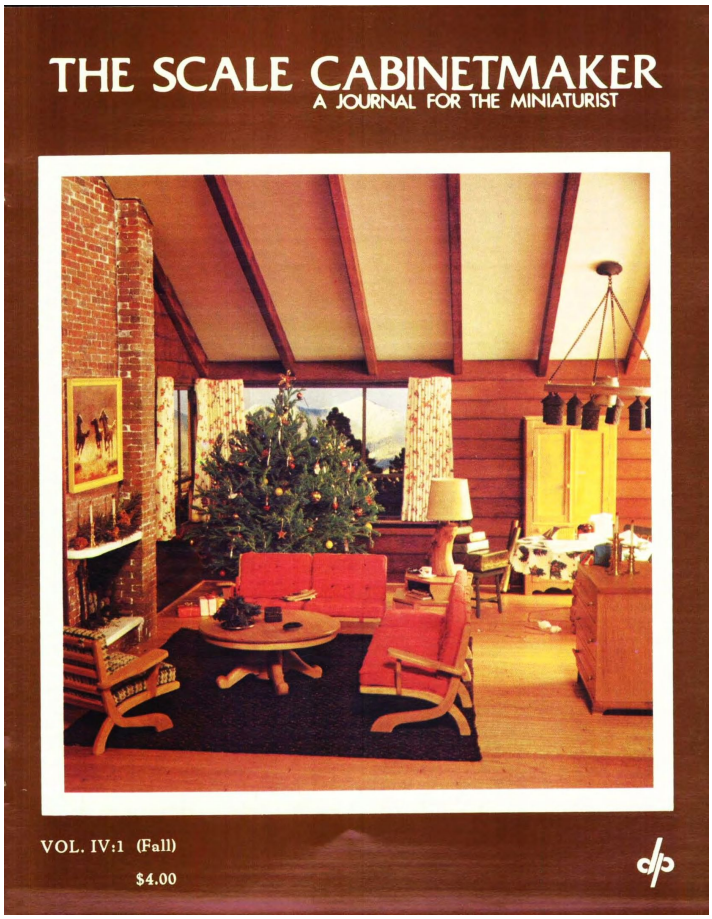


"Christmas on the G.I Bill: The Modern Ranch Oak Chair, c. 1950"

A Free Sample Article From the Pages of *The Scale Cabinetmaker* (Volume 4:1)

While Helen Dorsett was the primary "modeling" force for *The Scale Cabinetmaker,* Jim Dorsett was the writer. Jim, by training was a social historian and sociologist, which explains why many of the project articles start with a short essay on the social and historical context of the particular piece of furniture. Some of the introductions were fairly short, others, like "Christmas on the G.I. Bill" were a bit longer and were often built around Helen's roombox on the front cover of each issue."

