

The Intarsia Table

A Table of Many Colors

By Philippe Mutrux

In years past, the San Francisco Gem and Mineral Society has produced two major projects. The first was a full sized working grandfather clock with jade mechanisms. The second was an electric train made of jade that chugged through a stone-slab western frontier town.

Our latest project was far more ambitious. Seven years in the making, it involved scores of members who contributed their time, materials, talent and dedication. The result of our effort is now complete: a 7-1/2 by 2-1/2 foot intarsia table framed in oak atop a decorative wrought iron base.

The choice of design was relatively simple, but moving ahead toward production was another matter. Although many members assisted club instructors using available equipment had previously created smaller intarsias, we now found ourselves launched into an entirely new dimension. How could we ever assemble, grind, polish, handle and transport and exhibit a table measuring 7-1/2 by 2-1/2 feet? The slab alone weighed 240 pounds!

For starters, the design was modified to accommodate three separate 30-inch square panels separated by two removable wood strips. Each panel weighs or more manageable 80 pounds, making it possible to move them from the wood frames. Members volunteered to execute the 12 corner medallions, which measure 4-1/2 inches square and depict various birds, fish, reptiles and insects.

Others roughed out segments of the magnesite background of the center panel representing the club's logo. Some members worked on cutting the the letters of the logo and others roughed out the square jade tiles surrounding the panels and the inch-wide magnesite dividing strips. One member volunteered to provide two chess boards of granite and magnesite with four subsections per board, an undertaking of great complexity.

Most intarsias dealing with subjects such as flowers, animals or landscapes have complex curvilinear outlines. Although far from easy to assemble, they nevertheless allow for adjustments. In the case of geometrical patterns, the lines begin to creep if the segments are not cut to near perfect angles and dimensions. We tried and failed to invent machines enabling us to solve this problem. Finally, under the tutelage of the member who provided the chess boards, a fairly simple device was built which, when attached to the carborundum grinder, served us perfectly.

Following is a brief description of the methods we used for the table:

1. Subassemblies:

After verifying the exact dimensions and shapes, each of the 12 corner intarsias along with the magnesite strips was placed face down on glass overlain with Seran™ Wrap within a temporary frame. Pieces of wire coat hangers were placed crisscross over the stones and the stone joints and wires were fixed with epoxy. Hydrocal was then poured on to a depth of 1/2 inch. We then had 25 subassemblies plus the eight chessboard segments.

Each 30-inch square panel was assembled by fitting the subsections together within a temporary frame over glass with plastic film. Metal lath screen and 1/4-inch rods were superimposed, epoxied

together, and covered up to a 2-inch total thickness with Hydrocal. (previously he tried a mixture of sand and casting resin, but a slight curvature resulted). Three brass 1 by 1/8-inch frames, 30-inches square, were used as permanent edges for each panel. Black epoxy was inserted between the brass and the panel edges.

2. Grinding:

Using an overhead rig, we placed a panel in a box, allowing enough space for edge clearance. After experimenting with a number of commercial abrasive "bricks," with very little success, we finally began to make headway using an 8-inch 80 grit diamond mesh pad with water. We were able to eliminate most of the slight level differences that resulted despite all the precautions taken during assembly of the panels.

3 Polishing:

Who knows what we would have done were it not for the propitious arrival of a new member - a terrazzo and marble worker who introduced us to commercially available diamond pads, velcro attached to our hand-held electric polisher. After a few sessions he never came back but we had learned enough to continue on our own to a satisfactory completion.

4. The Base:

In previous years we had been exhibiting the panels as works in progress. The panels were held in a temporary wood frame on a table. When they were all complete, one of our members volunteered to produce a permanent oak wood frame. The wrought iron base was made by a local manufacturer. The intarsias have been covered with a protective lexan plastic sheet and the table now serves as the speaker's table in our clubhouse assembly room.

Credits:

Designed by Phil Mutrux & Walter Koniuk

All time & materials were donated by members of the Society

Oak woodwork by Norman Stone

Intarsia Elements:

Dolphins - Mihoko Dietrich

Butterfly - Nancy Roche

Dragonfly - Rosabelle Gold

Lizard - Louise McGuirk

Snake - Anne Timmins

Beetle - Tom Coleman

Parrot - Millie Ehtee

Blue & Gold Fish - Alice Roche

Black & White Bird - Amy Spencer

Seagull - Peggy Bechtell

Frog - Alicemarie Mutrux

Fish - Jerry Vloeberghs

Chessboards - Frank Gemmell

Club Intarsia - Phil Mutrux

Lettering in Stone - Don Harris