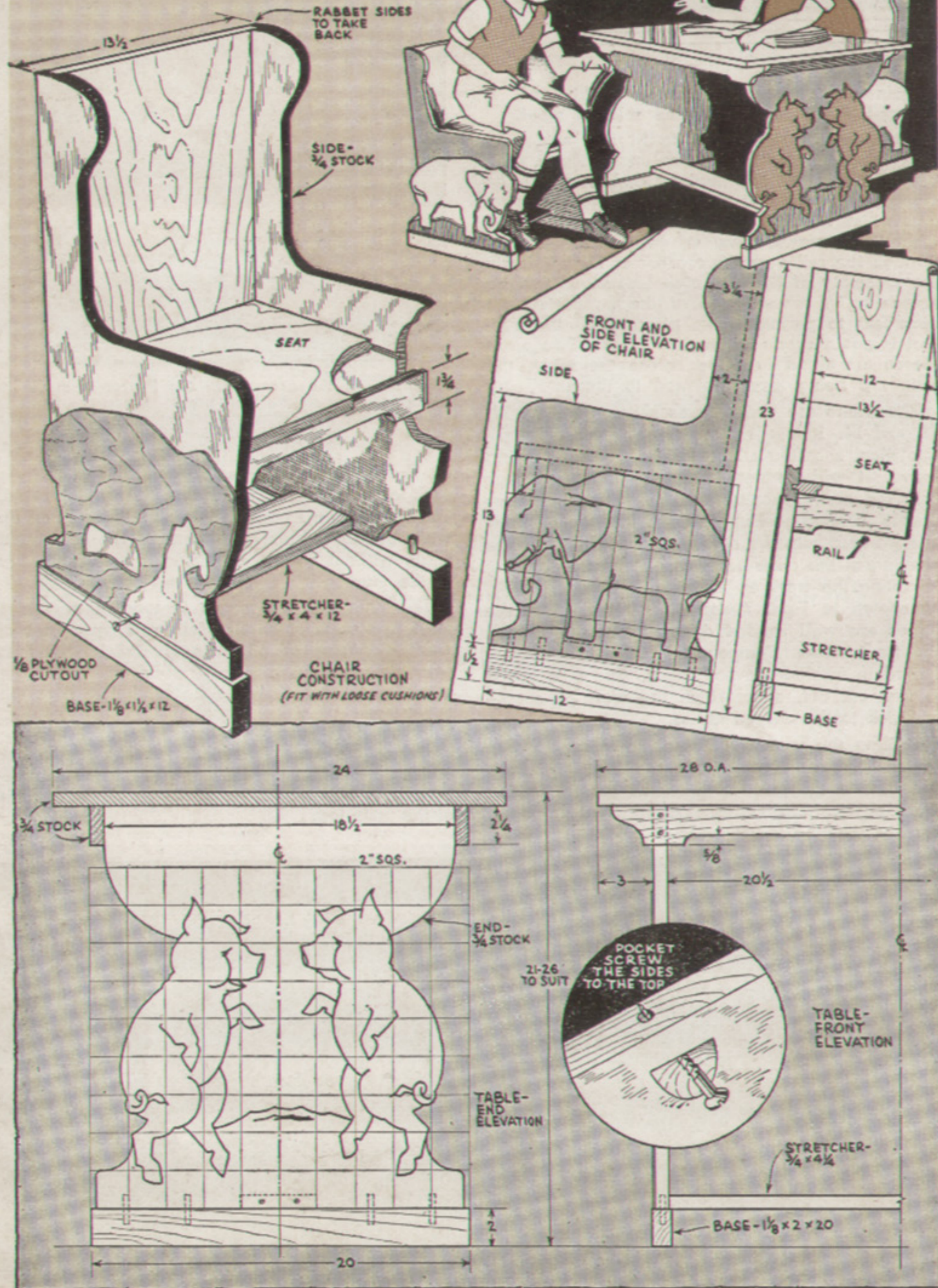


Juvenile
PLAY TABLE
and CHAIR



19 Charming



Chairs

A DELTACRAFT PUBLICATION

Occasional CHAIR in Limed Oak

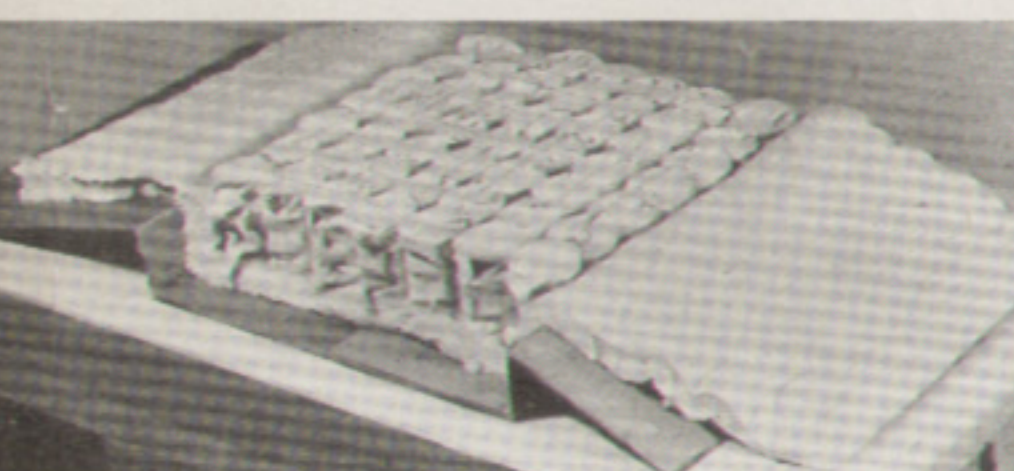
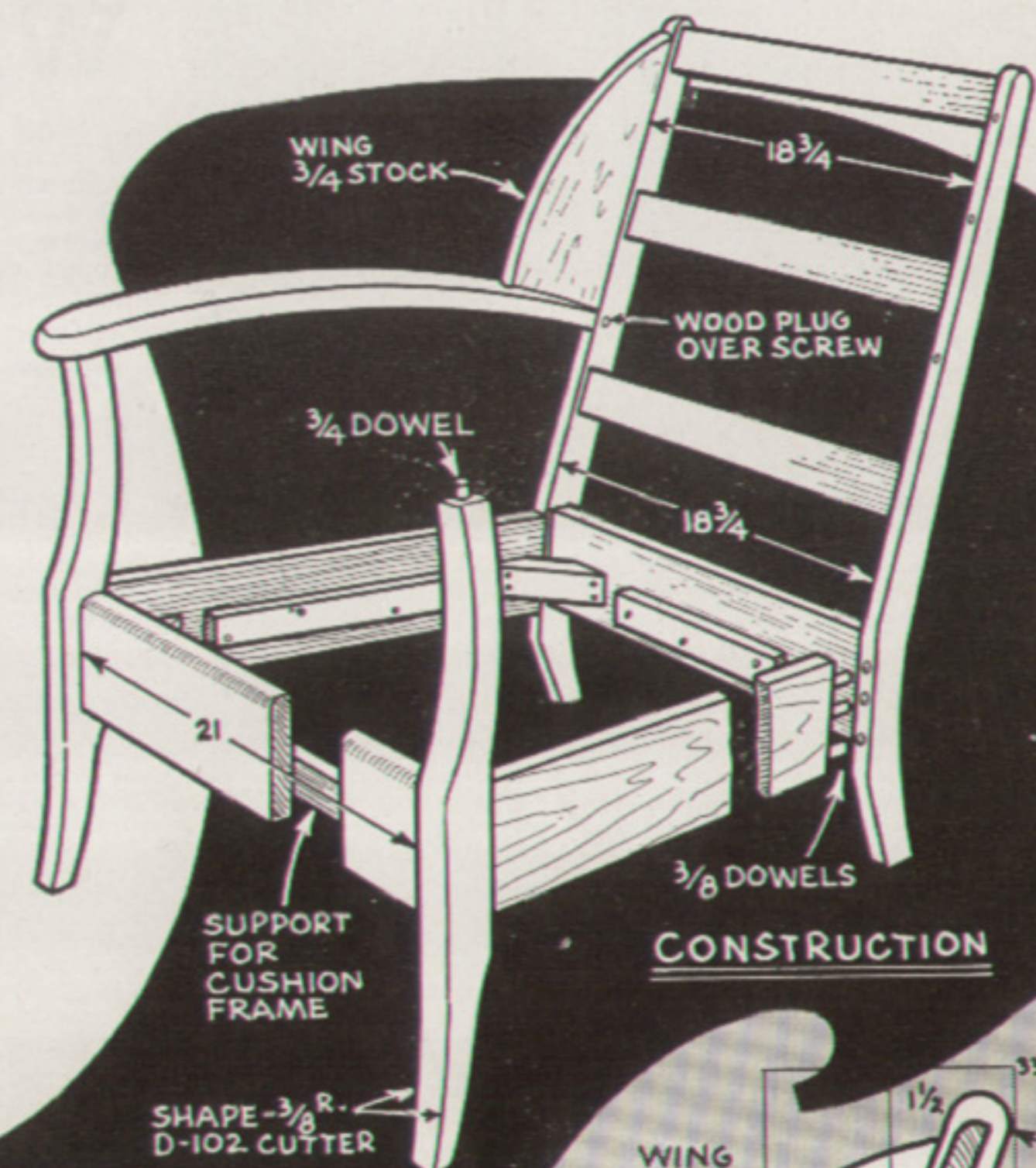


CHAIRS like this are quite simple to make and very attractive in combination with conventional overstuffed pieces for living room use. While this design specifies white oak and a limed finish, the same chair can be made in maple with antique maple finish.

The best way to start is to make a full size drawing of the side section shown on opposite page. As in almost any heavy project, this takes a lot of guesswork out of the fitting. The front legs are square as viewed from the front except a slight taper at the bottom. After band sawing, the facing edges are shaped with D-102 shaper cutter from end to end; a similar cut is run in on the back edges for the length of the curved portion at bottom. The arms require 2 1/2-inch thick stock, but can be reduced slightly if this thickness is not readily available. It is also satisfactory to use a glue-up job of 1 3/4 and 3/4-inch thick stock, arranging the curve so that the joint comes near the back of the arm. The rest of the construction is plain sailing . . . doweled joints throughout, wings and arms fastened with screws under wood plugs or buttons. The seat cushion support is a wooden frame covered with webbing,

and the cushions themselves standard innerspring construction which any upholsterer will make up at a nominal cost if you do not care for this part of the work.

For the limed oak finish, use only selected white oak without dark streaks. On the bare wood apply a coat of white toner. This is made by mixing 1 part of white lacquer to 5 parts clear and then further reducing the mix with about 10 parts of thinner. The result is a slight lightening of the wood, frosty. Next, apply a wash coat of water-white lacquer. Sand when dry. Fill with white or off-white filler, wiping the surface clean so that the filler remains only in the pores. Finish with top coats of water-white lacquer. It is important that a very pale, water-clear lacquer be used for top coats since the regular pale amber will kill the purity of the white filler. The finish is completed with a rub down and wax. If the construction is in maple, the finish would be the conventional orange-red tone used on this wood.



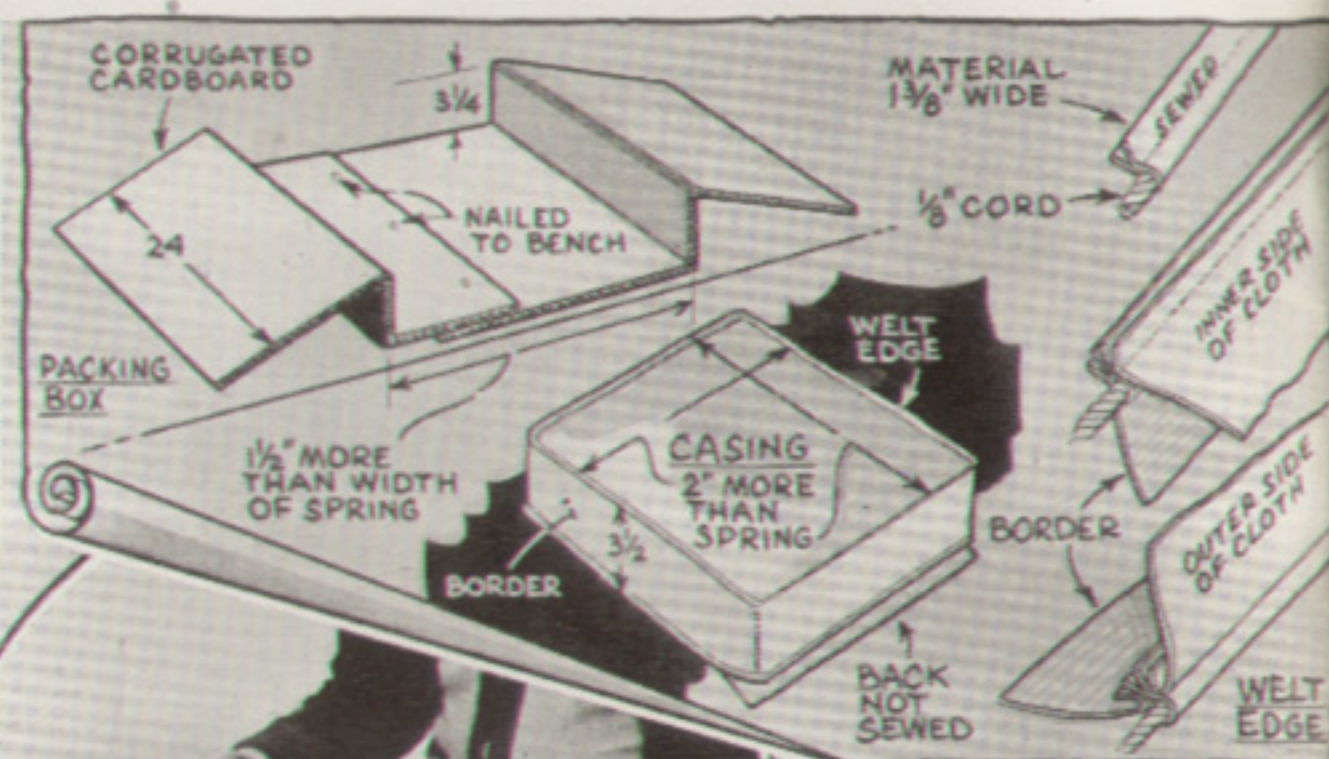
1 SPRING AND FIRST LAYER OF COTTON IN BOX