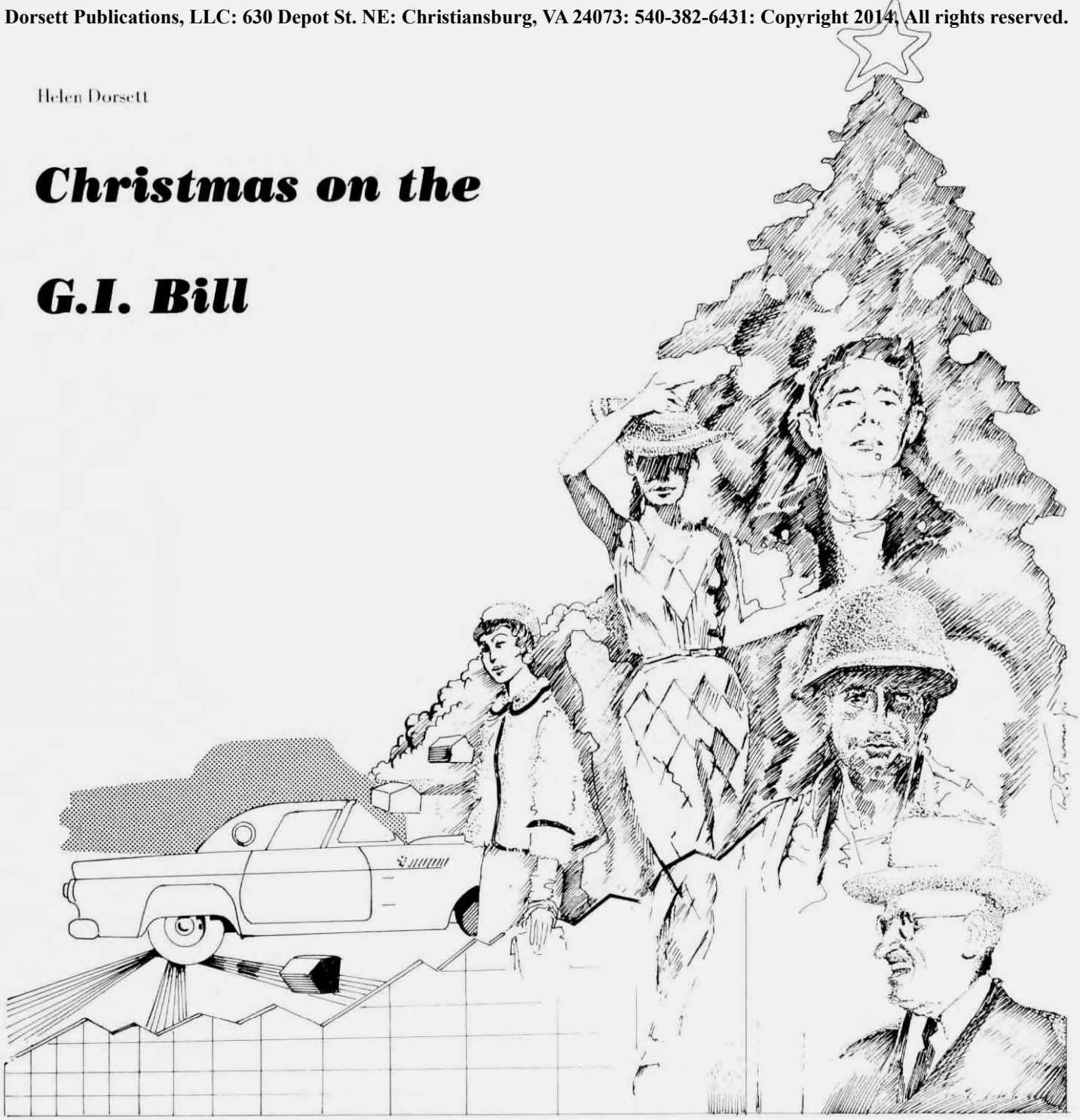
The modern ranch oak chair project was intended for beginner/intermediate modelers, modelers who were familiar with basic joinery and were ready to move beyond butt joints to slightly more difficult projects with more advance joints and other skills. The directions for the chair also included directions on modifying the chair to create a two-seat ranch-style settee and a three section ranch-style sofa. They assumed that if a modeler could master the single unit (the chair), then it was only one step further to create other types of furniture from the same basic instructions. The new skills were the important thing in each article because they could then be used on other projects not included in the pages of *TSC.*

Each issue of *The Scale Cabinetmaker (TSC)* includes a minimum of ten projects or articles covering a wide range of subjects. In *TSC 4:1,* for example, you could learn to make ball and claw feet from wooden beads (Theodore W. Donaldson), and learn how to do helical fluting with the copy attachment (Jim Jedlicka); find out what to look for house plans for scratch builders (TSC Product Review); finish up Pete Westcott's Late Georgian Roombox, including building an outer case for a roombox and installing wiring; and building a econear, c.1759 (Joan Elliot), a leather-bound dome trunk on stand, c.1672 (Edward Gehrke); a John Hall "Late Empire" consol and side chair, c. 1840 (Helen Dorsett), and an oak coffee table, c. 1950 (to go with the modern ranch chair).

The Scale Cabinetmaker is available in two formats: by the issue as pdf downloads (available from www.dpllconline.com) and by the volume (4 issues) as cd-roms (also in pdf format, available from www.dorsettpublications.com).

Helen Dorsett

Christmas on the G.I. Bill



Christmas, 1950, the Christmas of our cover room, was not a time of peace, but it was a period of renewed plenty. World War II veterans, aided by the benefits of the G.I. Bill of Rights, had renewed their educations, begun their families, and settled into lives and careers interupted by the war. Post-war cars of pre-war design, delivered with missing parts and wooden plank bumpers, had been replaced by new post-war designs. Catalogs, which for years had carried the notation "Not Available" across the pictures of merchandise, overflowed with new and available items for the Christmas shopper. Nearly eight million veterans had taken advantage of the educational loans under the G.I. Bill to reestablish the direction of their lives. And across the breadth of the countryside, the fringes of American communities were being embroidered with a pattern of new, one-story, two-bedroom ranch style houses, financed by government guaranteed loans. It was indeed Christmas on the G.I. Bill.

