

define her shape upon reconstruction. Once these molds were placed into the vessel as a final check upon her shape, her bottom and keel structure were cut out with a Sawzall. With the bottom out of the old boat, Bielinski laid a new and lighter keel, stem, sternpost and deadwood.

With the help from the volunteers, Bielinski milled the 3/8th inch garboard planks and the six 5/16th inch upper planks out of straight grained Port Orford cedar. Each strake was flat scarfed in two places to complete the forty foot run of the boat's length. The strakes were lapped with adjoining planks and rabbeted towards the bow and stern.

On a single night in June 1996, forty-five volunteers steamed, bent and fastened sixty frames into the *Wieland*. Teams of volunteers drove over a thousand copper nails through the planking and

frames and peened them over roves.

Bielinski and the volunteers installed longitudinal stringers, thwarts and fore and stern sheets of Douglas Fir, rub rails of oak, and grown knees of applewood. With guidance from the design of the traditional eight-oared shells, volun-

teers engineered the layout of the rowing positions. Oarlocks were acquired from George Pocock in Seattle.

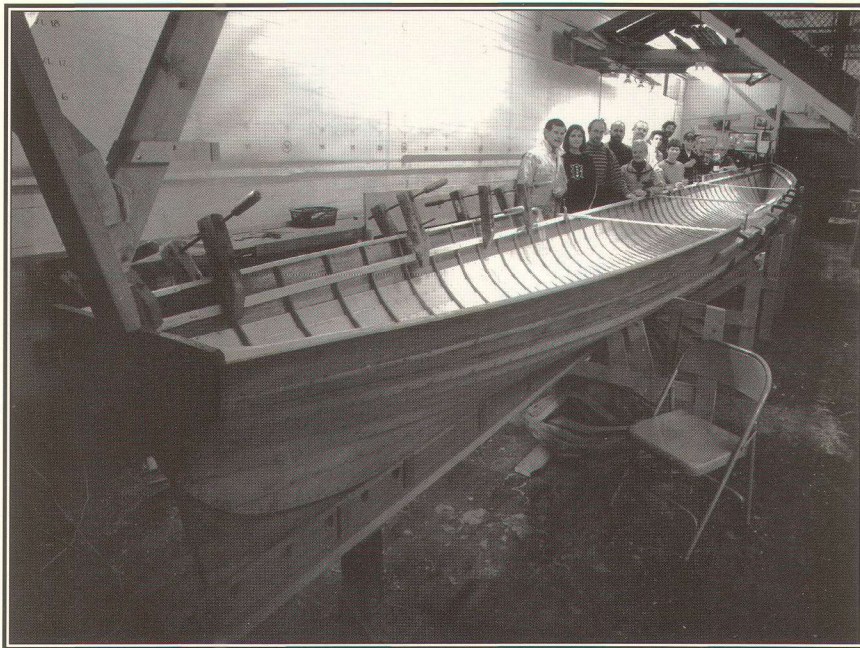
Nine coats of varnish protect the inside of the planking, six coats shield the frames and interior fittings, and six coats again seal the outside hull.

The most significant design change from the boat as decommissioned is in the keel structure. The

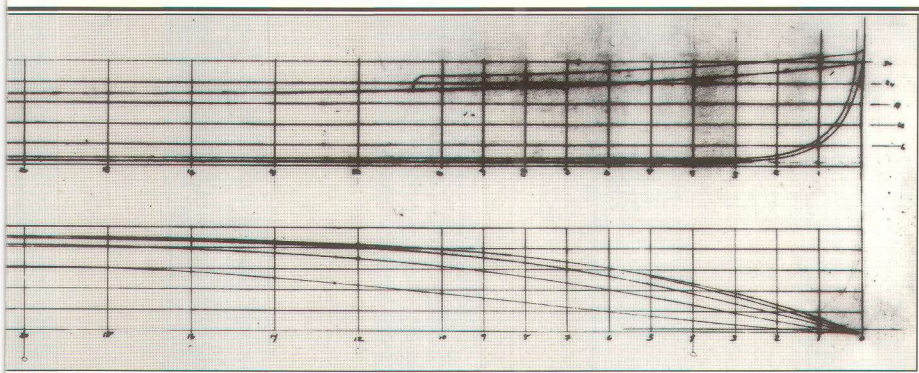
heavy log keel installed in the 1970's as a repair was replaced by a "T" structure composed of a 1" by 1-1/4" oak keel topped with a 1/2" oak hog piece slightly over two inches wide. This single change saved approximately three hundred pounds in weight over the old log keel. It stiffens the boat to resist bending in her length but allows the boat to twist to soften the stress of the waves.

With a crew of six on the oars and a helmsman, the *Wieland* should cruise at six knots. With two crews aboard trading rowing watches, she will travel San Francisco Bay waters to Sacramento and further and back.

—John Kortum



*By late 1996, all the new planking and ribs were in place, and the form of the boat was fully defined. The molds had been removed. The fabrication and installation of inboard fittings was about to begin.*



*Volunteers. These lines were used to build a half hull model. Principal dimensions, 13'; rowing stations, 6.*