## TAKE IT EASY

A classic redwood recliner for deck, patio or pool.



Being equipped for warm weather fun doesn't just mean that you know where your tennis racket is or that the pool toys are inflated and afloat. For many of us, fun in the sun takes on a more civilized quality, where time is spent motionless–or nearly so–and the height of activity amounts to turning a page or lifting the nearest icy drink.

Like our more athletic friends, though, we need the right gear. And once the cooler is filled, the Ray-Bans are in place and the sun-screen's at hand, everyone knows what's needed next–a comfortable place to lay back and soak up the rays.

Our outdoor chaise lounge (or more properly, chaise longue, meaning "long chair" in French) is more than just a platform in the sun. In addition to being built to stand the abuses of the weather, it's portable, so you can follow the sun if you wish, and its three-position back suits everything from reading to cloud gazing. For creature comfort we added a long cushion, but with the chaise back fully lowered and the cushion removed, the unit converts to an attractive bench for your deck or poolside. The cushion we used is available from Gardener's Eden, P.O. Box 379907, Las Vegas, NV 89137; 800-822-9600. (Order No. 69-1611235.)

We built the chaise frame, backrest and back support out of solid redwood and assembled the components with

stainless steel bolts, nuts and washers. To maintain the original color of the wood, we applied a sealant/preservative finish.

Redwood is available at many lumberyards, home centers and specialty lumber dealers. The highest grade is called "clear, all heart, vertical grain." Like pine, redwood comes in nominal sizes. However, the actual thickness of the stock will be less. For example, 1x redwood stock will be about 11/16 in. thick and 5/4 redwood will be about 1-in. thick.

## **Building The Frame**

Rip 5/4 stock to width for the side rails and crosscut the rails a few inches longer than the finished dimension. Make a pattern of the rail-end shape from 1/4-in. plywood and trace the shape onto each rail (Photo 1). Use a sabre saw to cut the rail-end profiles and remove the saw marks with a spokeshave and sandpaper.

Lay out the mortises for joining the legs to the rails. Then, use a plunge router with an edge guide to make the cuts (Photo 2). Rout each mortise in several passes to avoid overloading the motor and bit. Square the mortise ends with a sharp chisel.

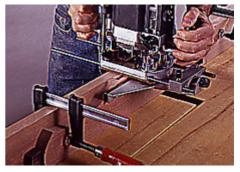
Cut the legs and crossrails to finished size. Then, install a dado blade in your table saw and make the broad tenon cheek cuts on the two faces of each piece (Photo 3). Next, cut the tenon shoulders in the same way.

Lay out the crossrail mortises on the leg inner faces. Rout the mortises and square the ends with a chisel. Test fit all the mortise-and-tenon joints to make sure they're snug yet go together without excess force.

Make a template for the leg bracket and trace the shape onto redwood stock. Orient the template so



1--Make a 1/4-in.-thick template for the rail-end shape. Then trace the shape onto both ends of each rail blank.



2--Use a plunge router with edge guide to cut mortises for the legs. Clamp rails side by side to provide good router support.



3--Cut the leg tenons with a dado blade and table saw. A stop block clamped to the miter gauge ensures consistent tenon lengths.

the grain of the stock runs diagonally and cut out the brackets.

Mark the joining-plate positions on the legs, brackets and side rails. Clamp each piece to your bench to cut the slots (Photo 4). Hold the plate joiner against the benchtop to ensure accurate slot registration.

Spread glue in the plate slots of a leg and adjoining bracket, and spread glue on the plate. Assemble the parts, clamp and repeat the process on the other legs (Photo 5).

Prepare to join a leg/bracket subassembly to a rail by spreading glue on the mortise-and-tenon joint mating surfaces, in the two plate slots and on a joining plate. Join the leg and bracket to the rail and clamp (Photo 6). Repeat the procedure for each leg.

Rip 5/4 stock to width for the rail cleats, and cut them to length so their ends match the rail ends. Lay out the angled notches for the back-support assembly, make the cuts and sand each notch to remove the saw marks.

Use an exterior glue and galvanized screws to fasten the cleats to the side rails. Countersink the screwholes so the screwheads are just below the wood surface (Photo 7).

Mark the locations of the carriage bolts that fasten the chaise back to the side rails and bore the holes through the side/cleat subassembly.



4--Cut plate joint slots for attaching the brackets to the legs and rails. Register the joiner and work against bench surface.



5--Apply glue to the joining-plate slots and the plates, and join each bracket to a leg. Clamp until the glue sets.



6--When leg/bracket assemblies are finished, join them to the rails. Apply glue to plate and mortise-and-tenon joints, then clamp.



Apply glue to the crossrail joints, assemble the base frame, and clamp until the glue sets.

## The Back And Slats

Cut the backrest cleats and support legs to size. Use a sabre saw to trim the ends of each piece to the profiles shown in the drawing. Then bore the bolt holes and join the support legs and back cleats with the bolts. Use one flat washer between each leg and cleat (Photo 8). 7--After cutting rail cleats to length and shaping backrest notches, glue and screw each cleat in place on its rail.