The cover room, patterned after an artist's watercolor in the January 1951 issue of The American Home (Vol. XLV, No. 2, p. 43) is typical of the sights and surroundings of that Christmas. A large tree, surrounded by gifts and the preparations being made for the holidays (including wrapping scraps on the floor) stands before large picture windows. Picture windows were the invariable characteristic of the "ranch house". Presumably they looked out over the open vistas of the western countryside, but more often they framed only the view of the neighbor's picture window

FIG. 1 – A 1950 Christmas in a Ranch Style Setting

across the street. An open-faced brick fireplace with a fire laid on its raised hearth added warmth to a family celebration in which "togetherness" was the current catch-word. A generous use of natural wood paneling and beams enclosed the scene.

The furnishings were a combination of new and old. But after years of deprivation through depression and war even the old was made to appear new. Grandmother's round oak dining table had been cut down for a coffee table, but it was stripped of the last vestige of the patina of age, sanded clean, and probably with a limed oak (champaign, wheat, etc.) filler and stain was revarnished to a high gloss. Hand in glove with the presumed western vista beyond the picture window, the new furniture was Western Oak (by A. Brandt). And the rugged theme was underscored by yarn or fiber rugs, a Charlie Russell or Frederick Remington print over the fireplace, a lamp-base made from a varnished length of cedar or juniper, and bright accent colors throughout. Overhead, a wagonwheel and tin lantern chandelier,or coppertoned lanterns provided general light, while area lighting was often from large, ceramic-based lamps molded in the form of horses or roosters. The kitchen cabinet on the far wall was as likely as not to contain a gun rack (particularly if there were glass doors), and was often referred to in decorating magazines as a "chuck cupboard". Mixing the old with the new, a modern three drawer chest (TSC 1:2) and end table fill out the living room group, while a table and kitchen Windsors (covered with wrapping paper) occupy the dining area.

The language used to describe the room in American Home underscores the western image. Furniture finishes were "Sage Honey" (birch), "Canyon Brown" (ash), "Saddle Leather" (maple). and of course "Knotty Pine". (By any other name, the most popular finish of the period was still limed oak.) The editors depicted the room as "both simple and sophisticated" with "furnishings that are sturdily forthright" and having "a look of substantiality without being overscaled."

My model of this period setting is really a type of temporary stage design, erected for photographic purposes as is typical of most TSC cover settings. But it illustrates some simple techniques available to miniaturists who wish to construct temporary period settings in which to display their miniatures. The dominant activity in the hobby tends to focus on the construction of permanent houses and room boxes which, after a period of time, overwhelm our living space and depress the urge to continue building. So, why not build a succession of temporary settings instead? The floor is a sheet of fiber board or ceiling tile overlayed with finished wood strips. The walls are hot-press mat board, backed with frames of 1/4" square wood, and faced with paneling of redwood or cedar. The fireplace was built

up with Tom Thumb brick (Binghamton Brick Co., TSC 3:3, pp. 58-59). The bricks used were salvaged from a different fireplace built for the cover on the May, 1979 TSC (3:3). Because the white glue used to join the bricks is water soluable, the old fireplace was simply soaked in a pan of water until the materials separated. Then the bricks were reused in this new fireplace. (No planned obsolescence here!)

The large Christmas tree in the setting (Fig. 2) is reminiscent of the trees we used to cut in the Judith Mountains of central Montana for holiday decoration. In our family, a nine foot ceiling aways seemed to require a Christmas tree to match. And the most perfectly bushy and symmetrical trees were always obtained by topping a60 foot tall white or silver spruce or white fir that was marked for later cutting as timber for corral poles. The tree in our cover setting simulates those immense, symmetrical trees from the western hills. A similar but not identical miniature tree was used in the Christmas setting on the cover of TSC 2:1. After its publication, we received a number of requests for information on where we had obtained our tree. We didn't either buy it or fabricate it: we cut it from the pasture surrounding our home: a Juniperus communis, or common juniper, which infests the pasture land like a weed (Figure 3). The original cover tree was cut green, decorated, and then with the heat of August and photo floods visibly wilting it, the tree was hurriedly photographed for the cover.