2 COTTON FOLDED IN AND SECOND LAYER ADDED



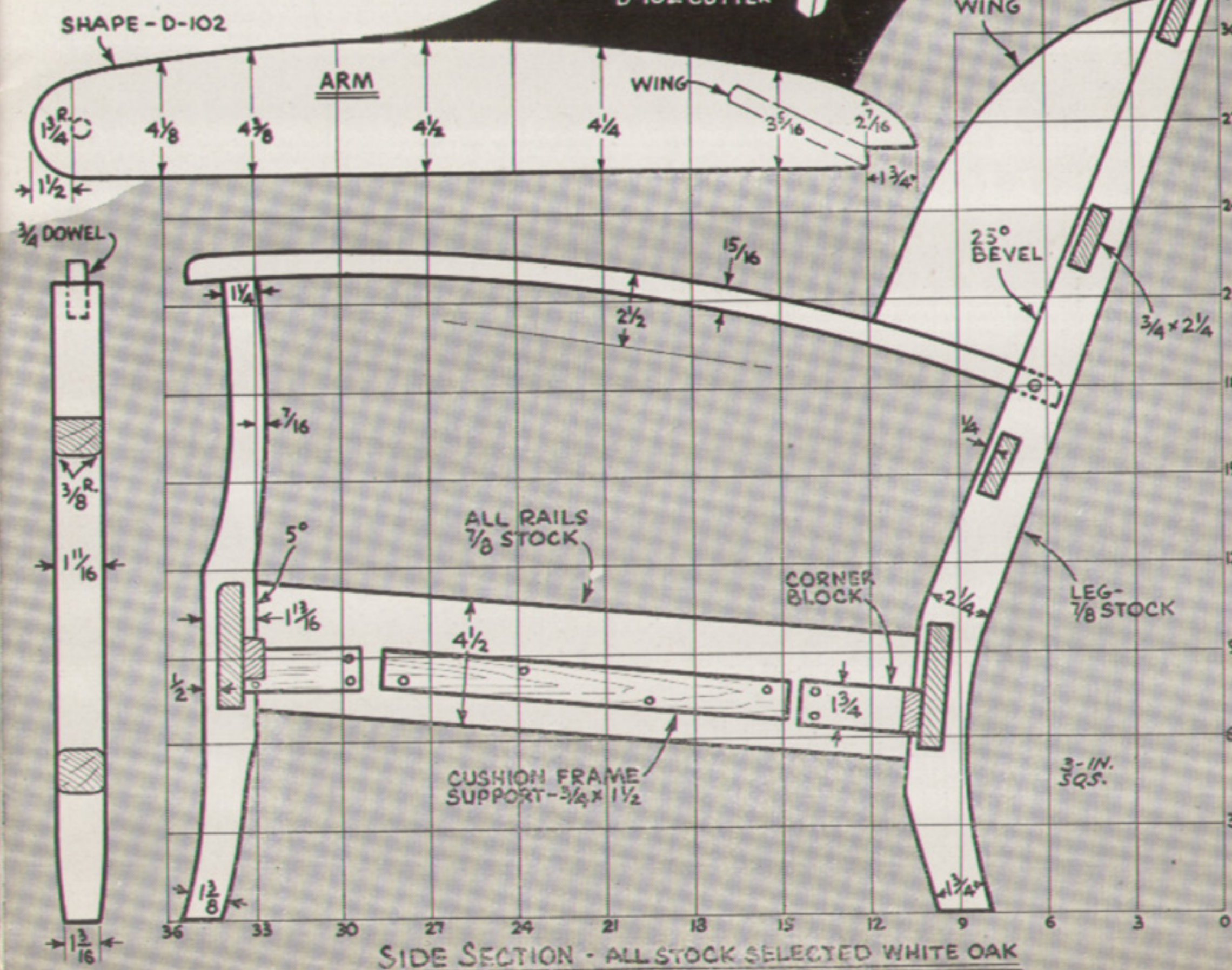
3 BOX CLOSED AND FASTENED WITH GUMMED TAPE



4 CASING STRIPPED OVER BOX
5 RAMROD HOLDS SPRING AS BOX IS REMOVED

Innerspring Cushions . . . are easily made by following the schedule of operations shown in photos. Cardboard loading box should be bradded to bench and then pulled loose when ready to load spring into casing. The casing is a job for the b.h. and can be made with welt edges or French seams as desired.

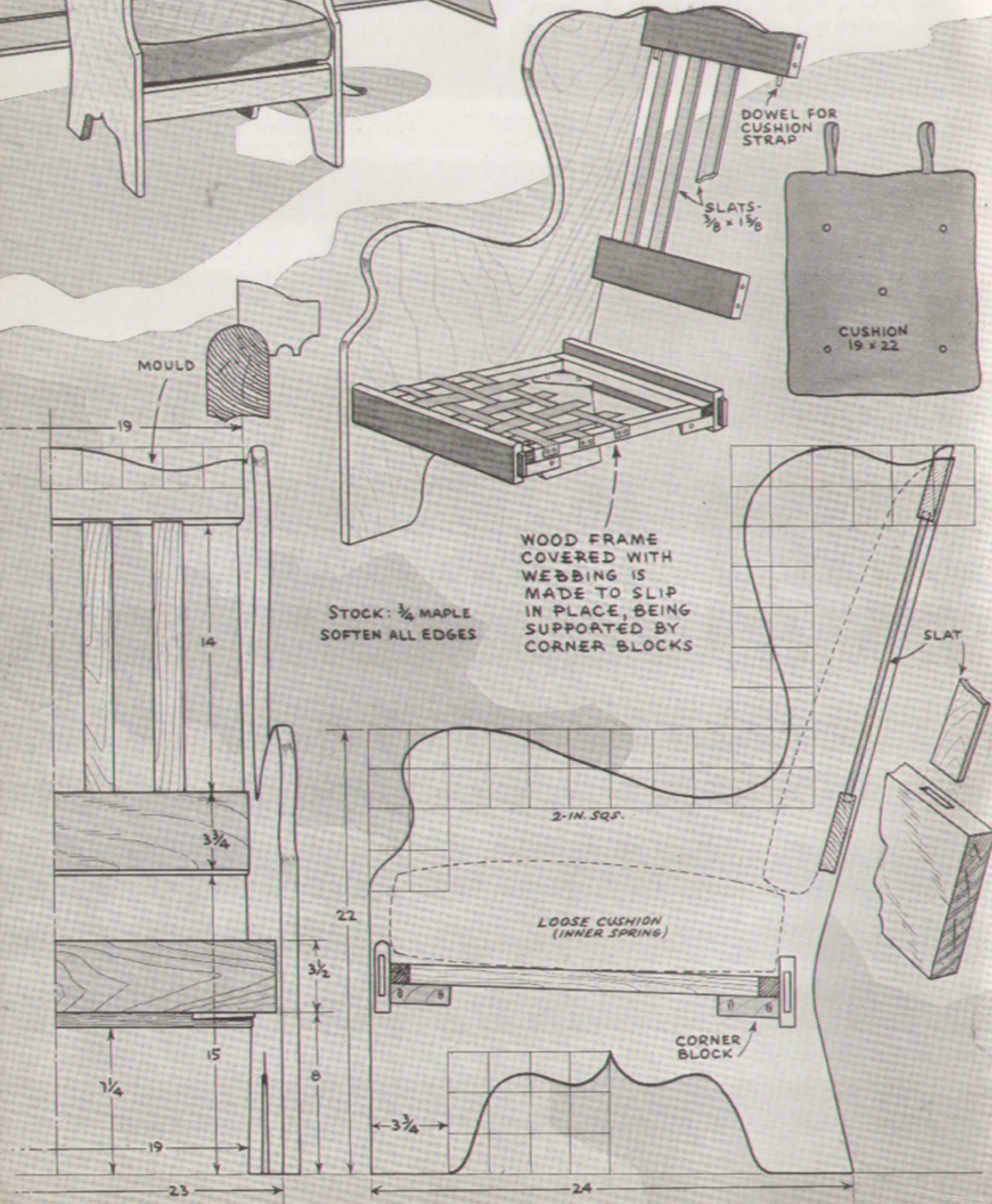
Materials . . . include cotton felt, which comes in rolls about 27 inches wide by 1 inch thick. Costs about 25 cents per yard. Ready-made spring mats are 3 1/2 inches high, and are made from 2 1/2 or 3-inch diameter coils. Sizes start at 15x15 and go up by 2 1/2 or 3 inches to 22 1/2x25. Average price of mat is \$1.25.



SIDE SECTION - ALL STOCK SELECTED WHITE OAK

Colonial WING CHAIR

SLAB sides simplify the construction of this Early American piece. The stock for sides is first glue-jointed and then band sawed to the proper shape. A wood framework covered with webbing provides a support for the inner spring cushion which is used. Joints can be mortise-tenon or screws countersunk and plugged with 3/8-inch plugs or buttons.



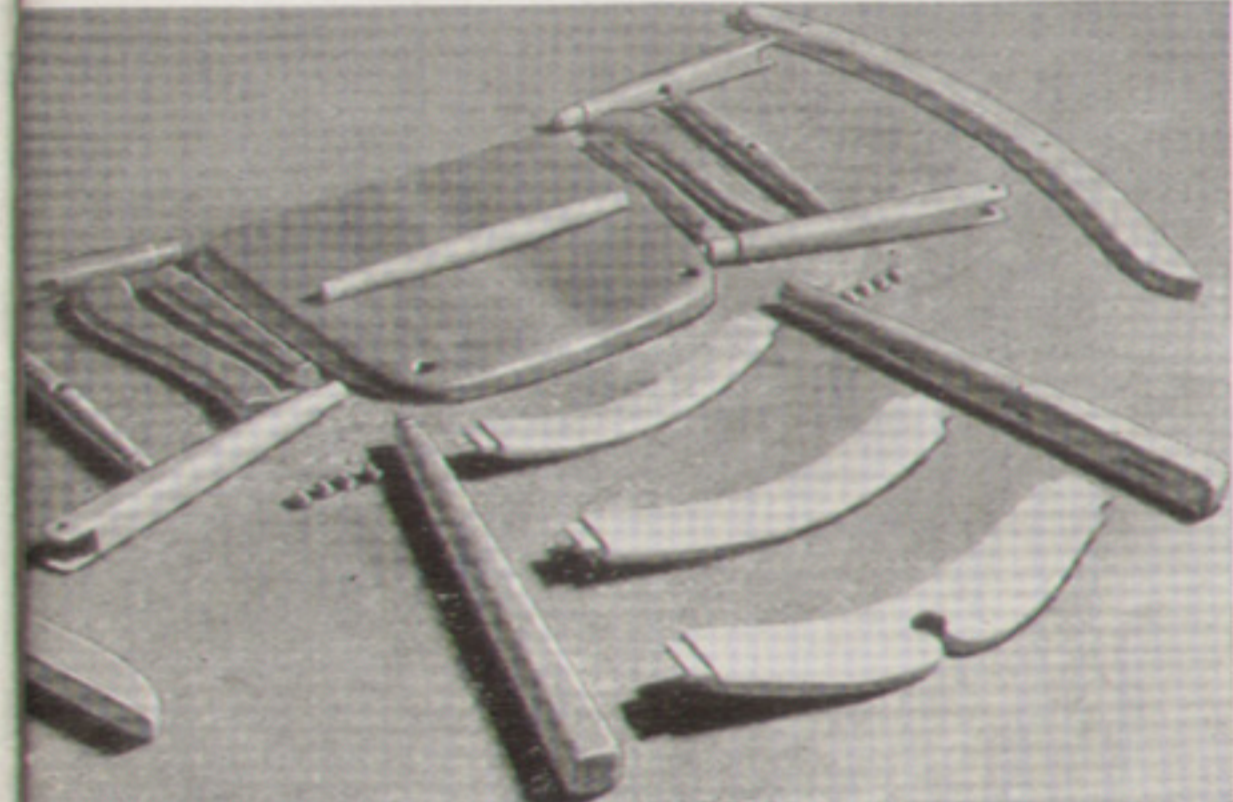
Child's ROCKER

NOT recommended for beginners, this junior rocking chair in early American styling makes an attractive project, and is a worthy test of the craftsman's skill. It is advisable to make full size drawings to check the various angles involved. The height of seat is shown as 10 1/2 inches—can be increased to 11 1/2 if the child is over 6 years.

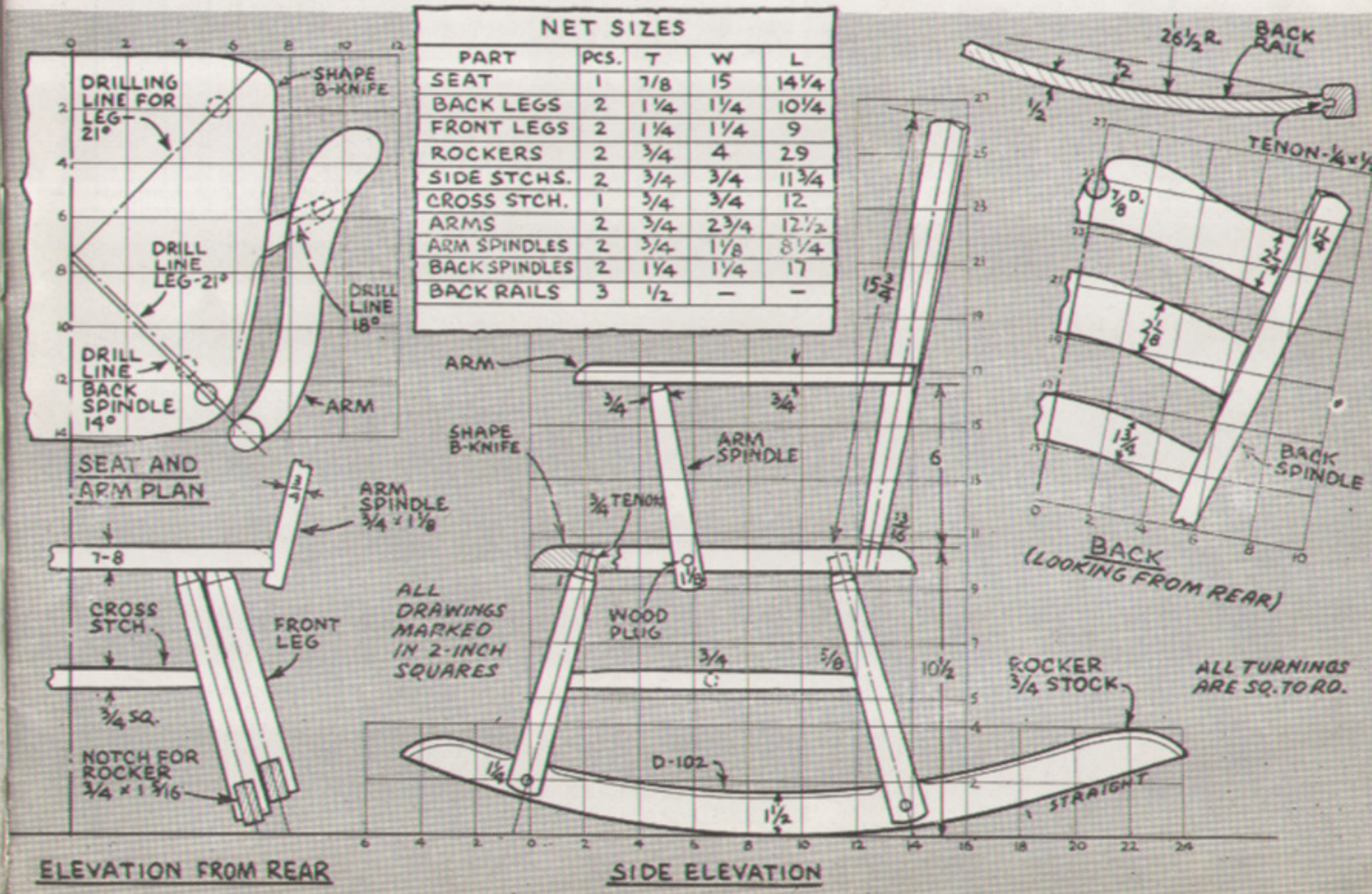
Start with the seat. Mark the drilling lines for legs on the underside; mark the drilling lines for back spindles on top side. Any angle hole to be drilled must be lined up so that the drilling line comes under the drill point and is seen as a continuation of the drill centerline as viewed from the side of drill press. Under this condition, the tilt angles given will be correct for the hole. The



It will take you about eighty-five hours on this job, according to Allan F. Kelsey, Seattle, who designed and made the original.



tilt of drill table is best measured with a tee-bevel, setting to 90 degrees plus the tilt. All turnings are square to round and are not difficult. Mortises for back rails should be cut while the stock is in-the-square. Back rails are steam bent in-the-square, or, more expensive but simpler, compound band sawed from thicker stock. All turnings are driven home with blind wedges.

