



*Although this sectional couch was designed in 1988, it may well have originated in 1911 from the same Prairie School architects, Purcell, Feick and Elmslie, who designed the house in which*

*it sits. All the elements of the couch are based upon an architectural style that was first developed by Louis Sullivan but made internationally famous by Frank Lloyd Wright.*

# An Eighty-Year Collaboration on a Prairie-Style Couch

*Comfortable seating echoes architectural elements*

by Scott Dickerson

In 1911, the architectural firm of Purcell, Feick and Elmslie designed a bungalow for Harold C. Bradley on the Crane Estate in Woods Hole, Mass. In 1988, Max Burger, the current owner, contracted me to design and oversee the making of a couch for the residence. Thus began a collaboration between the owner, a contemporary furniture designer, a woodworker, an upholsterer and the architects—whose voices, long stilled, nevertheless spoke eloquently from the style of the house and the record of their work.

Purcell, Feick and Elmslie was one of the most vigorous firms advocating the Prairie School, a style that was originated by Louis Sullivan and led to international recognition by Frank Lloyd Wright. This dynamic style brought American architecture out of the repetitious, derivative designs of the 19th century into a bright, transcendent redefinition of form and space. The spiritual and intellectual energy of the Prairie School architects initiated modern expression in American buildings. Purcell, Feick and Elmslie took a very active role in this evolution of ideas and materials. The firm's commissions were diverse and many including

the execution of over 70 banks, courthouses, residences, churches and other buildings from 1909 to 1920.

The commission for the Bradley bungalow specified a modest seasonal home, but it has become the best known of the Purcell, Feick and Elmslie residences. The site is on the knoll of a narrow, grass-and-juniper covered peninsula that defines the eastern side of the Great Harbor of Woods Hole. The dramatic setting, regal in its view of the sea and islands, is also the dominant view of seafarers. In keeping with the site, the architects created a corresponding visual statement. The strong symmetrical breadth of the roof overhanging the crisply cut upper floor and semicircular living room, defines a lifting form that appears to float above the knoll. Because of its appearance, the bungalow soon became known as the "Airplane House."

Wood is the principal material of the interior. Cypress paneling on the walls and ceilings of the semicircular living room has aged to a rich golden hue. Exposed roof beams, purlins and rafters are decorated with small, fretsawn panels. The board-and-batten walls

are punctuated by the distinctive slat-and-block lattices of heating registers and stair balusters. The floors are a darkly stained, quartersawn white oak.

A window seat lighted by casement windows follows the semicircle of the room perimeter. Each of the windows is glazed with a border of leaded, stained and clear-textured glass, which can be seen in the photo on p. 86, as are the doors to the adjoining built-in bookcases and those leading to other rooms. The effect brightens the absorbent darkness of the dominant wood.

At the base of the semicircle is a massive fireplace, laid in long, thin blond bricks, as shown in the photo on the facing page. The radially bricked arch of the large open hearth repeats the semicircular plan of the room. On the back face of the fireplace is a cypress shelf with attached lamp fixtures on sawn-wood pedestals.

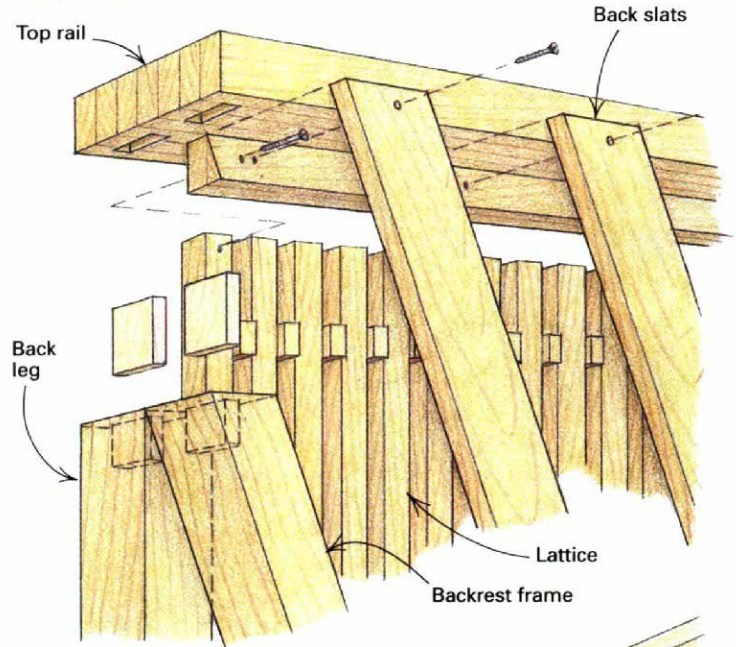
### Establishing design parameters

Any furniture that might have been designed by the architects for the house has long since departed. Burger, the owner, told me my task was to create a seating design for the room that would be "as if Purcell, Feick and Elmslie had made it but more comfortable." The reference to comfort is a reflection of Prairie School philosophy that emphasized the visual statement of the seating rather than the ergonomic details.