This year, in order to prolong the useful life of the decorated tree, I cut several small junipers, mashed the fiber at the end of each stem, and soaked them for more than a week (or until the sap oozes from the branch tips) in a 3:1 solution of water and glycerin. Glycerin, commonly available in small quantities at drug stores, is absorbed by the wood and not only preserves it but softens the sharp needles as well. However, it also has the indesirable effect of turning the needles brown (Figure 4). To counter this, I added green vegetable dye to the solution and immersed a number of smaller branches in it. The resulting green, pliable branches seem to have solved the problems. (However, I am not certain how lasting the solution will be; the longer term results will be reported in a later TSC.)

The tree was constructed by drilling slanted holes as needed in a straight juniper twig of the desired length (Figure 4). Small branches of juniper with the bark cleared away from the end of the stem are then glued into these holes until the desired fullness is achieved. Added symmetry results from a careful trimming of the mounted branches. Then a base is added and the tree is ready for decorating.

Decorations consist of colored glass beads of varying sizes, mounted on hooks of .020 brass wire. To add luster ot some of the beads, a coat of Flo-Paque Luster Glaze (a high gloss, transparent lacquer) was added in different hues. This paint, so frequently used in painting "stained glass" windows, is a valuable decorating aid on the workbench. In addition, two sets of Clare-Bell Brass Christmas ornaments were used (Nos. 1721 & 1722). These sets of twelve

FIG. 2 – Ornaments Festoon a Man-made Tree

ornaments per sheet are die cut from flat brass and etched with designs ranging from Santa to candy canes (Figure 5). Decorate each by painting the etched relief area with different colors of Flo-Paque: when dry, clean the random paint from the raised, non-etched areas of the design by wiping the face of the ornament with a piece of 400 grit emory paper. Another decorating material used in the setting (Figure 5) was the assortment of Christmas wrap from J. Hermes. This collection of metallic and non-metallic papers offers a range of decorative accents to the miniature holiday scene. If you have the patience, tinsel

FIG. 3 – Juniperus communis Is Not One of the Lillies of the Field

FIG. 4 – Dyeing the Glycerin Treated Juniper Preserves the Color of the Constructed Tree

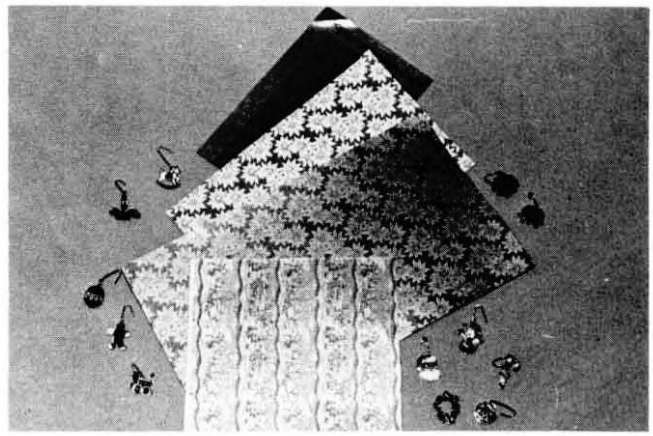


FIG. 5 – Wrapping Paper from J. Hermes and Clare-Bell Ornaments Add Color to the Setting

will add some sparkle to the tree, ie., paper-backed foil strips cut from a cigarette pack and then with the paper stripped away draped on the tree branches. That requires infinite patience and the absence of any wind in the workroom.

But the center for the holiday festivities in the room is the grouping of furniture before the fireplace. There the modern Ranch Oak pieces form the basis for the room setting. Altogether there are six individual pieces in the grouping: an arm chair, (Figure 6) a two-section sofa, and a three-section sofa (Figure 7). Yet, except for a change in fabrics and the addition or omission of left and right arms, all six pieces are identical. They are rugged, easily made, and typical components in a room in which a 1950 Christmas "on the G.I. Bill" is to be celebrated.

Bill of Materials: Modern Ranch Oak Chair

Item	*No.*	*Scale Dimension*	*Material*
Front leg/seat back	2	1 1/2" thick (cut to pattern)	1/8"
Back leg/seat	2	1 1/2" thick (cut to pattern)	1/8"
Seat: Front rail	1	1 1/2" square x 23 (incl. tenon)	1/8" sq.
Seat Slat	3	1" x 2 1/2" x 23" (incl. tenon)	5/64"
Back Slat	4	1" x 1 1/2" x 23" (incl. tenon)	5/64"
Back Slat	1	1" x 2 1/2" x 23" (incl. tenon)	5/64"
Arm (optional)	1 or 2	1" x 4 1/2" x 20" (cut to pattern)	5/64"
Arm Post (optional)	1 or 2	1" x 3 1/2" x 10 1/2" (cut to pattern)	5/64"
Seat Cushion	1	22" x 22" x 3" (width may vary)	1/4" foam bd.
Back Cushion	1	16" x 22" x 3" (width may vary)	1/4" foam bd.
Fabric			
Cotton Batting			

Construction

Cut out identical pairs of front and back legs by marking the pattern on one piece of stock (Figure 8). Attach another piece of stock to the bottom with double-face tape and jig saw out the part (cutting outside the marked line). Before separating the two pieces, sand the edges down to the line of the pattern. (Any residue from the tape must be removed with alcohol.) Miter (45°) the front end of the seat peices.