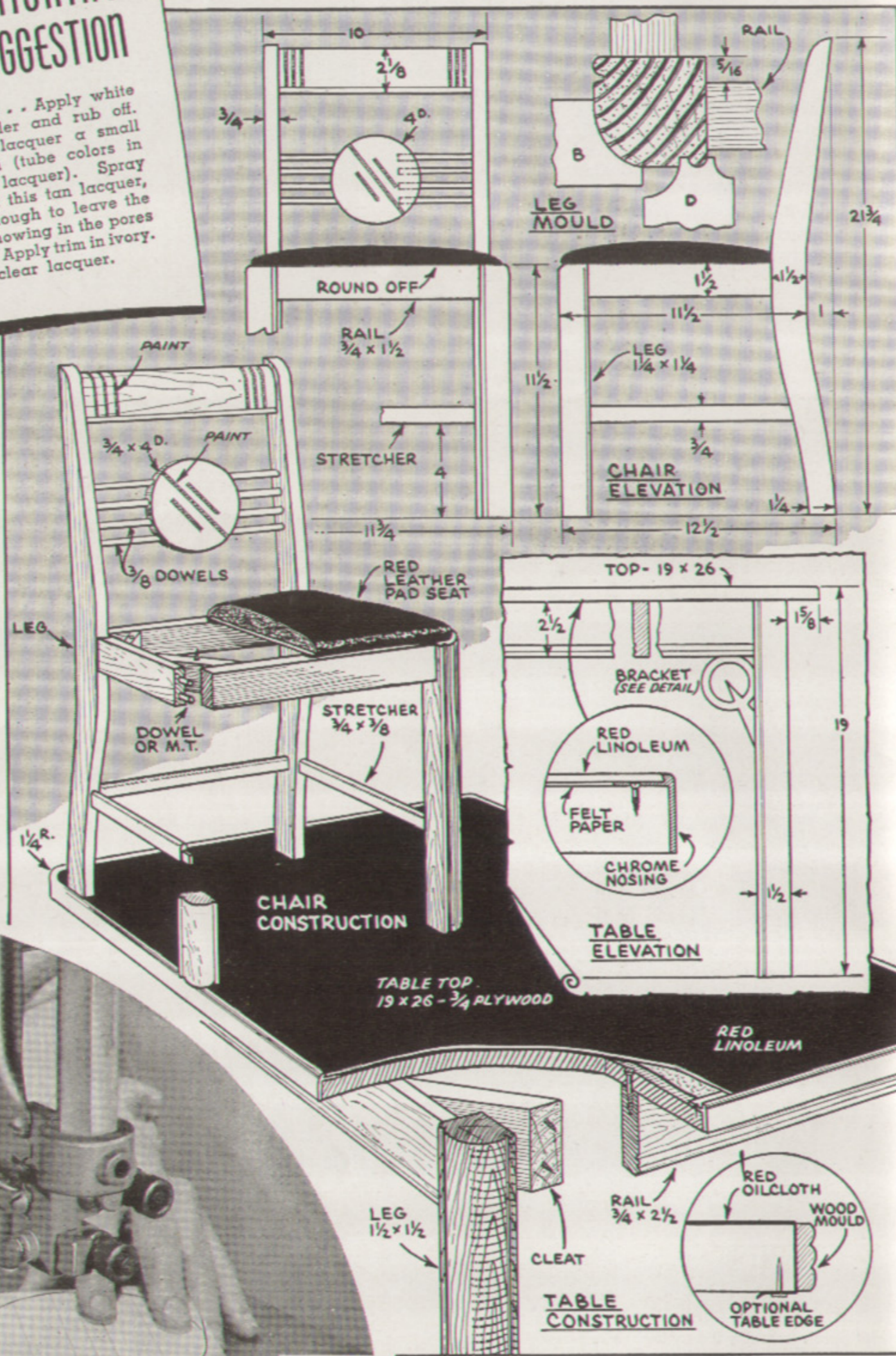


FINISHING SUGGESTION

Tawny Oak . . . Apply white paste wood filler and rub off. Add to clear lacquer a small amount of tan (tube colors in japan or tan lacquer). Spray a thin coat of this tan lacquer, just heavy enough to leave the white filler showing in the pores of the wood. Apply trim in ivory. Finish with clear lacquer.



DESIGN
by
FRANKLIN
D.
MAURER



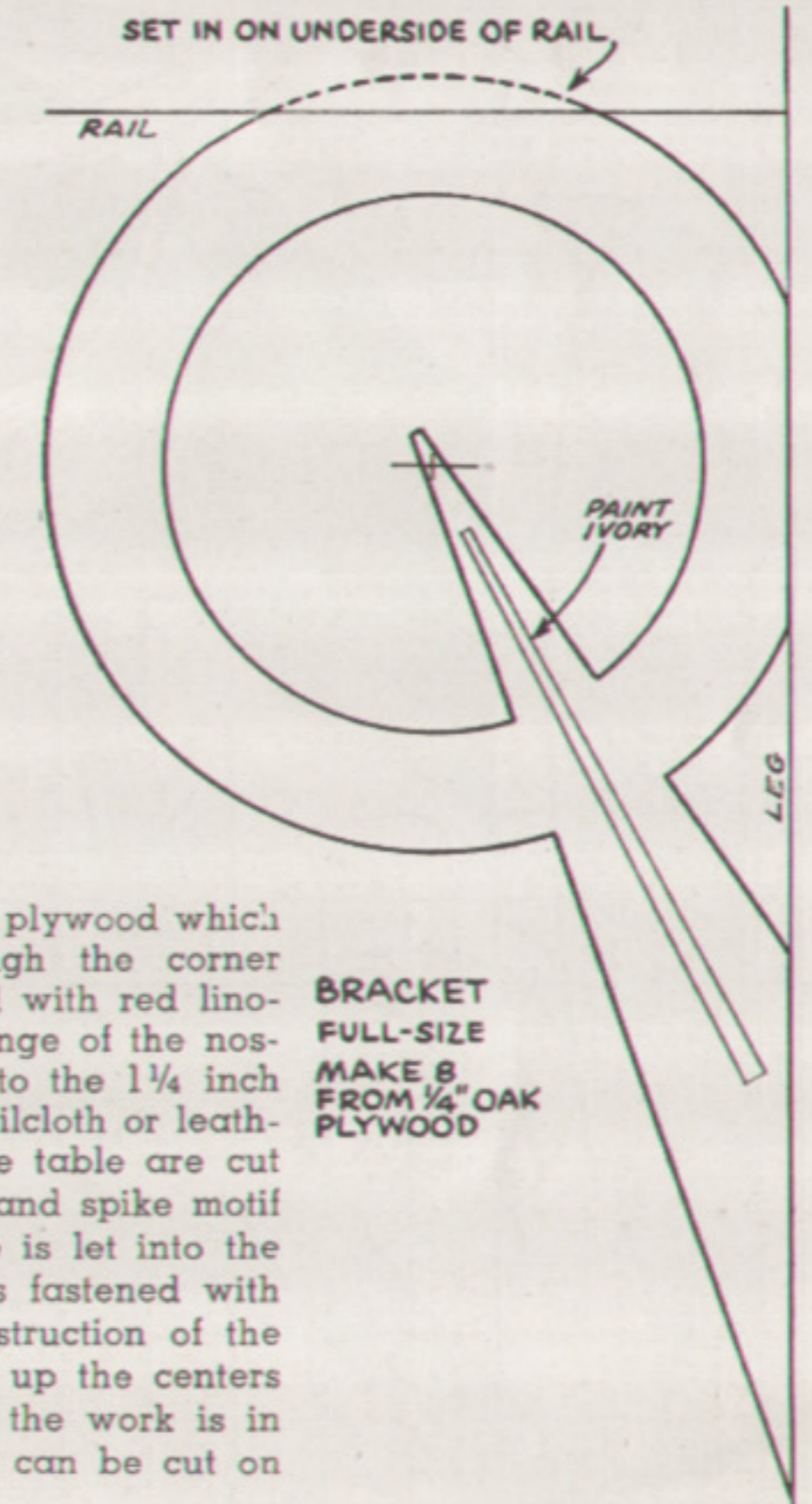
Juvenile KITCHEN SET



Uses Tylon and Perisphere Motif in Corner Brackets

THIS makes up nice in oak with a buff lacquer finish, as suggested on the opposite page. However, any other finish can be used. It would be quite nice in colored lacquer or paint. The height dimensions given will fit the average youngster up to about seven years old. Over this age, the chairs can be increased to a 14 or 15-inch seat level, and the table to 24 to 26 inches. Start work by making the legs. These are 1 1/4 inches square for the chairs, and 1 1/2 inches square for the table. Corners are shaped with style D knife, using either the circular saw moulding head or shaper. The round on the outer corner is run in with style B knife. The D knife is used for various other edges, as can be seen in the drawing.

The general construction features of both chair and table follow standard practice. Chair seats are imitation red leather, fitted to a base of 1/4 inch plywood which is fastened by means of screws inserted through the corner cleats. The table top is 3/4 inch plywood, covered with red linoleum and edged with a chromium nosing. The flange of the nosing is cut away at the corners to permit bending to the 1 1/4 inch radius specified. An optional treatment using red oilcloth or leather with a wood edging is shown. Brackets for the table are cut from 1/4 inch oak plywood, and carry out the ball and spike motif of the World's Fair. The upper edge of the circle is let into the rail. The other edge butts against the leg and is fastened with brads and glue. It should be noticed in the construction of the chairs that the round circles of wood which make up the centers of the backs are drilled for the dowel rods while the work is in the square. After the holes are drilled, the shape can be cut on the band saw.



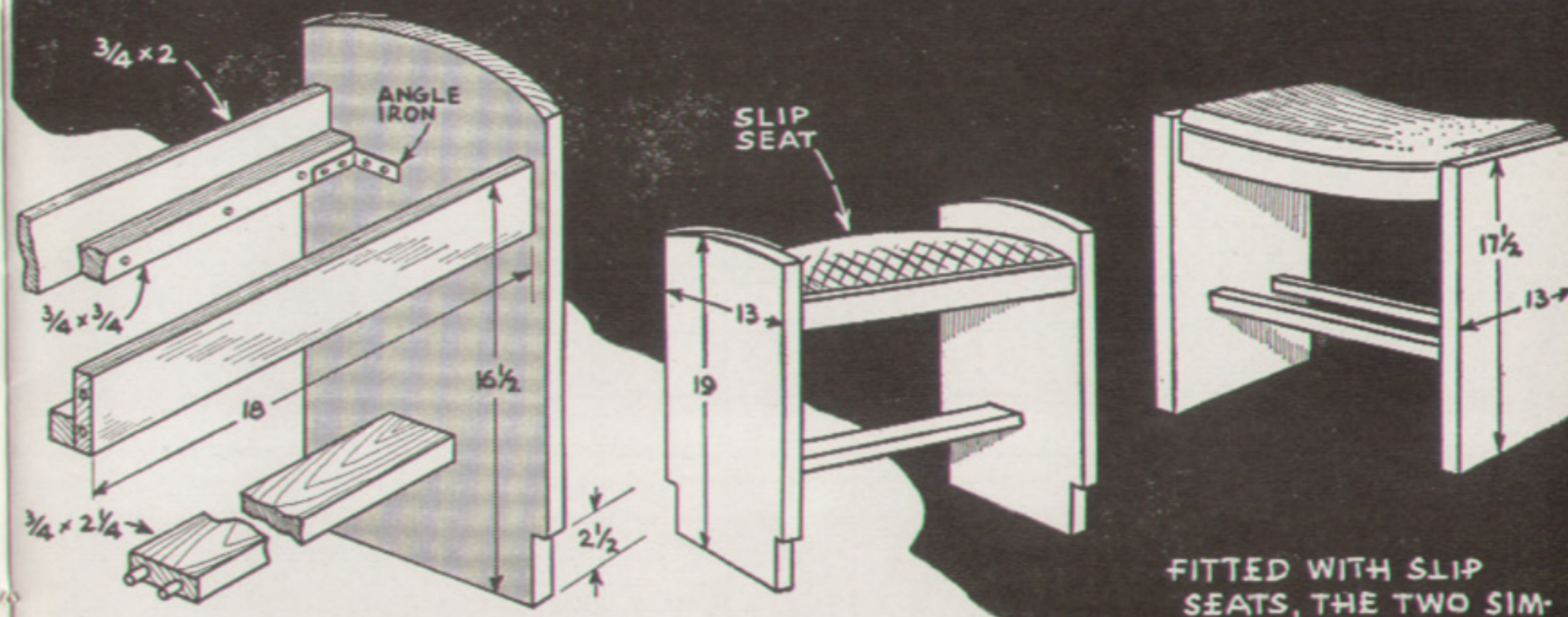
Bath BENCH

COMBINING a bench with a storage compartment for towels or bathroom supplies, this unit reflects the simple styling of modern furniture. It makes up nicely in white pine and is quite attractive in a monotone color scheme to harmonize with other bathroom fittings.

The most important part of the work is the making of the two rounded end members. The exact manner in which this is done is shown in another article in the Dec. 1938 Deltagram, pages 50 and 51, the stock being worked on the lathe and cove cut on the circular saw. Joints between the rounded members and the top and sides are best made mortise-tenon, using the shaper to cut the groove in the rounds and also the tenons on the ends of the flat pieces. Other joints can be either mortise-tenon or dowel, or, since a paint finish is to be used, the remaining joints could be satisfactorily worked with nails or screws.