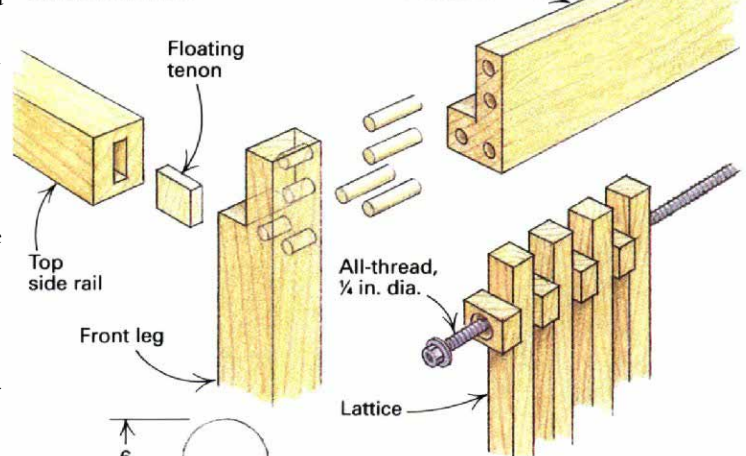
We sat through the evening on the casual sofas that then served the living room, discussing the house, the architects, the materials and eventually, the form of the seating. Burger conceived the plan view of the seating to be like the Greek letter omega, with the open side of the letter facing the fireplace. The seating would be composed of six units, each of two-person capacity, which could be separated into different arrangements or assembled into the continuous omega. Some sections of the couch should be long enough for lying down. He also wanted built-in lighting and table surfaces between the sections that included hidden storage. To be sure the seating blended with its surroundings, Burger thought the sections should be made of oak or cypress and should include some of the design details of the house.

In the morning, I measured the room and all the appropriate ar-

#### Joinery detail A

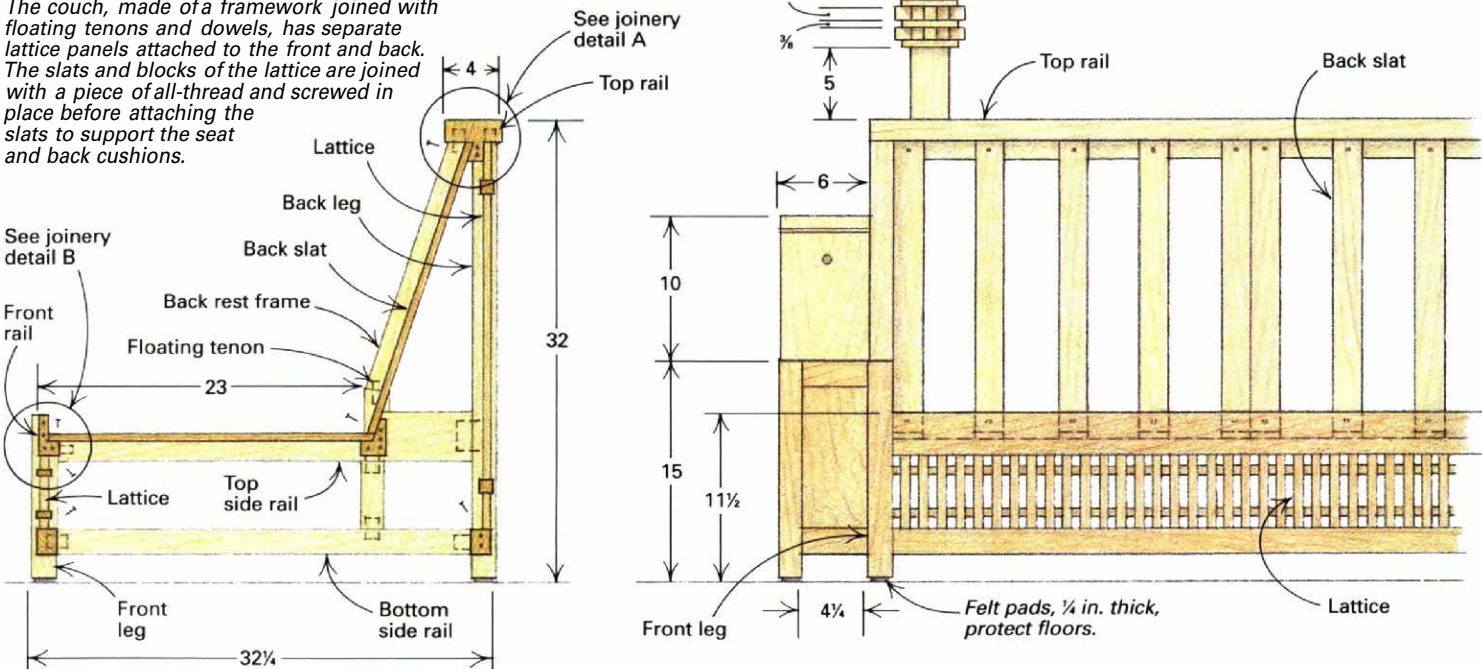


#### Joinery detail B



### Prairie school style couch

The couch, made of a framework joined with floating tenons and dowels, has separate lattice panels attached to the front and back. The slats and blocks of the lattice are joined with a piece of all-thread and screwed in place before attaching the slats to support the seat and back cushions.



chitectural details that could become part of the seating design. I also photographed the house, both inside and out. We then arranged a series of chairs in the omega shape in front of the fireplace, which gave us a good perspective on the scale of the proposed seating. It was evident that the seating should reflect the semicircular room plan and the arch of the fireplace opening with the open end of the omega running the full width of the hearth. We also discovered that the dimensions Burger had in mind were too large for the scale of the room and would not create a compact seating arrangement conducive to conversation.