The mortises (Figures 8 & 9) can be marked, drilled and cut in each leg individually, or you can spend some time making a jig to make the job quicker and more exact. (If you are making more than one chair, make a jig!). Whichever means you choose, the mortises are cut in the same manner. First mark the outline of the mortise hole. Then drill out each end of the mortise position with a No. 59 drill to a 1/2" depth. If using a hand drill (pin vise), the depth of the hole can be guaged by wrapping a piece of masking tape around the bit at the 1/2" mark. And remember that in making matching pairs of legs, identical mortises are being cut on facing surfaces of the legs.With the holes drilled, trim the mortise to shape with a hobby knife and small chisel.

The purpose of a jig is to hold identical legs secure as exactly matching holes are drilled at every required position along the length of each. The parts of the jig for

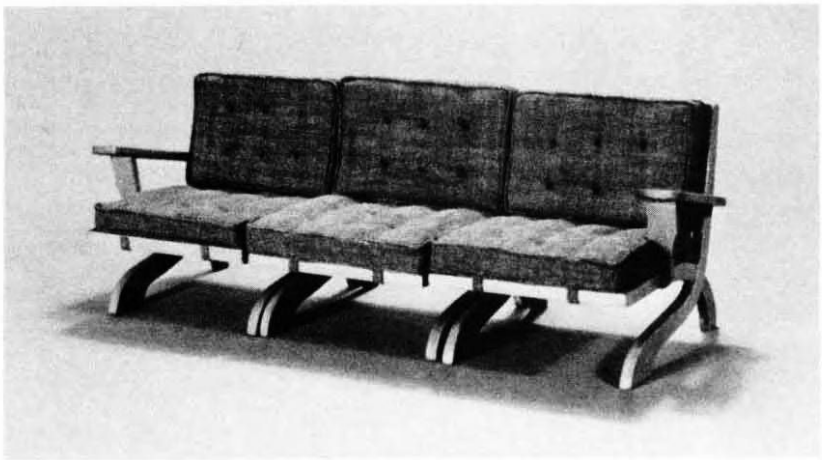


FIG. 6 – A Modern Ranch Oak Sofa (Three-Section)