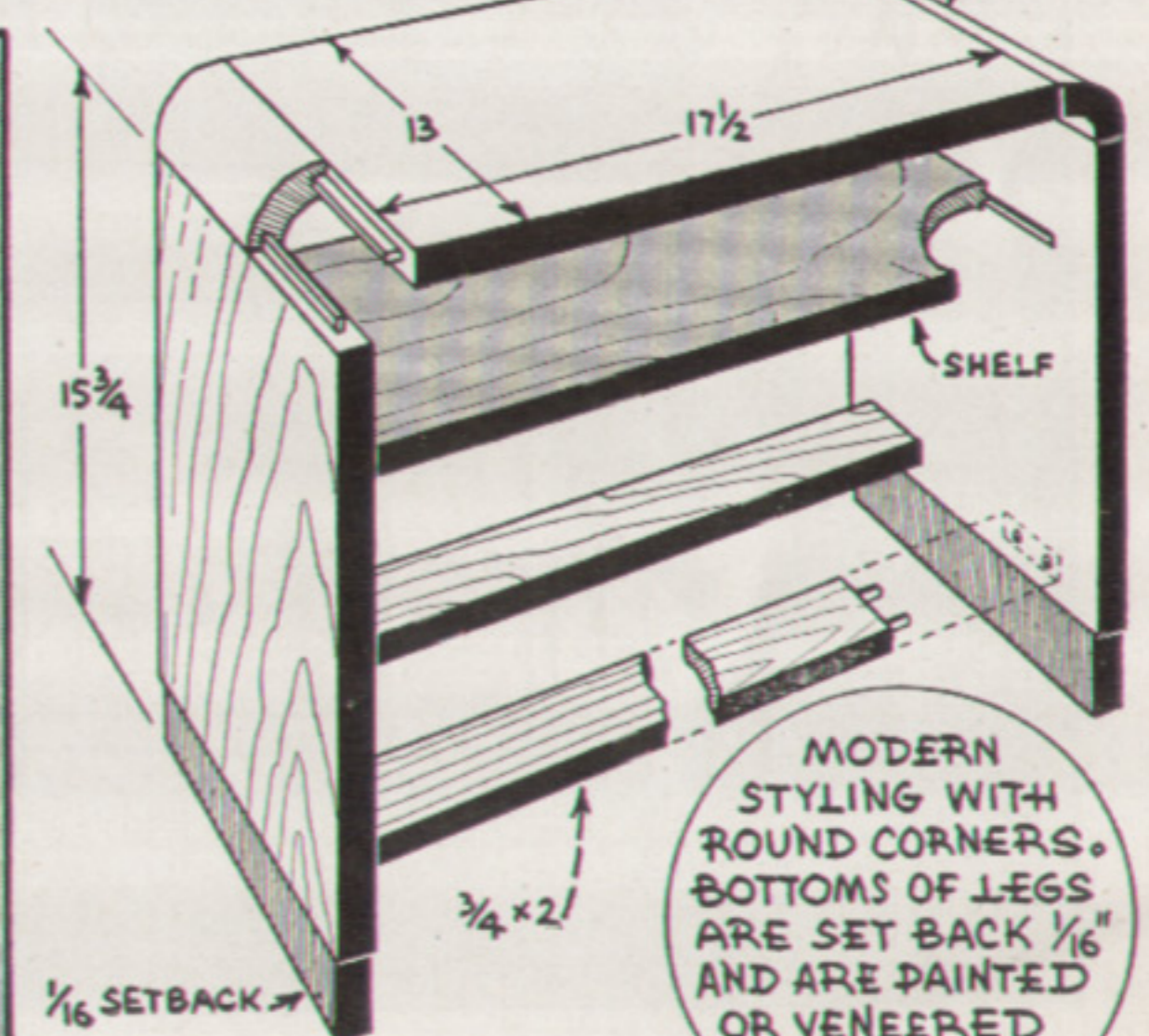
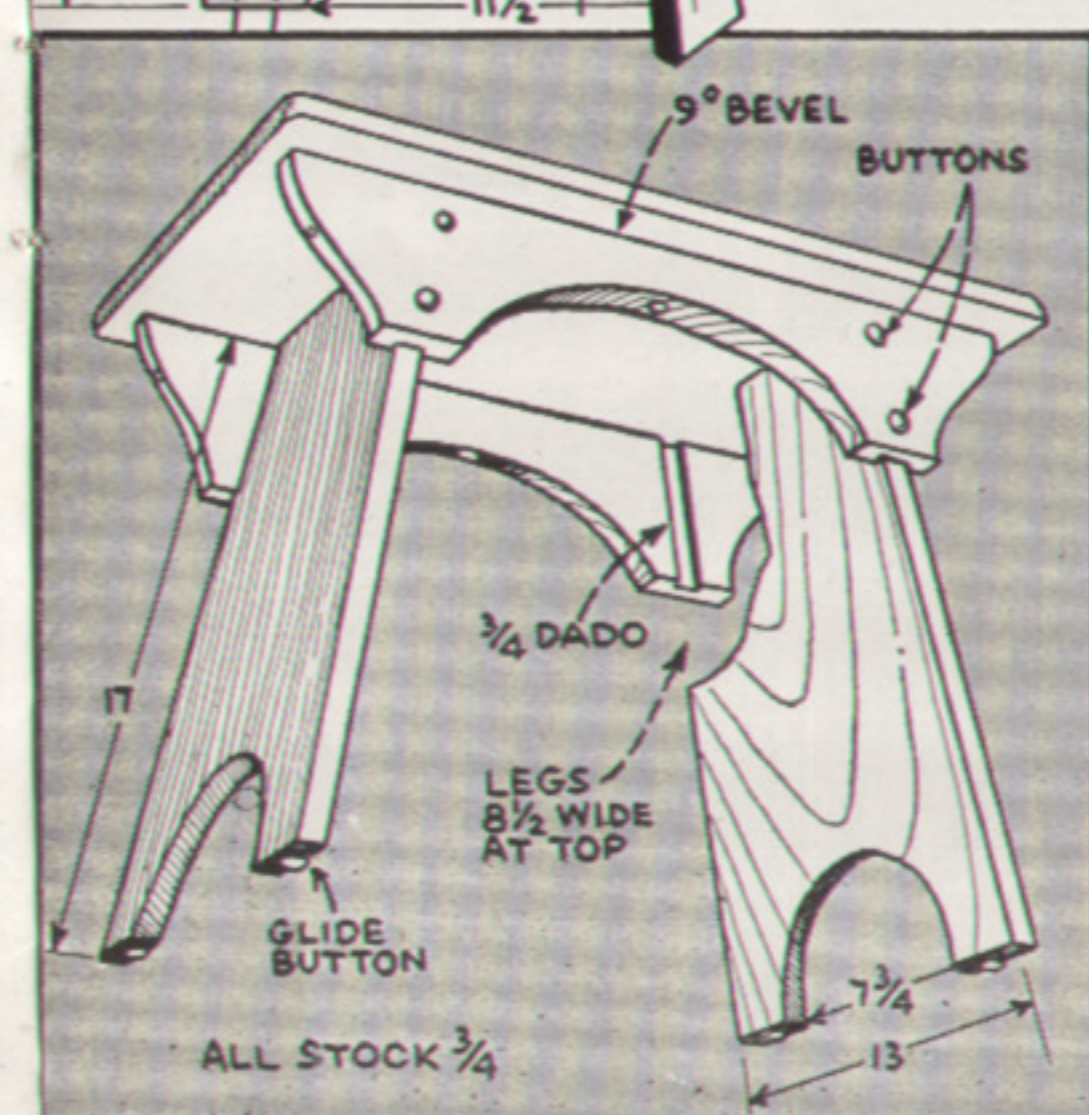
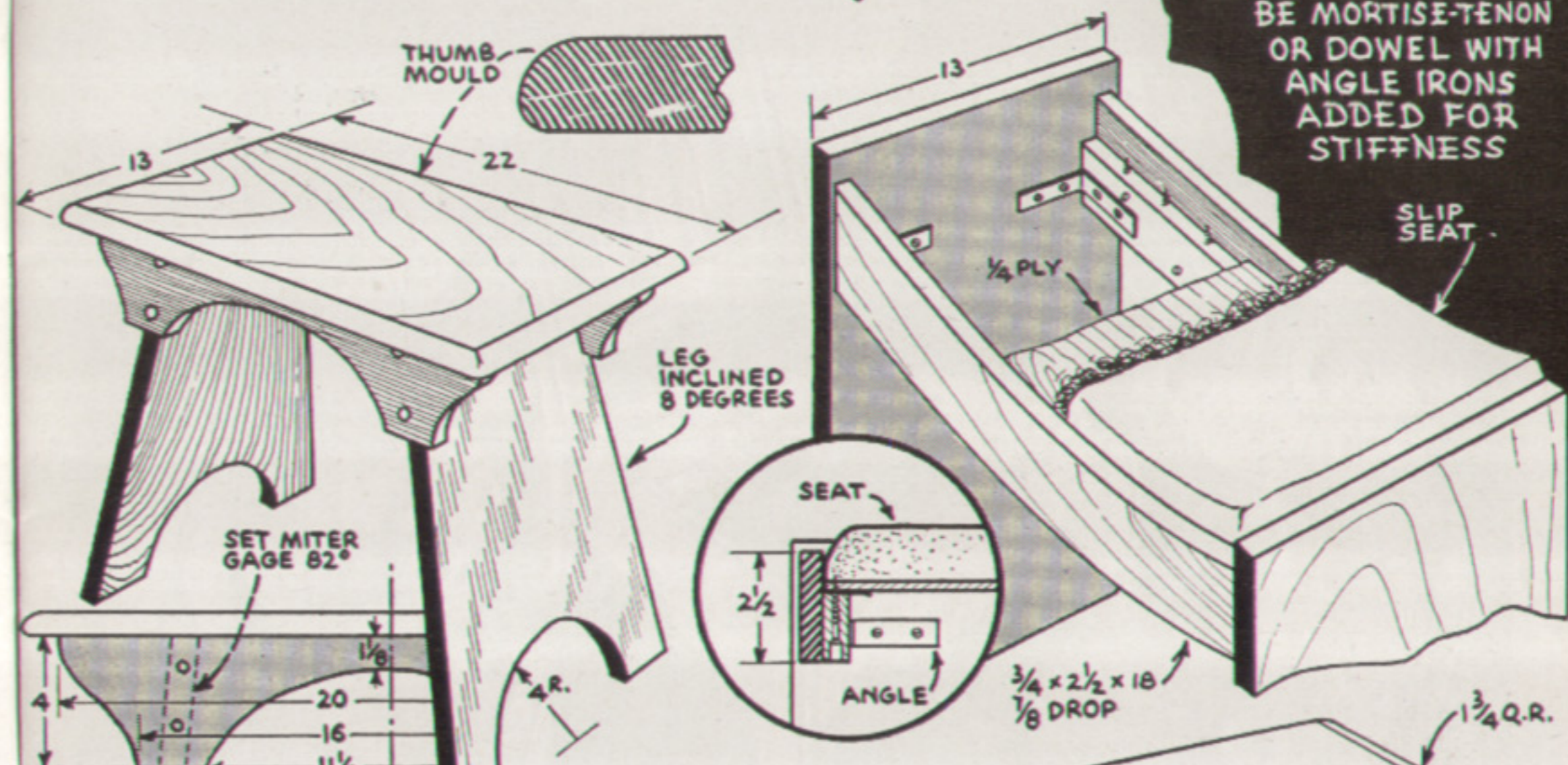
All flat stock used with the exception of the 1/4-inch plywood back, is 3/4-inch thick white pine. A similar thickness of plywood also works up nicely, and is particularly adapted for the door. The door is of the fall-front variety, hinged on the underside. A shallow rabbet is cut on the shelf to furnish a stop while a friction catch of the ball type holds the door in a closed position. The door handle can be any conventional type, either made up to suit or purchased. Rabbets are cut in both the upper and lower shelves to take the plywood back. At the sides, the back is simply butted flush.

In an optional method of construction, the compartment could be eliminated, but retaining the shelf, which, in this case, would be set about 6 inches from the top.



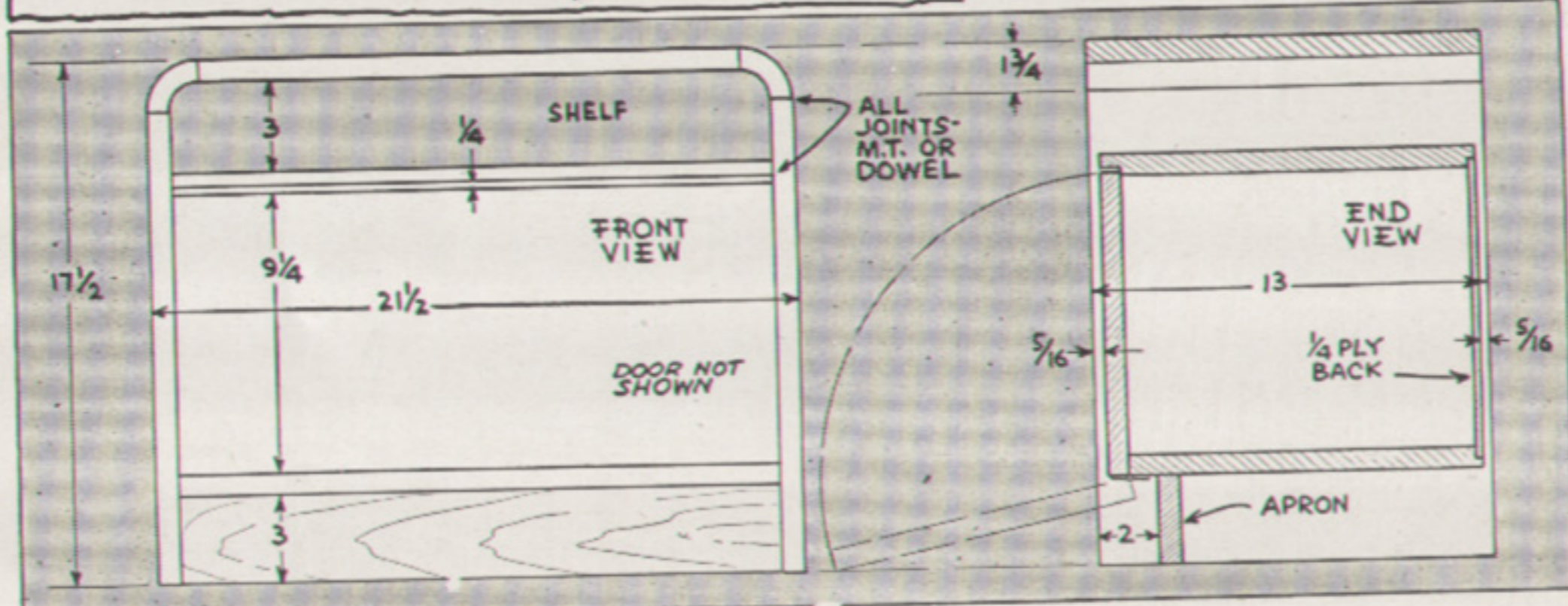
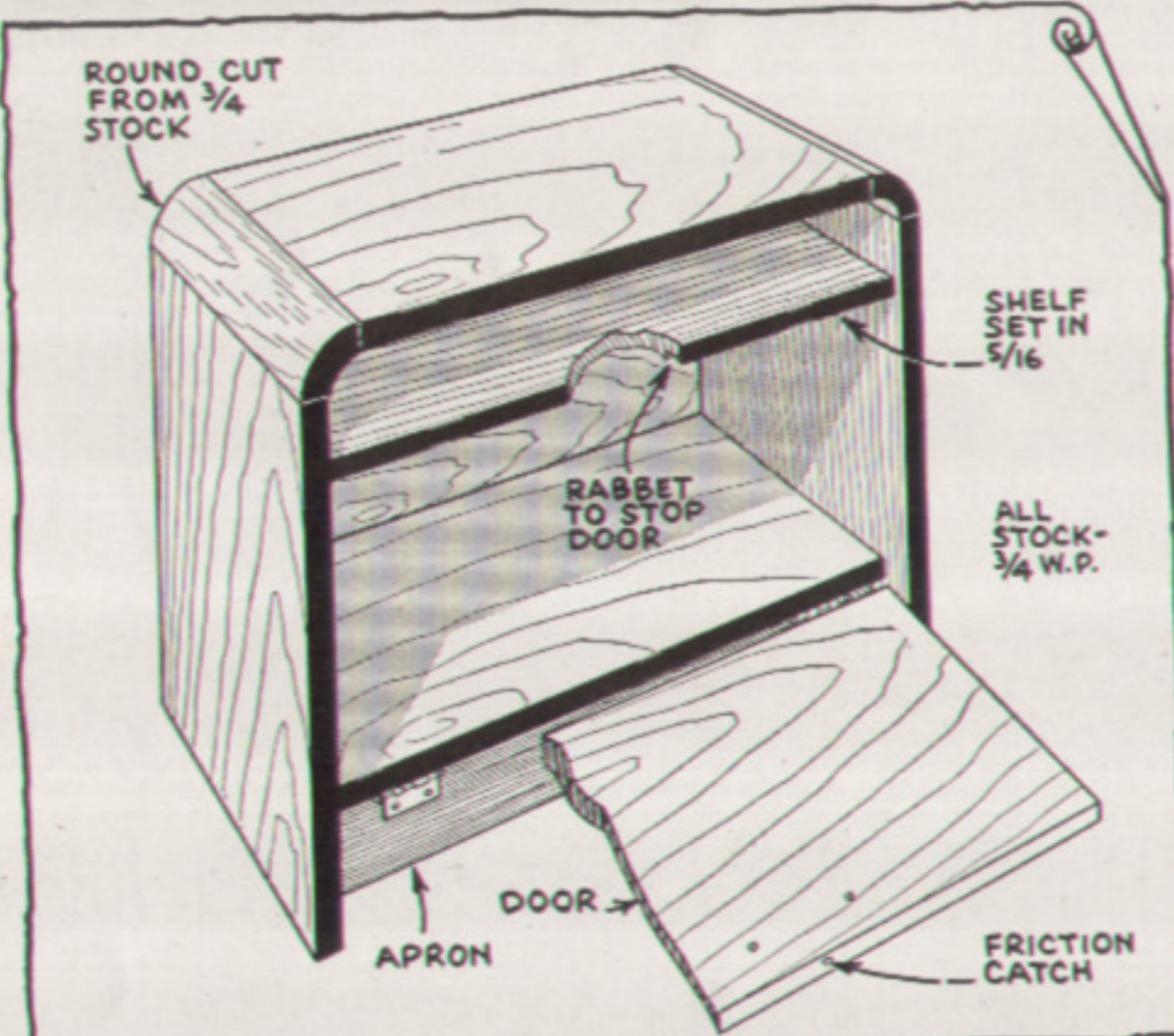
FITTED WITH SLIP SEATS, THE TWO SIMPLE STYLES SHOWN ABOVE ARE VERY EASY TO MAKE. ALL JOINTS SHOULD BE MORTISE-TENON OR DOWEL WITH ANGLE IRONS ADDED FOR STIFFNESS