## Designing for harmony and comfort

Working with these concepts, I distilled our discussions to a few essential, spare forms consistent with the architectural style of the house. The omega form superbly mirrored the arch of the fireplace and the semicircular plan of the room. It also met the request that the couch have some portions available for lying down and others that would bring people together for conversation. Although the reduced scale of the omega precluded making the units in front of the fireplace large enough for lounging, I was able to include space under the seats for occasional storage.

Original Prairie School seating designs are rigidly angular, with proportions, forms and materials serving the eye of the architect more than the comfort of the user. To satisfy the architects' perspective, I designed the exterior faces of the couch in a vertical, rectilinear style. The design and proportions were based on measurements I had taken of the slat-and-block lattices of the stair balusters and heat registers. The top rail on the back of the couch reflected the tops of the adjacent bookcases, the window sills and a fireplace shelf that had built-in lamp fixtures. By incorporating all these elements, the couch design, as shown in the photo on p. 84, reflects the design motif of Purcell, Feick and Elmslie.

Comfort was created by designing support cushions that fit inside the couch frame with the proper proportions, geometry and materials. The seat cushion is low enough to allow legs to be comfortably stretched in a semireclined sitting position. Thighs are fully supported by the depth of the cushion, but it is not so deep that the backs of the knees are pressed by the front rail. The seat is a bit narrow for lying down, but it's still acceptable, and if more room

is needed, the back cushions can be removed. The seat cushion has a firm foam core that gives even support, and a top layer of polyester fiberfill to provide a soft surface texture.

The 17-in.-high back cushion is tall enough to support the sitter to the shoulders, and the 18° angle of recline creates a relaxed posture suitable for reading and conversation. Lumbar support is provided by using two different densities of foam in the cushion core: a firm foam in the lumbar region and a softer foam above and below that area. Because the firmer foam resists compression more than the softer foam, the cushion automatically conforms to the proper curvature to support the spine. As with the seat cushion, a layer of polyester fiberfill gives the back cushion a soft surface texture.

The cushions are supported in the couch frame by wood slats, which, unlike rubber or fabric straps, are almost permanently durable. If one does break, it is easily replaced. Wood slats also provide a controlled resilience that does not change over time.

With the visual features and the comfort of the couch accounted for, I turned my attention to the accessories that were to be included. I designed couch lights, as Burger had requested, based on the built-in fireplace shelf lights. The couch lights are a little shorter to maintain the appropriate scale and to reduce their exposure to damage. I located two fixtures, controlled by individual rheostat switches, on each seating unit to provide good reading light at each seat.

To add the table surfaces and storage that Burger wanted, I designed two different cabinet styles. The cabinet between the two quarter-circle couch units is freestanding, but the other cabinets are built onto the ends of each straight unit. Slanting compartments in one of the cabinets provides a hidden wine rack. The top shelf of each cabinet is 7 in. below the top rail of the seating units and is a perfect display shelf for Burger's bonsai juniper, a plant that reflects the house's location, Juniper Point.

## Building the couch

Dennis Saindon, of Deer Isle, Maine, admirably executed my designs, and he did more than just put together the 2,540 pieces to make the couch. He also developed techniques that made construction more efficient and the couch more durable, such as floating tenon joinery and all-thread to join the lattice, as shown in the drawing on p. 85. The construction process took 37 weeks and consumed more than 630 board feet of white oak.

We chose oak instead of cypress because oak's superior strength, durability and workability provided a stronger frame that's more resistant to wear. Although I think staining oak over-emphasizes the grain pattern, Burger wanted the couch to match the floors. And, I'll admit, the darker finish is consistent with the Prairie School style of finish.

The final design detail was choice of upholstery fabric. F. Schumacher and Co. (79 Madison Ave., New York, N.Y. 10016-7878; 800-523-1200) produces the Frank Lloyd Wright Collection of fabrics patterned on authentic designs created by Wright. "Storer House Matelasse" is the name of the rich, dark indigo fabric with intersecting woven diamonds of varying textures that Burger chose.

The upholsterer, Newt Tyler of Blue Hill, Maine, did an excellent job of matching the striking pattern of the Wright fabric to the series of irregularly shaped cushions. For the curving back cushions of the quarter-circle units, he ordered the specified foam for the cores to be laminated into oversized blocks and then bandsawn to the proper radius to fit the couch. This unusual technique resulted in a superior and consistent fit of these cushions. □

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*The couch retains the rigid angularity of the Prairie School style, but seating is quite comfortable thanks to modern high-density foams that Dickerson specified for the cushions. The design features of the couch, such as the open lattice work, top rail and built-in lighting, repeat architectural elements of the house.*