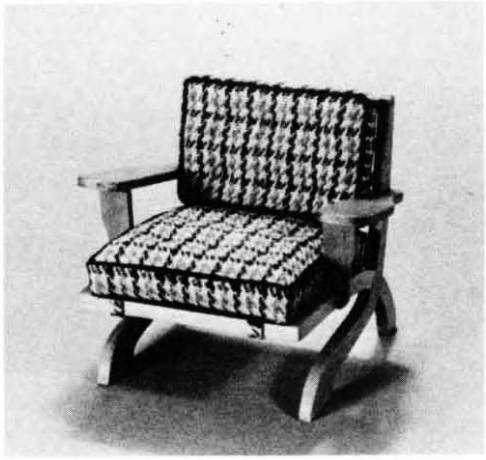
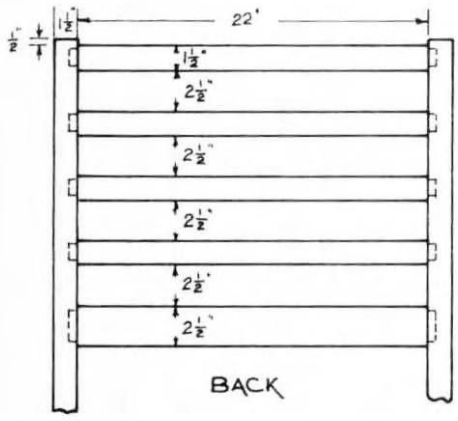
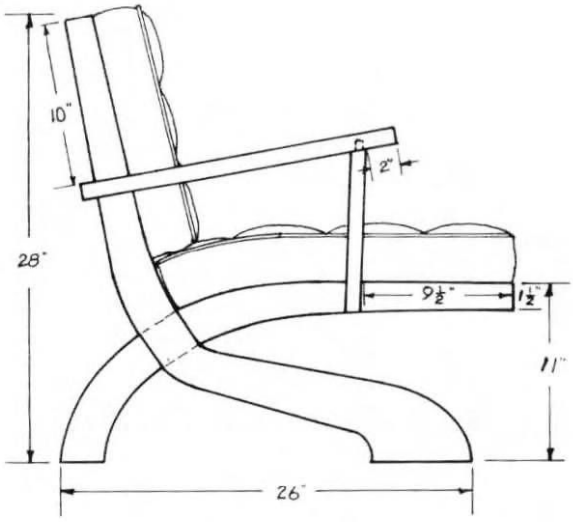
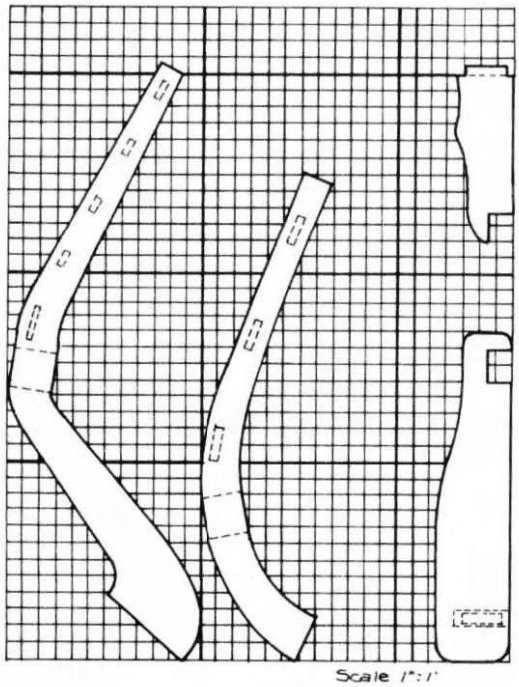


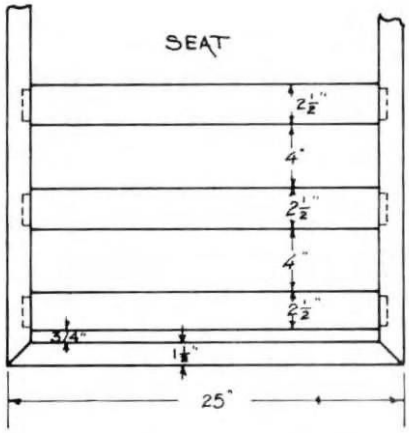
FIG. 7 – Modern Ranch Oak Arm Chair

FIG. 8 – Elevation Drawings: Ranch Oak Chair Frame









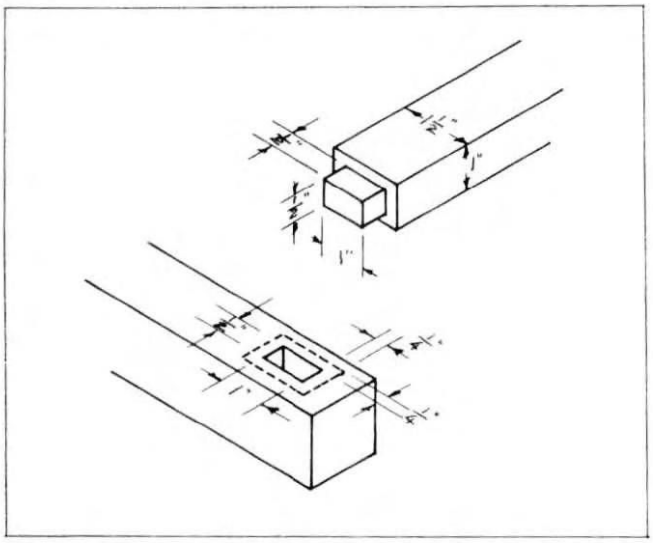


FIG. 9 – Mortise and Tenon Joint

the front leg/seat back in Figure 10 are: top board, right and left pattern halves, bottom board and dowels. The pattern halves are two sections of 1/8" stock cut away from either side of one of the legs as it was run through the jig saw.

First mark the outline of the leg on the top side of the bottom board, ie., the shaded area, and mark the position of every hole to be drilled along its length. Drill out these holes. Glue one half of the pattern to the bottom board and the other half to the top board. Next, placing the leg temporarly in the jig, match the halves together securely against the leg, and drill two 1/16" diameter dowel holes. Remove the leg, and glue the short lengths of dowel into the bottom half of the jig. These will assure the exact realignment of the jig during each use.