Four BENCH Designs



MODERN STYLING WITH ROUND CORNERS. BOTTOMS OF LEGS ARE SET BACK 1/16" AND ARE PAINTED OR VENEERED TO CONTRAST

FIVE-BOARD EARLY AMERICAN STYLING SHOULD BE MADE IN MAPLE



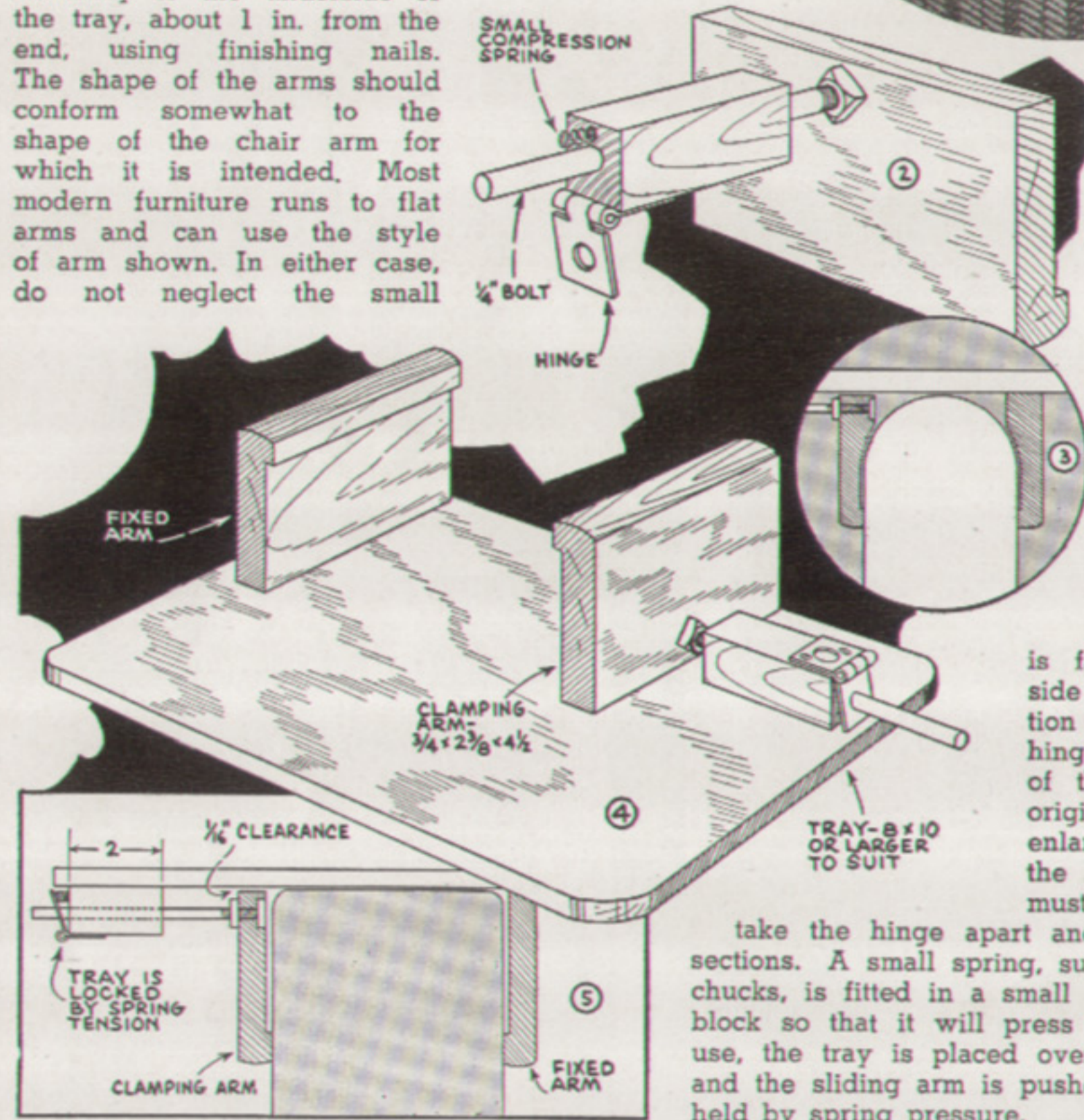
Clamp-on CHAIR TRAY

IF YOU have ever tried to juggle a drinking glass or an ash tray on the arm of an overstuffed chair, you will appreciate the merits of this simple clamp-on chair tray. Of course, some pessimist will immediately stand up and say it is more bother to get the thing and put it on, etc.; nevertheless, it comes in handy.

Make the tray first, using $\frac{1}{4}$ or $\frac{5}{16}$ in. plywood. 8 by 10-in. is a good size for an ash tray, drinking glass, or small sandwich plate. 10 by 12 is a better size for a plate and a drink. Round the corners and take off all sharp edges with sandpaper. Next, make the two arms. One of these is fastened permanently to the underside of the tray, about 1 in. from the end, using finishing nails. The shape of the arms should conform somewhat to the shape of the chair arm for which it is intended. Most modern furniture runs to flat arms and can use the style of arm shown. In either case, do not neglect the small



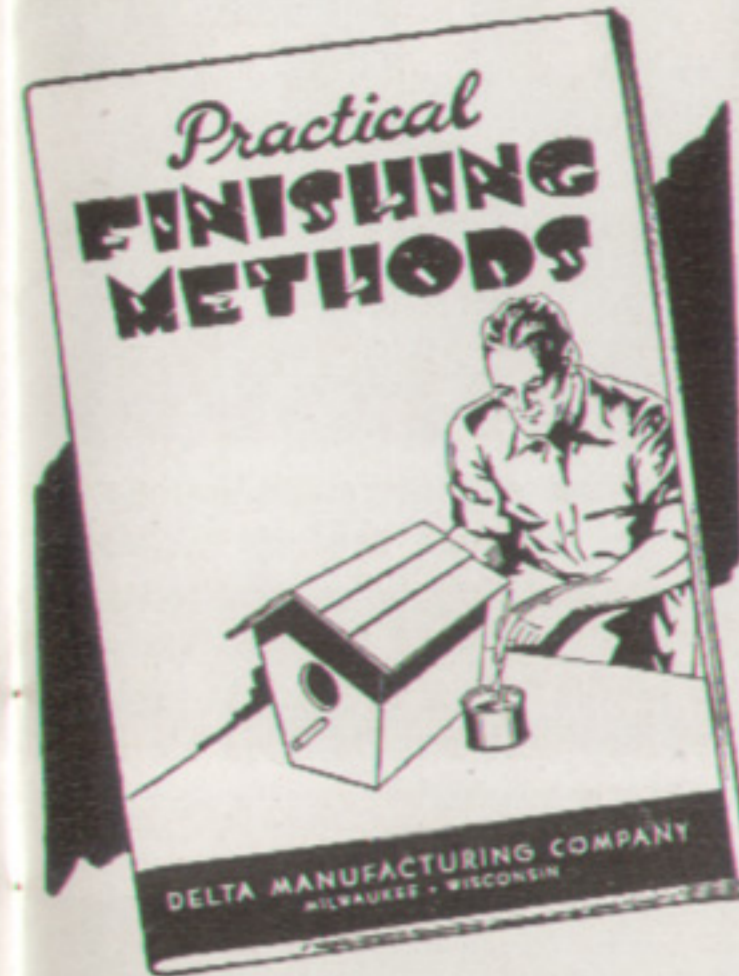
Readily attached, this chair tray makes refreshment serving simple.



hook at the bottom. This more or less grips the fabric of the chair covering and prevents the tray from tipping.

Fig. 2 shows the working portion of the tray—the sliding arm. This is held in place by means of a $\frac{1}{4}$ in. bolt which is a sliding fit in a hole drilled through a 2 in. long block which is fastened to the underside of the tray. A section cut from an ordinary hinge is fitted at the end of this block, one of the original screw holes being enlarged to exactly fit over the bolt. The hinge action must be free. It is best to

take the hinge apart and drill out one of the sections. A small spring, such as are used in drill chucks, is fitted in a small hole in the end of the block so that it will press against the spring. In use, the tray is placed over the arm of the chair and the sliding arm is pushed up tight where it is held by spring pressure.



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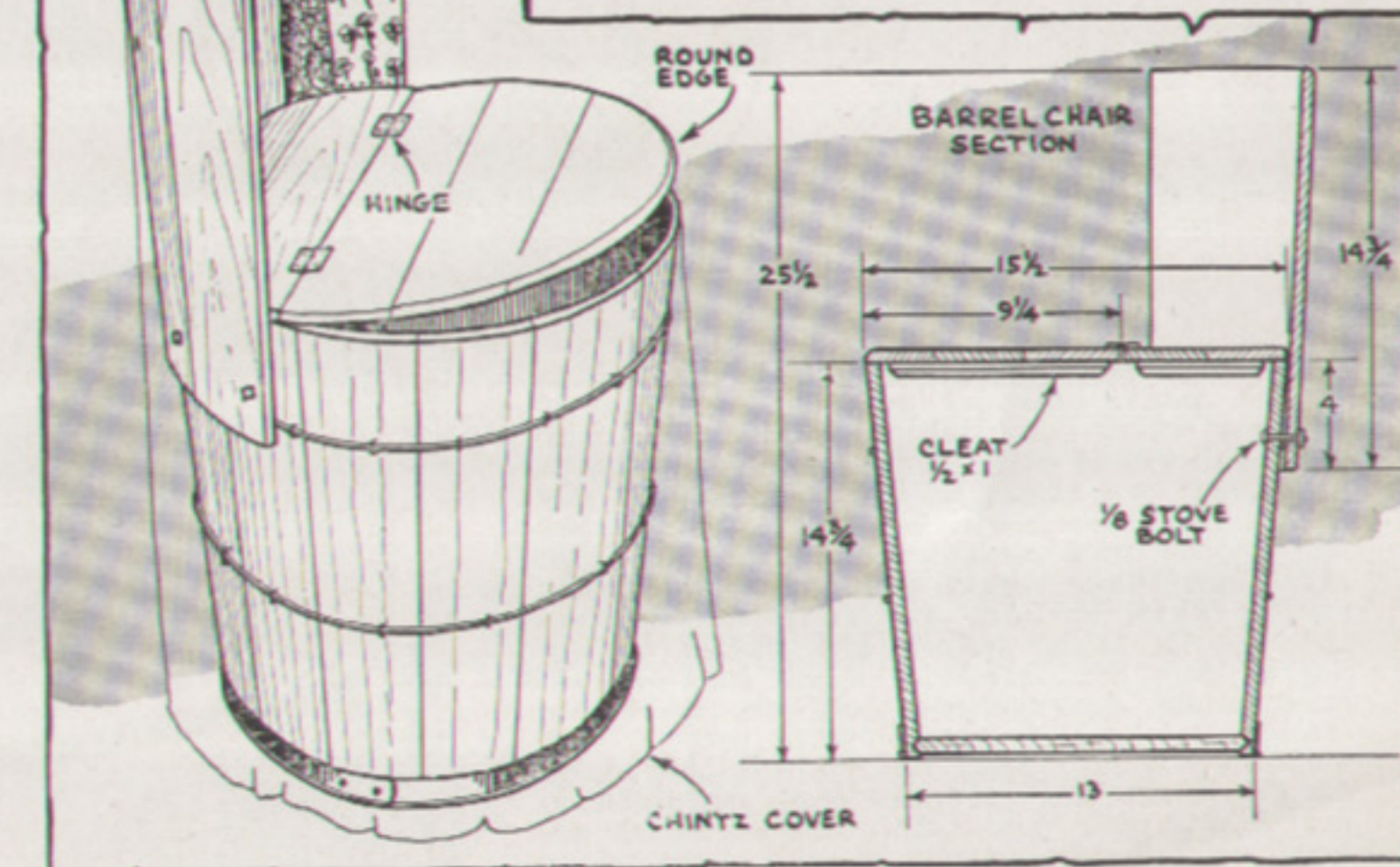
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BARREL CHAIR

FOR bedroom or bath, this barrel chair makes an attractive unit. It is comfortable to sit on while the compartment bottom provides ample storage space for dirty clothes, hats, linens, or other items. The construction is based on two butter buckets, usually available from local bakeries at a nominal cost. One of the buckets provides the seat and bottom while half of the other makes up the back, the two being bolted together, as shown in the drawing. The wood should be thoroughly scrubbed with soap and water and then wiped with benzine to remove butter oil residue. A coat of shellac in the inside is desirable. Padding is cotton felt, applied to the face of the back and rolled over the top. The rest of the wood is not padded. The chair is covered with chintz, using one piece for the back and a second piece, gathered in large pleats, for the bottom or skirt. The seat is cushioned with a separate round pad, built on one or two layers of cotton felt and covered with the same material. This makes an excellent piece when grouped with a chintz covered dressing table of the conventional design commonly available in unfinished wood from any of the large department stores.



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UNIT FURNITURE

UNIT furniture has a distinct advantage in that the various pieces can be combined to form pleasing groups. In the corner unit, the complete unit can be used in a corner, or, the cabinets can be used in other ways to produce several combinations. All pieces in this set are 28 inches high. The construction is conventional, using plywood stock and housed joints. All of the pieces need not be made at once, since any unit can be used alone until others are made.

Each Piece Complete in Itself but Designed to Permit Effective Grouping

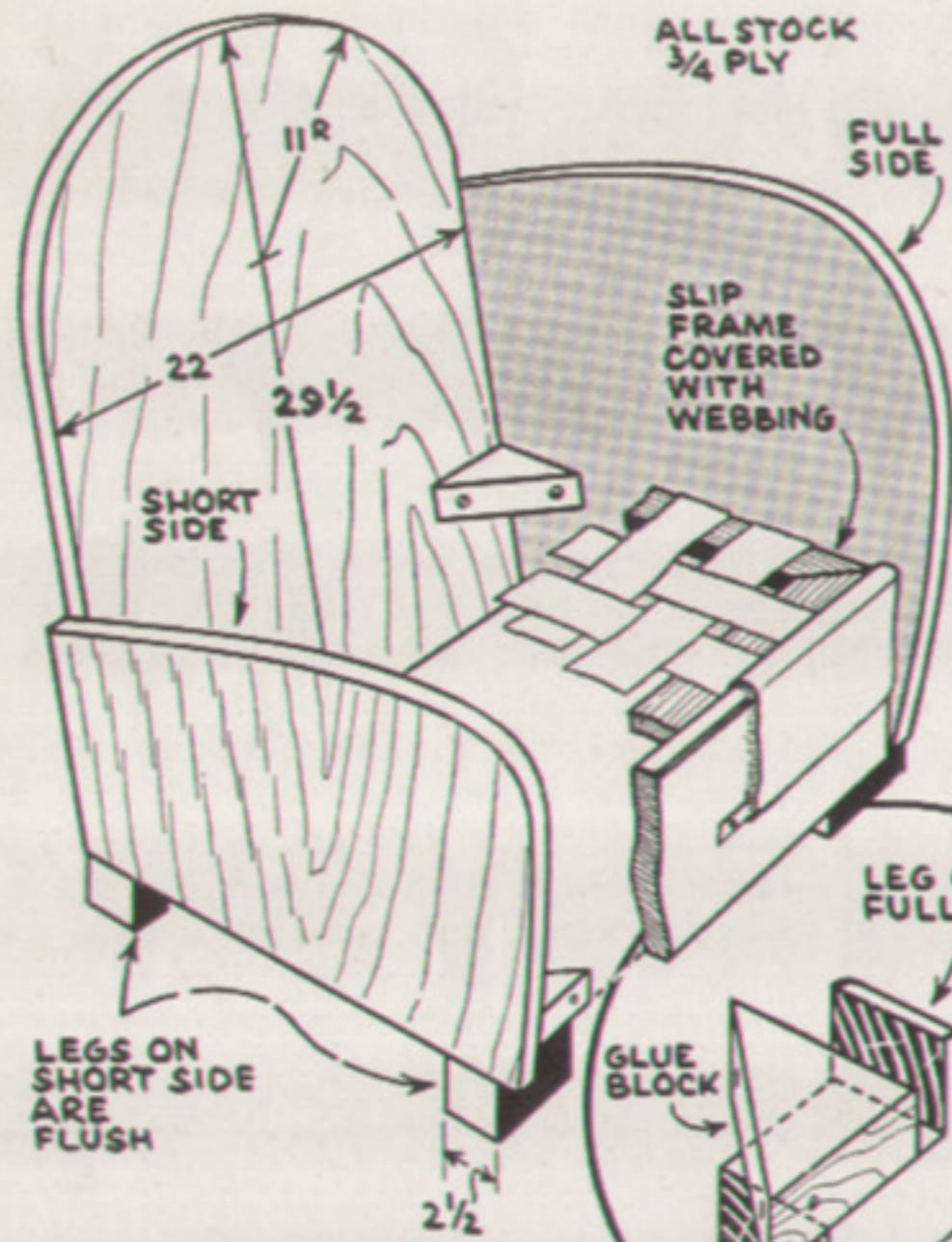


A CORNER UNIT

Two Arrangements of a Typical "TABLE and CHAIRS" UNIT



Photos by Charles Wheeler



CHAIR CONSTRUCTION

THIS smart table-and-chairs unit is made from 3/4-inch maple plywood with the exception of the legs which are blocks of walnut. The complete set would consist of one chair with two full arms, two chairs with one arm (right and left), and one chair with no arms. The sketches and photos show arrangements. The chair with short arms only would be used between two "half" chairs to form a davenport. The construction is fairly simple and should be apparent from the drawings. Chair cushions are innerspring construction, held in place by means of a slip frame covered with 3 inch webbing. Legs project on the full side only; on the short arm side the legs are flush to permit grouping with other pieces. Finish natural with all edges darkened with burnt umber to conceal end grain.