8--Use carriage bolts to join the backrest cleats to the support legs. Use a washer between parts to create 1/16-in. space.

Rout the long edges of each slat with a 3/16-in.rad. rounding-over bit. Bore screw pilot holes in each slat and counterbore for 3/8-in.-dia. plugs to cover the screws.

Install the bolts to hold the back cleats to the frame sides. Use three washers between each back cleat and main side-rail cleat. Clamp the cleats to the chaise sides. Then screw the first slat to the back-support legs (Photo 9).

Use 5/16-in. blocks to space the slats and screw each slat in place (Photo 10).



9--Bolt the backrest and support leg assemblies to the rails. Align and clamp the parts while attaching the first slat.



10--Use 5/16-in. blocks between slats to create uniform spaces and screw slats in place. Keep ends of slats 1/16 in. from rails.

Bevel the last slat on the back to provide clearance for the back to move to the highest position. Leave a 1-in. space between the beveled slat and the first slat on the chaise seat (Photo 11).

Use a 3/8-in.-dia. plug cutter in a <u>drill</u> press to cut plugs for all the slat screwheads. Glue the plugs in place so the grain of each aligns with the slats (Photo 12). Saw each plug close to the surface, and pare flush with a sharp chisel.

Lay out and bore the holes in the legs for mounting the wheels as shown in the drawing. Then, cut these legs 3 in. shorter (Photo 13).

Use a file or small grinding wheel to remove the square shoulder on two  $1/2 \times 4$ -in. carriage bolts. Then install the wheel with the modified bolts, washers, lock washers and nuts (Photo 14).

Sand all surfaces with 120- and 220-grit sandpaper. To protect the redwood, we applied a coat of Cabot's Decking Stain (No. 1400, clear). Let the finish thoroughly saturate all surfaces and allow it to dry at least 48 hours.





12--Use a small brush to spread glue on plugs. Align plug grain with grain of slat. Trim plugs with a fine saw and a sharp chisel.



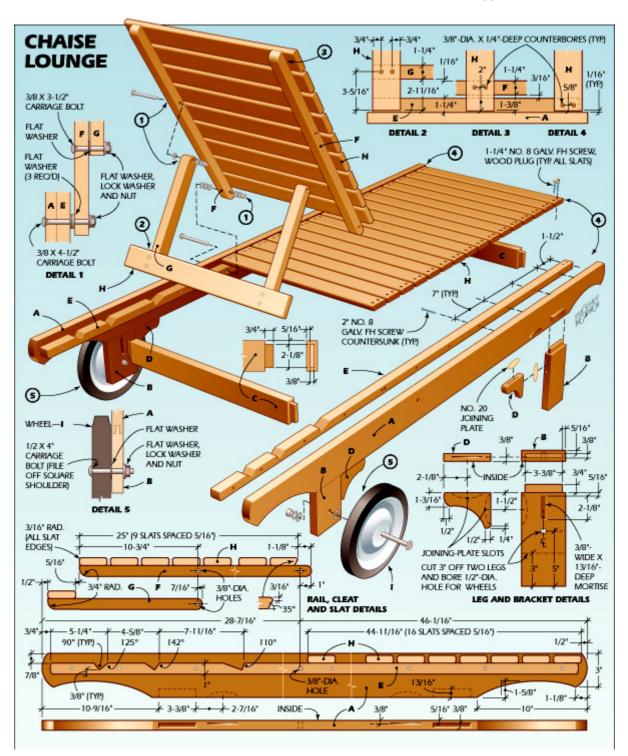
13--To provide clearance for the wheels, cut 3 in. from each rear leg with a sabre saw. Smooth the sawn edges with sandpaper.



14--After filing away the square shoulder on 1/2-in. carriage bolts, use the bolts as

axles to support the wheels

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MATERIALS LIST—CHAISE LOUNGE			
Key	No.	Size and description (use)	
Α	2	1 x 4 x 74 1/2" redwood (side)	

В	4	1 x 4 x 9 1/4"* redwood (leg)	
С	2	1 x 2 3/4 x 25" redwood (crossrail)	
D	4	11/16 x 3 1/4 x 4 1/4" redwood (brace)	
E	2	1 x 1 1/4 x 73" redwood (side cleat)	
F	2	1 x 1 1/4 x 26 1/8" redwood (back cleat)	
G	2	1 x 1 1/4 x 14" redwood (support leg)	
Н	26	11/16 x 2 1/2 x 23 3/8" redwood (slat)	
Ι	2	10''-dia. wheel, No. BTP110**	
Misc: 1/2 x 4" carriage <b>bolts</b> ; 1/2" flat washers, lockwashers and nuts; 3/8 x 3 1/2" carriage bolts; 3/8 x 4" carriage bolts; 3/8" flat washers, lockwashers and nuts; 1 1/4" No. 8 fh galv. <b>screw</b> ; 2" No. 8 fh galv screw; 3/8"-dia. redwood plugs; No. 20 joining plates.			

\* Cut two legs 3'' shorter for wheels. \*\* Available from Frey The Wheelman, 110 Savannah St., Rochester, NY 14607.