With the leg removed, place the halves of the jig together, turn it upside down and drill out the holes in the top half of the jig by using the predrilled holes in the bottom as guides. Now the jig is ready for use. Set your drill press (or tape your bit) so that the depth of the holes are equal to the depth of the top board plus 1/2" scale. Place a leg in the jig and drill all of the required holes. Then, replacing the leg with its mate, turn the jig over and drill the same holes through the opoosite side of the jig. This will produce matching mortises in the legs. In the same manner, construct a second jig for the back leg/seat pieces.

A full-lap joint is used to join the two legs where they cross (Figure 11). Notice in Figure 11 that adjoining dimensions in the lap joint are identical, ie., A = A, B = B, C = C, and D = D. When joined, the sides of the crossing legs will be flush. This is a strong joint, because in any joint the strength increases with the number of surfaces that mate. In a simple butt joint only two surfaces mate, and it is relatively weak. In a full lap joint, the number is five. When a flush joint surface is desired (as in this case), the depth of the joint in boards of equal thickness (in this case 1 1/2" scale, or 1/8" stock) is exactly half the thickness of either board (ie., a scale 3/4" deep, or 1/16" full scale). In brief, A = B in Figure 11. The width of the joint in each board (C

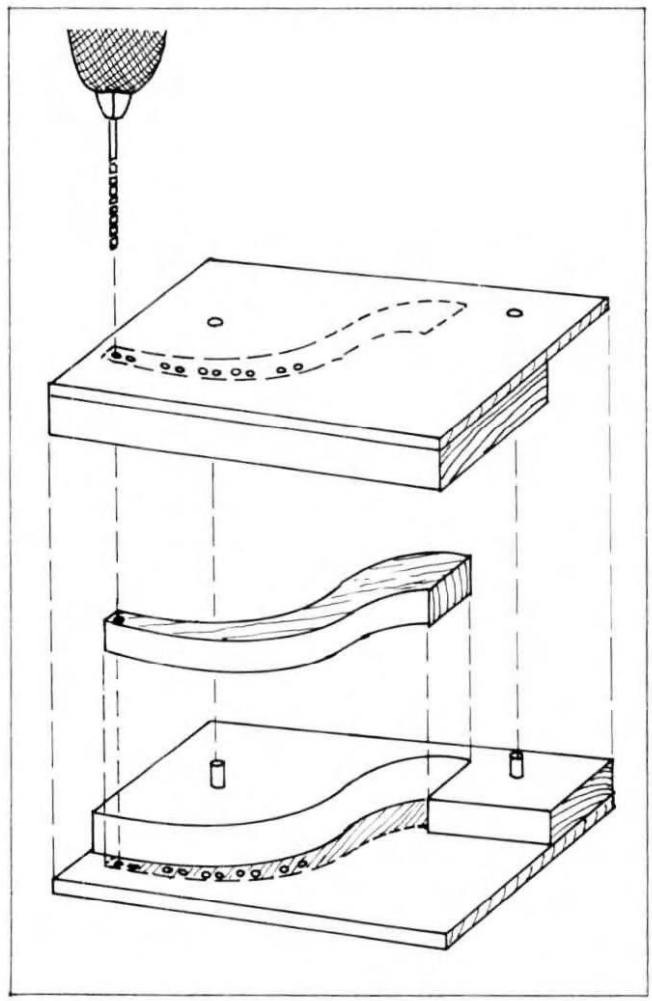


FIG. 10 – Jig For Drilling Mortise Holes

& D in Figure 11) is exactly the width of the adjoining board.

To cut a full lap joint, first mark the width of the joint on the face of each board (C & D, Figure 11) with two lines. Score these lines with a knife point to break the surface fiber of the board and avoid splintering. Cut to the depth of the joint (A & B) with an X-Acto razor saw just inside each of the width marks. A simple guage can be made to limit the depth of each cut by laying a scrap of 1/16"