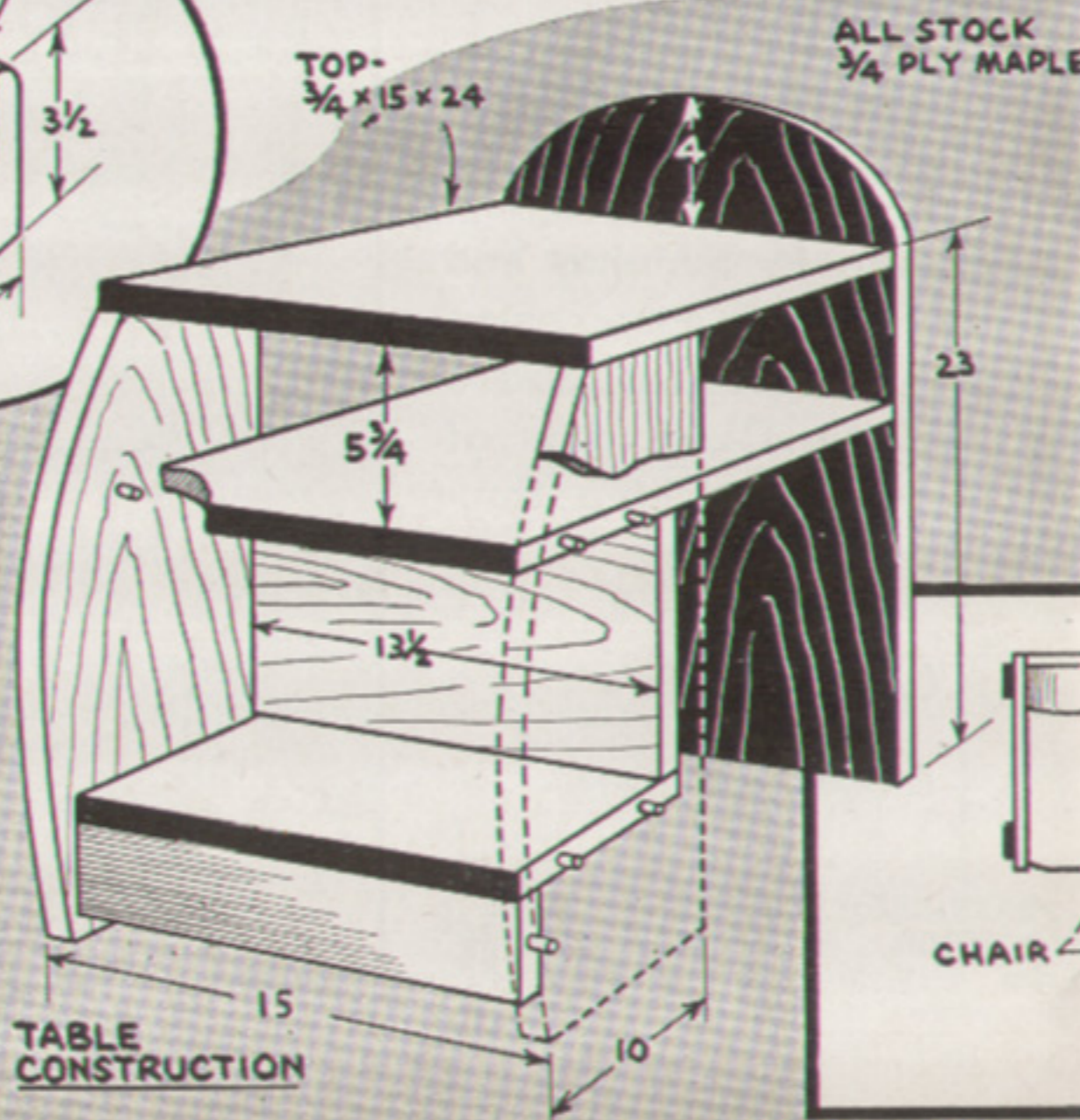
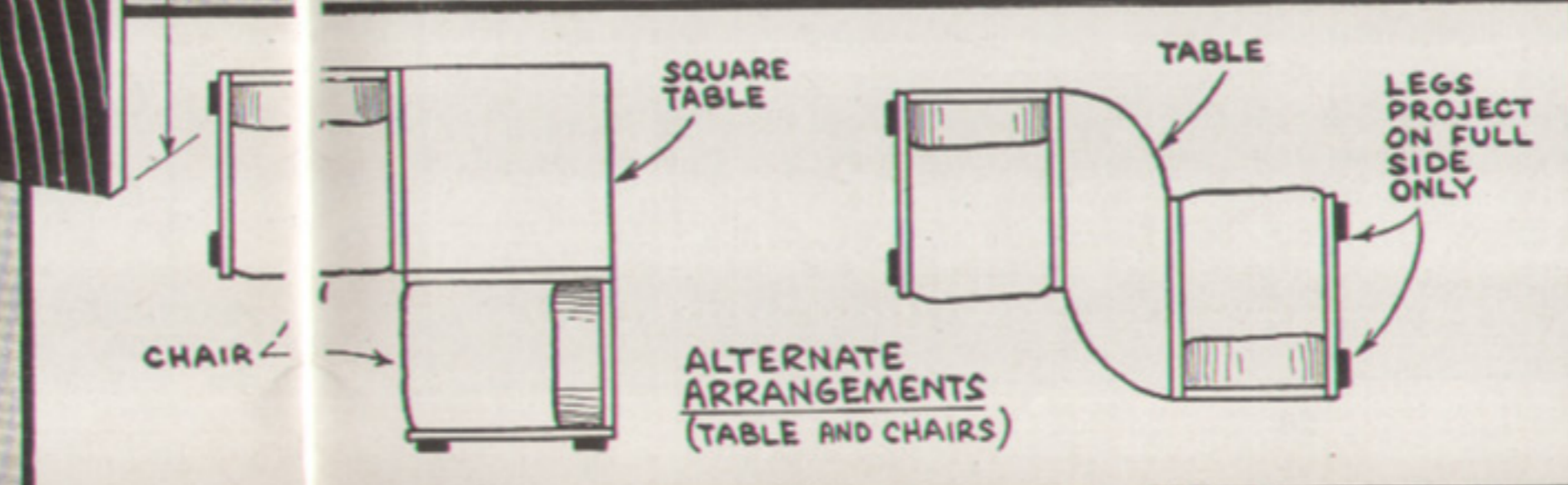
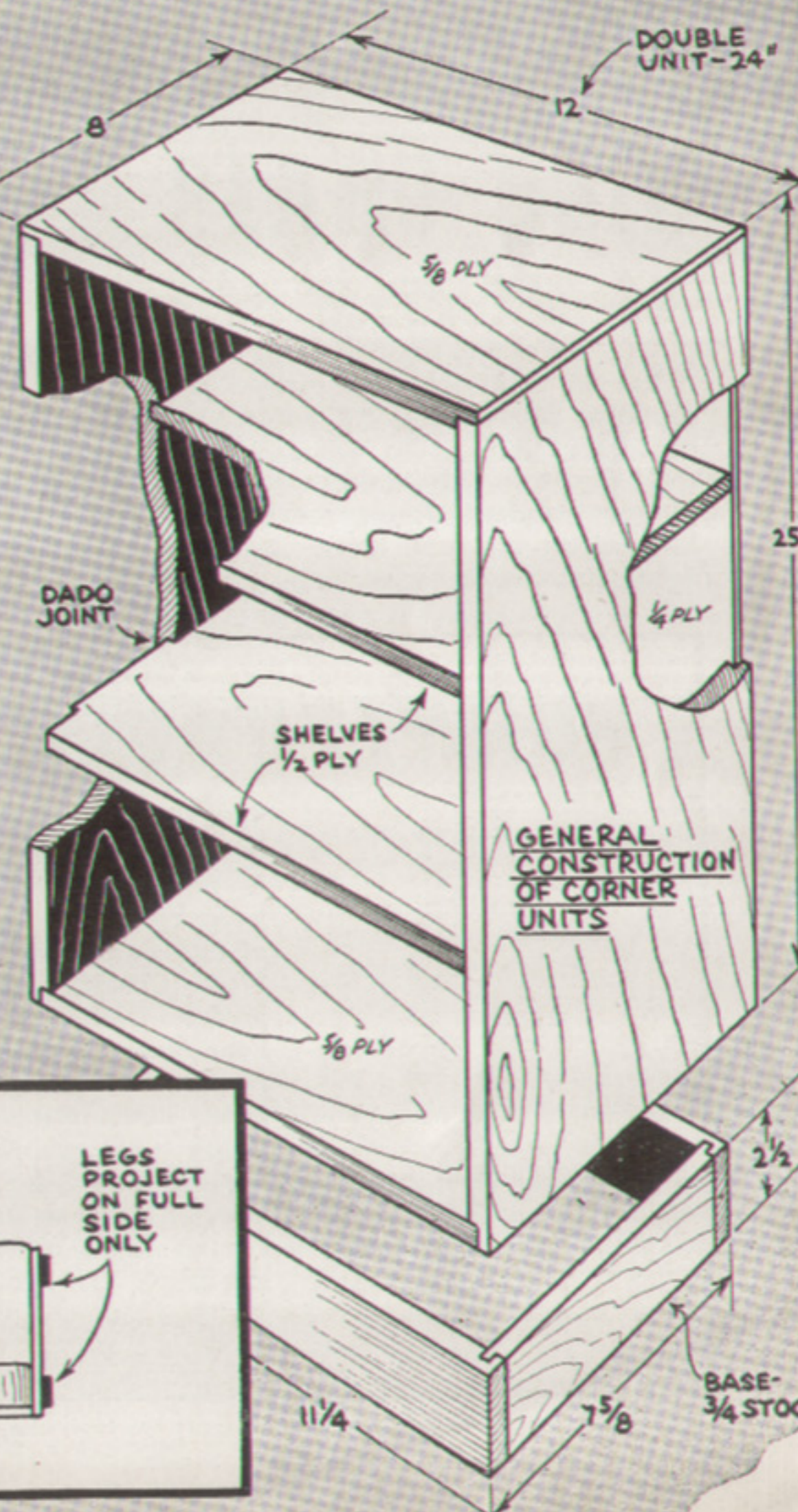
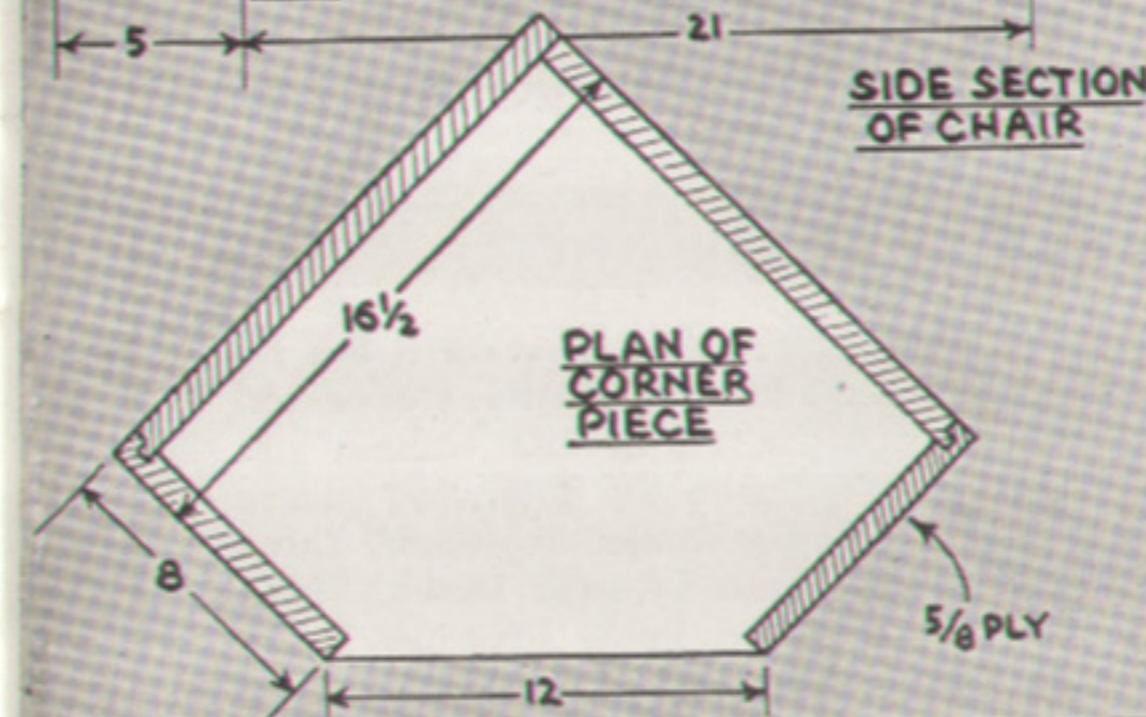
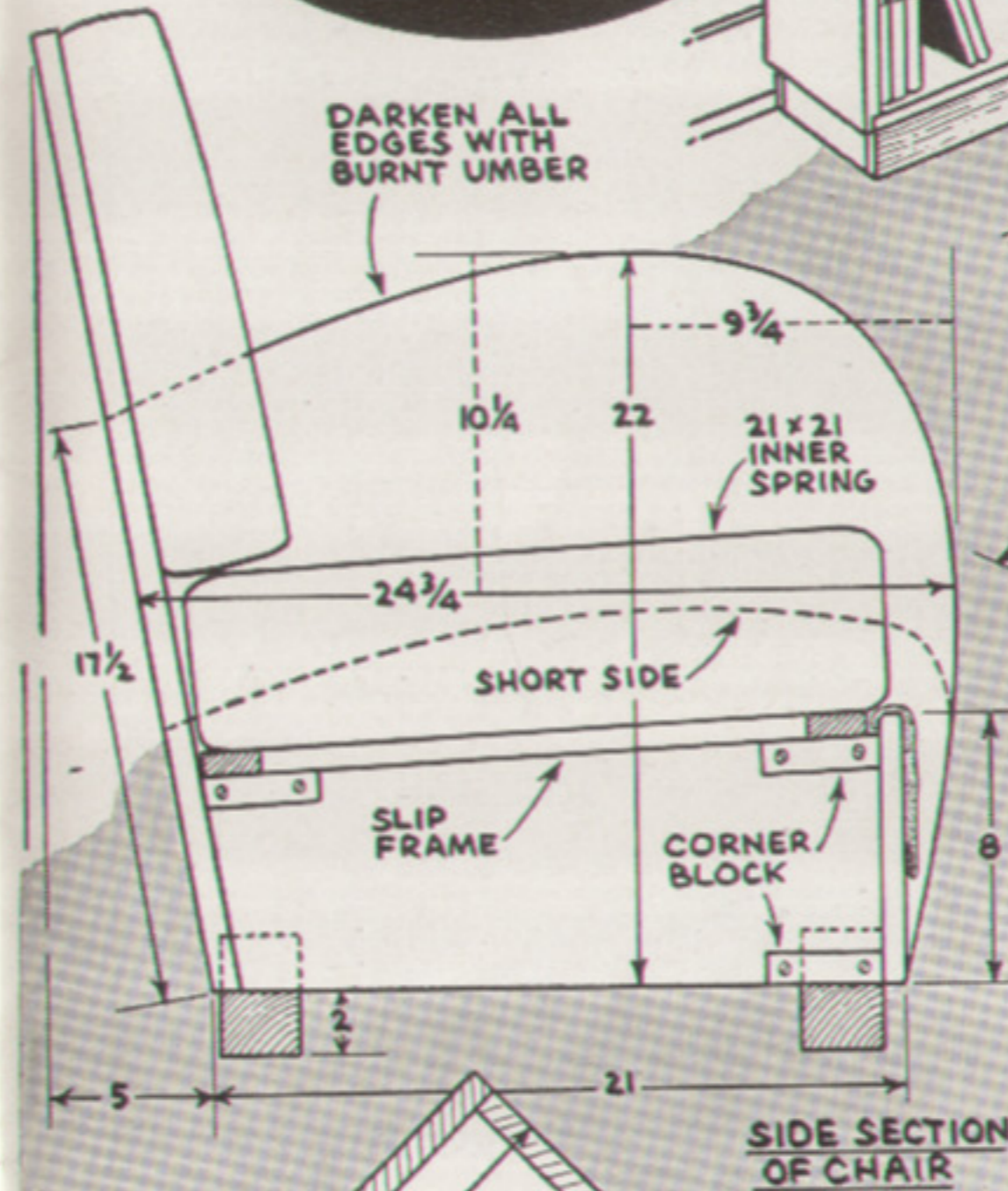