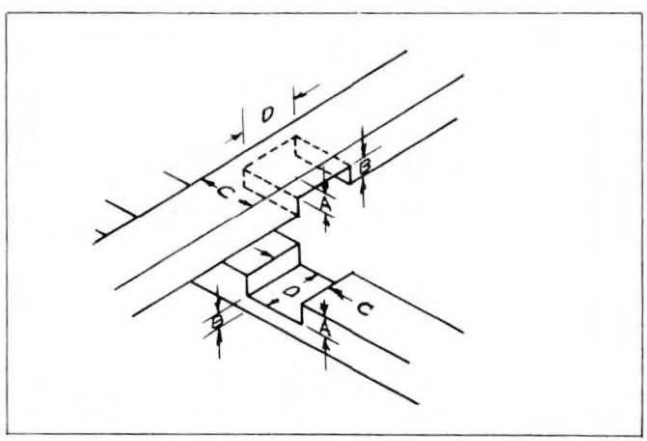


FIG. 11 – Matching Dimensions of the Full Lap Joint

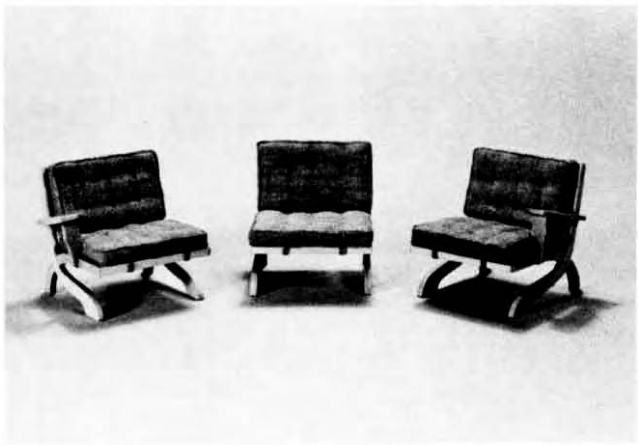


FIG. 12 – Cushions Are Tufted on Four Inch Centers

wood on each side of the leg. Saw down until the blade touches the scraps on both sides of the leg. Or a simple guage, using an X-Acto miter box can be used as outlined by Horace Cooke in TSC 3:3 (pp. 2, 40). To aid in the even removal of material within the joint, make several additional cuts across the joint with the saw. The remaining thin material between cuts can be snapped out with the finger and the bottom of the joint evened up with a chisel or hobby knife. Trim and fit the mating pieces until the faces of the joint are flush and the joint line even.

Cut the eight slats for the seat and back. Cut tenons on both ends of each. Score the shoulder line 1/2" back from the end on all four sides with a knife point. Then carve back the four sides of the tenon with a knife. Trim each tenon to a snug fit in the mortise.

Cut the square front rail and miter both ends (45°). Assemble and glue the sides, slats and front rail. Square up and adjust before the frame dries. Finish sand the assembled frame.

The addition of arm posts & arms are optional, depending on the use to be made of the frame. An arm chair requires two arms, a two-section sofa requires one arm on opposite sides of the adjoining chairs, and a three-section sofa requires an additional chair with no arms. Cut the arm and post to the pattern in Figure 8. Mortise the underside of the arm and cut the tenon on the end of the post. (Note the angle!) Mark the position of the arm and post on the chair frame and trim the notch at the end of the arm to fit around the seat back post. Glue the assembly to the chair frame.

To achieve a limed oak finish, paint the wood with a thin coat of gesso (obtained from an art supply store) and immediately wipe it from the surface of the wood but leaving white streaks in the open grain of the wood. Then finish the frame with a coat of clear laquer or varnish.

The width of cushions varies with the number of arms on the frame. The arm chair requires a cushion width of 22": a frame with one arm uses a 23 1/2" wide cushion, and the frame with no arms a 25" cushion. Cut the bottom cushion base to size from 1/4" foam board. Peal the paper from both sides of the foam and bend the foam to shape (Figure 8). Pad the top lightly with cottom. Cover the base with fabric, pulling the fabric down the sides and gluing to the sides of the cushion. (Dart or square fold the corners.) Cut a piece of card stock to fit the bottom and glue it in place. Tuft the top by pulling a thread up from the bottom through the fabric and down again. Tufts should be spaced at 4" intervals (Figure 12).

Cut a strip of fabric 3" wide (no hem) and glue it around the four sides of the cushion, beginning in the center of the back. Cover the bottom of the cushion with fabric (no hem). Cording is made by twisting several threads from the fabric, coating them with Sobo, and fastening them around the top and bottom edges of the cushion on all four sides.

Repeat the same process for the back cushion, except in this case because the piece does not need to be bent, only the paper from the face of the foam board must be stripped off. Glue the cushions in place, simulating straps (Figure 12) with two narrow strips of fabric around the front rail of the seat and the top slat of the back.