TABLE CONSTRUCTION



ALTERNATE ARRANGEMENTS (TABLE AND CHAIRS)



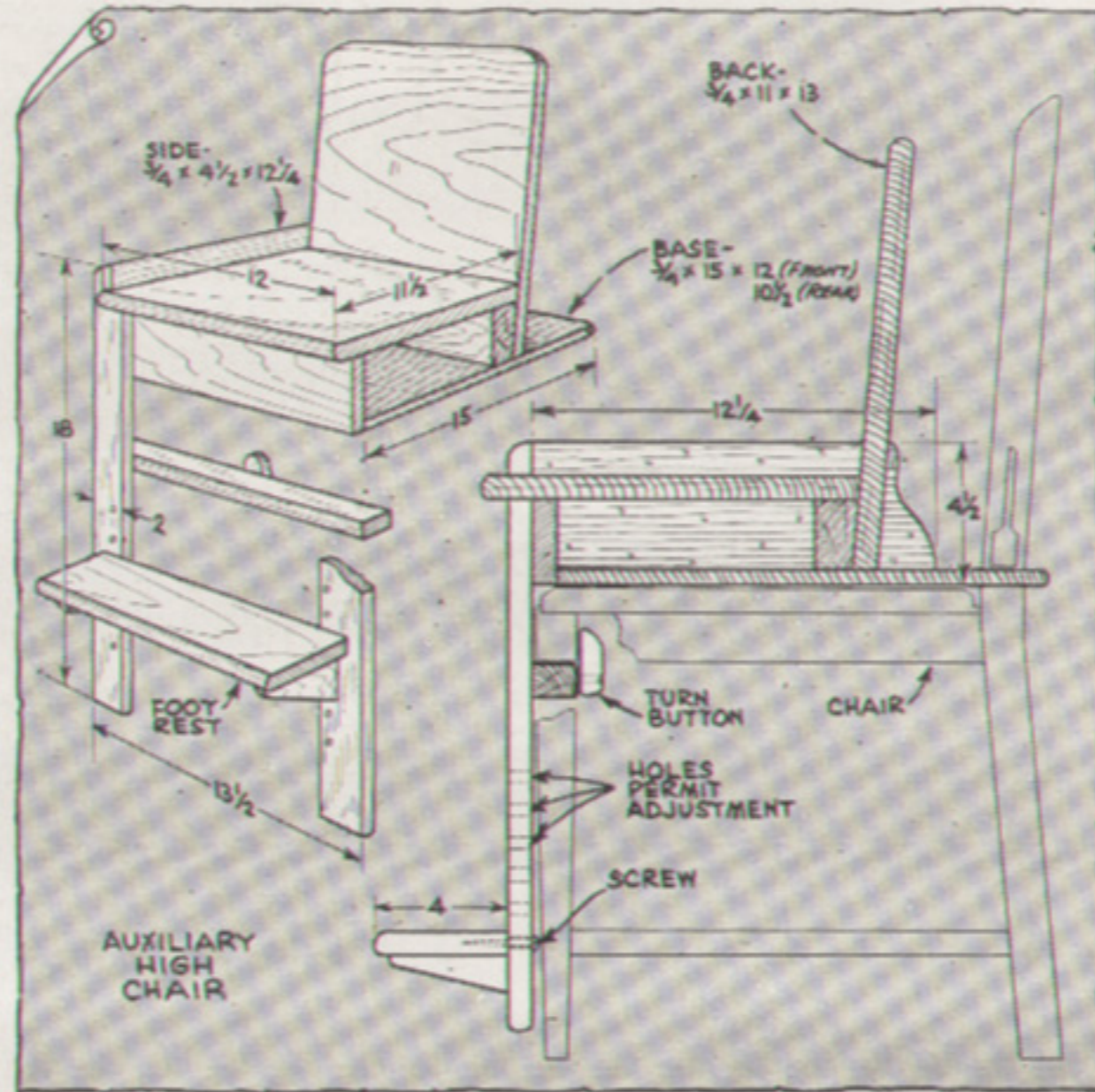
Auxiliary HIGH CHAIR

MOTHER'S "little man" can sit right up to the table with the aid of this auxiliary high chair. It has an adjustable foot rest, which supplies about the only adjustment necessary during the years of the child's growth. The unit can be fitted to any standard dining room chair. Dimensions are not given in great detail, since some variations may have

to be made to suit individual cases.

As can be seen in the photo and drawings, the base of the chair is made sufficiently long so that it will slip under the rail on the back of the dining room chair. A turn cleat on the front of the unit fastens it securely in place. The foot rest is fastened in place by means of screws fitting through the leg pieces, the height of the foot rest being changed from time to time as required.

The chair should be finished to match the dining room furniture, although a painted finish would not be out of place under the circumstances. All edges should be carefully rounded over, not only as a protection to the child but to prevent possible marring of the dining room chair on which it is used.—C. V. Simpson.



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Maple BREAKFAST SET

THIS practical set for breakfast nook or dinette features a draw top table which gives excellent accommodations with a minimum of bother in making the extension. With the top partly drawn, as shown in one of the photos, the extension makes a comfortable arm rest for perusing the morning paper.

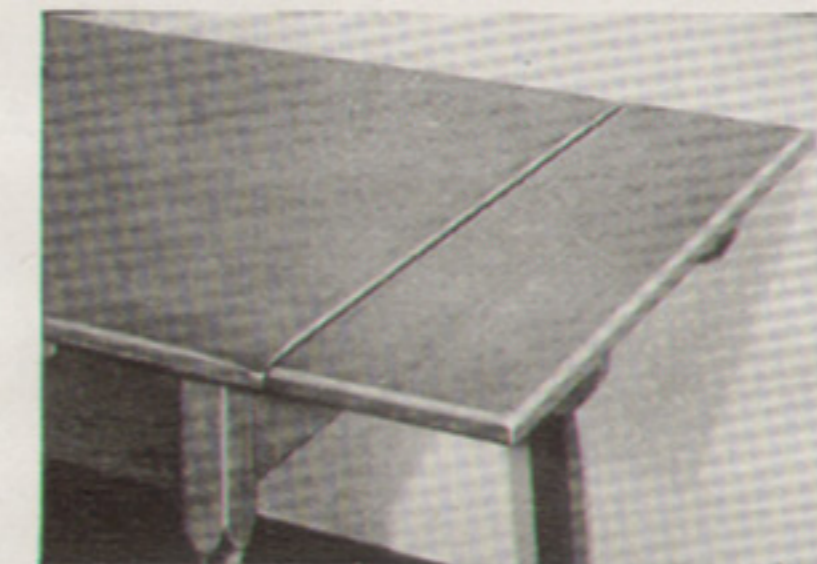
The manner in which the extension is made is a bit different than the usual draw top table. As shown in the lower photo, each leaf is attached to two supports. These supports are fitted with metal pins, the pins riding in a pair of grooves cut in the two longitudinal members of the frame. In order to work properly, it is necessary to fit the pins in correct relation to the grooves. Best results can be obtained if a full-size drawing is made of the support and bearer, as shown in Fig. 2 on the following page. If a paper pattern is made of the support, the pattern can be manipulated over the drawing of the bearer, thus checking the pin positions and the shape of the track.



A delightful set in Colonial styling for the breakfast nook or dinette.



DRAW TOP PARTLY OPEN.

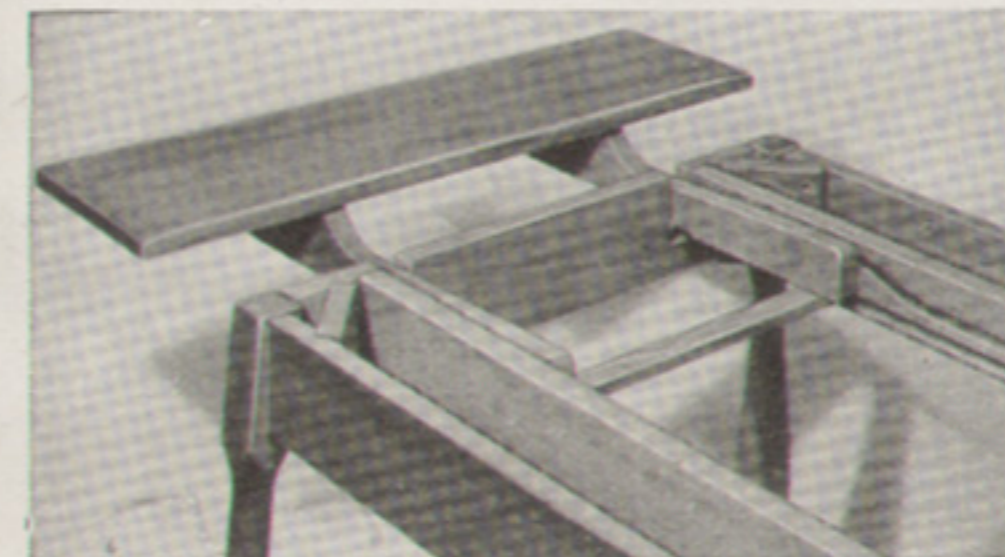


DRAW TOP IN EXTENDED POSITION.

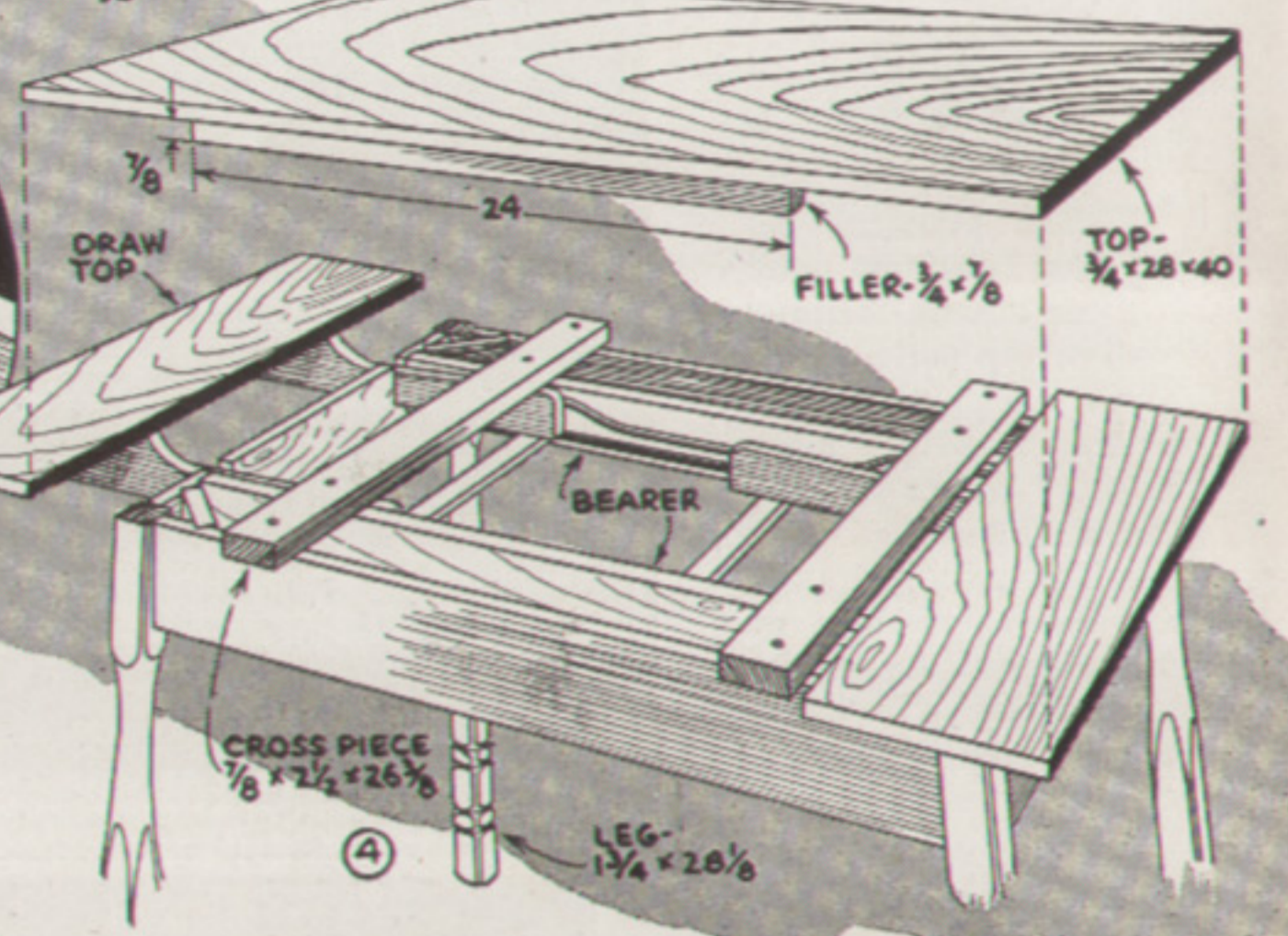
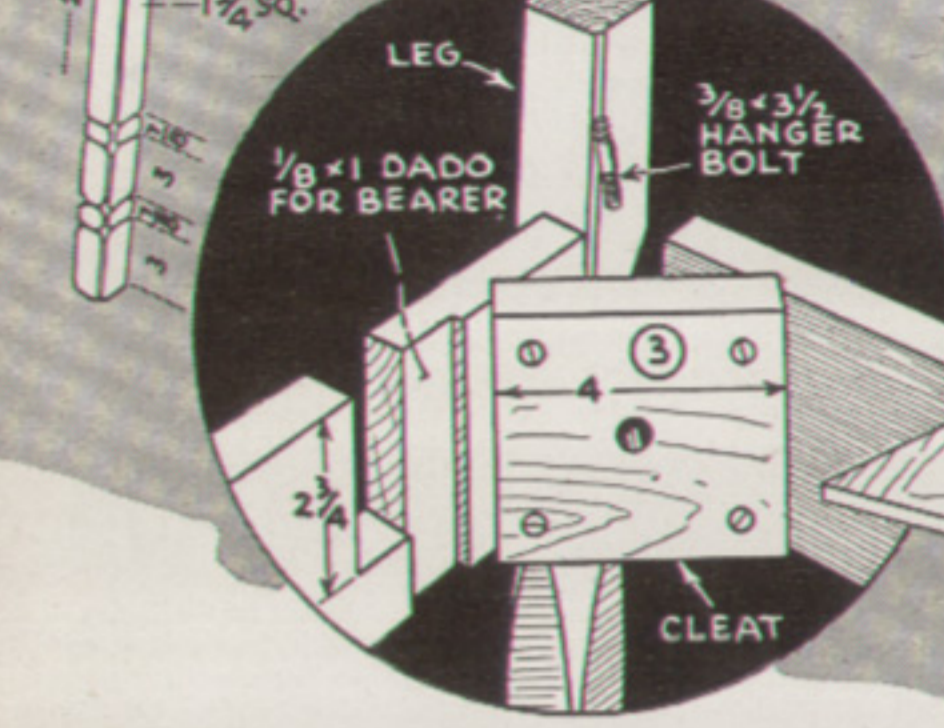
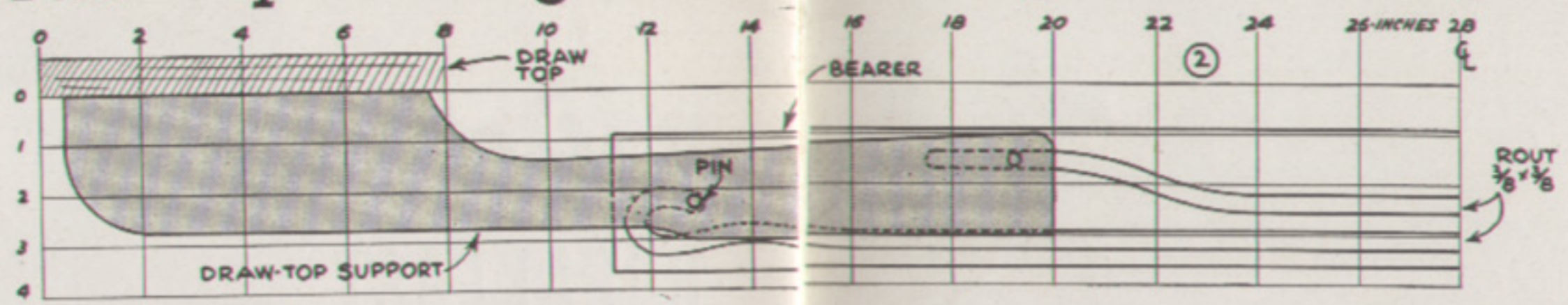
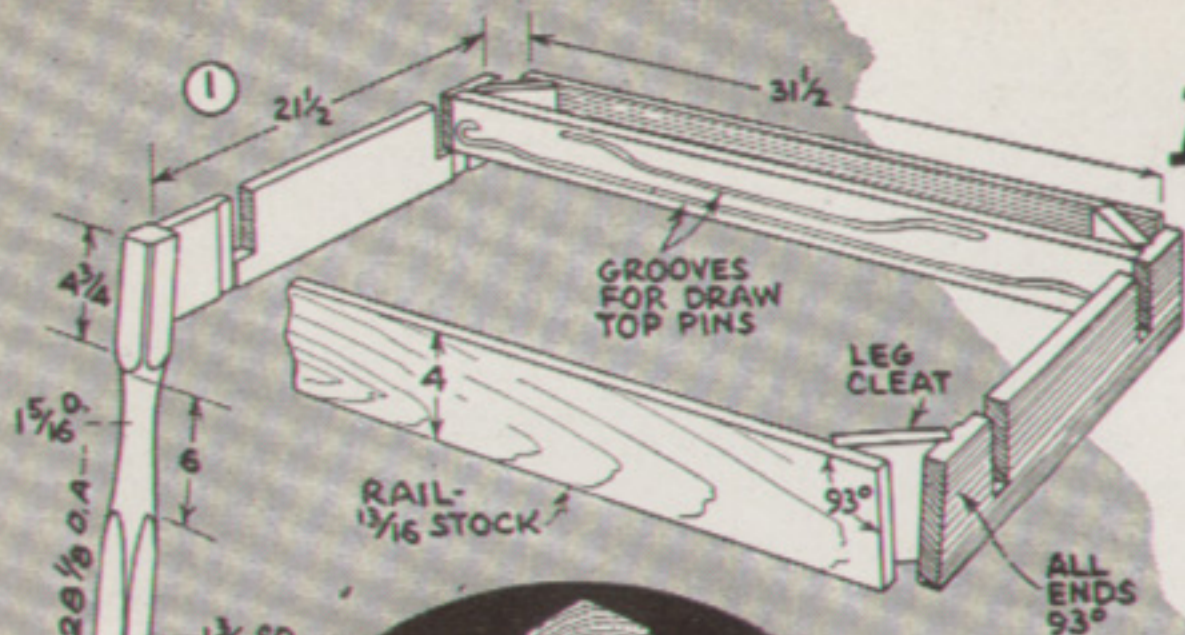
It is obvious that each track must have the same amount of "lift" (7/8 in.) so that the draw top will be level with the main top when extended. Once the correct shape of the track has been plotted, it is a simple matter to cut a plywood pattern and rout the grooves on the drill press.

Fig. 1 shows the general construction of the table framework, which is quite simple. The ends of the rails are cut with the saw table level, but with the gage set over 3 degrees. This gives the legs the required outward tilt. The leg stock is 1 3/4 inches square.

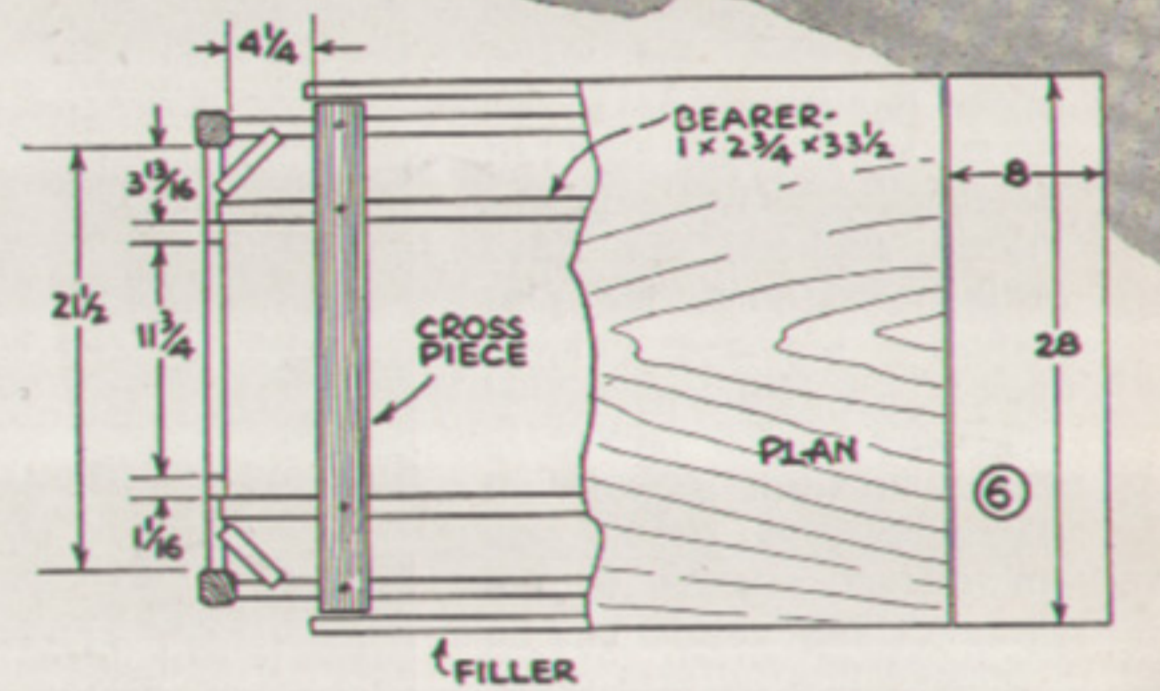
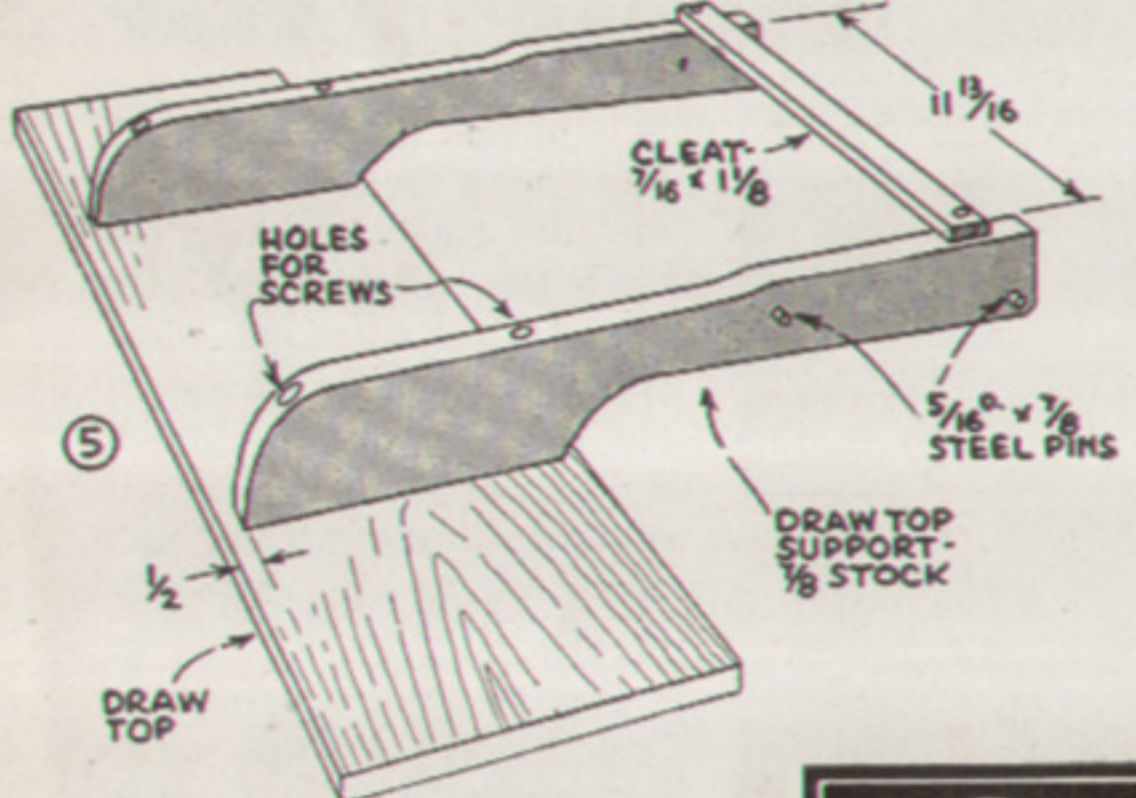
Each piece should be very carefully centered, since the turning is largely confined to knocking off the corners. After turning, the legs are cut to the proper length with a compound cut, the saw table being tilted 3 degrees and the miter gage set over 3 degrees. Each leg is held in place by means of a hanger bolt fitting into a cleat which spans the rails. This is a simple and substantial method of construction, but can be discarded in favor of dowelled or tenon joints if desired. Through



Draw Top Arrangement Is Simple and Foolproof



THE legs are fitted in place by means of a hanger bolt, as shown in the drawing above. Dowelling or tenoning can be substituted if desired. The location of the pins in the draw top supports, below, is best obtained by making a full-size plan of Fig. 2.



dowels are particularly simple to fit, and, if plugged, fit in nicely with the colonial motif.

Both bearers are sawed to fit and routed to take the pins in the draw top supports. The bearers are fitted into shallow dado cuts on the inner side of the end rails, adjacent to the openings which take the supports. Each bearer is held with two screws, one at each end, inserted through the rail near the top edge. Fig. 4 shows the assembly of the extension leaves. It will be necessary to remove one of the supports from each leaf to permit fitting, after which the support is again screw-fastened in place. Two cross pieces are fitted in place across the table, the main top being screw-fastened to these.

The chairs are made up as shown in Figs. 12, 13, and 14. It is advisable to draw a rough full-size plan, showing all centerlines, before sawing wood. It will be noted that the legs and back spindles are approximately the same, but vary a little in length. As with the table, the turnings are worked from the square into the round. The shaping of the chair seats can be easily done by mounting the work on the outer end of the lathe, as shown in Figs. 7 and 8. After turning, the edges are well sanded down, especially toward the front edge. Compound band sawing is required in making the headpiece. The face shape is first cut out, after which the work is cut 3/8 in. thick to the curved shape.

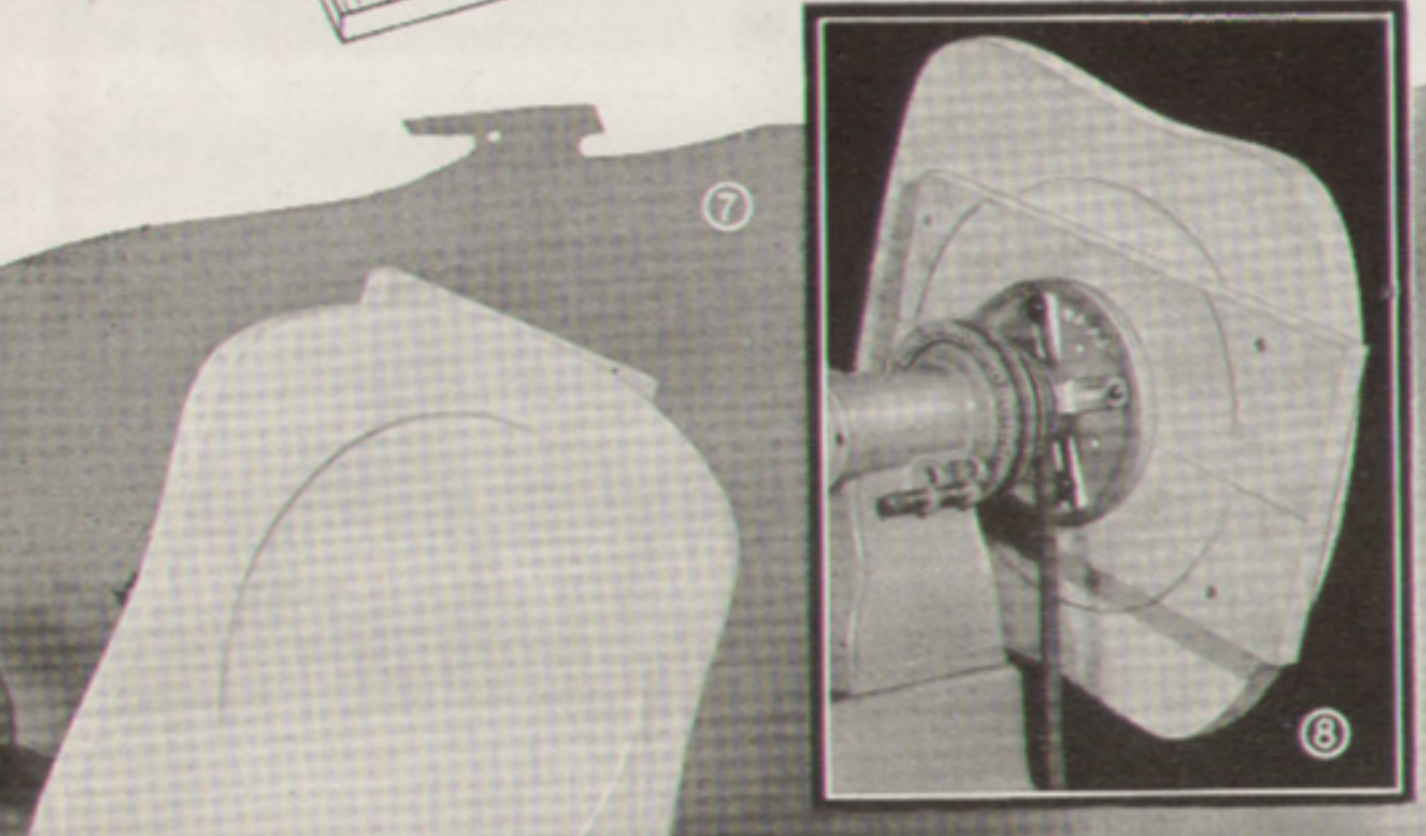
Drilling the various holes at compound angles in the seat, as required for the legs and back spindles, is the most troublesome job in making these chairs. The set-up is somewhat simplified



A pattern of the grooves in the bearer is made to permit routing on the drill press. Since the work is symmetrical, the pattern need be only a little over half full length.

by the angles and lines shown in Fig. 12. In each case, the drill table is tilted as indicated. The line drawn from the hole should be lined up with the drill. This takes care of the compound angle without the need of blocking up one edge of the work.

The finish on all pieces is most easily done with two coats of shellac followed by a coat of wax. A water or oil stain should be used to give the wood a pleasing red-brown tone. The edges of the table should be sanded to give the appearance of wear, especially at the corners. Two or three narrow strips of felt should be glued on the underside of the main top at either end so that when the leaves are returned to position they will not be scratched on the underside of the main top.



THE shaping of the chair seats is easily done by mounting the work on the outer end of the lathe spindle.

