## A MOKUME-GANE MATCH SAFE Featured In: IMSA Newsletter, Volume 3, Issue 4, October 2001 By Neil Shapiro

It all started at a craft fair about 10 years ago.

My wife wanted a pair of earrings that appeared to be nielloed silver. The jeweler informed me that they were definitely not silver niello but a unique fused metal made by an ancient Japanese technique.

We bought the earrings and I promptly forgot about them (not, of course, when my wife was wearing them - I am not insane) until a few months ago when I saw an unusual match safe.

It had a similar pattern to my wife's earrings, and the dealer thought that the safe was some sort of abstract design in nielloed silver and perhaps of Japanese origin.



I bought the safe, brought it home, and compared the safe and earrings. Different patterns but clearly the same metalworking techniques.

A month of research and I found out about Mokume-gane, a Japanese term for "wood-grained metal".

Mokume-gane was developed by Denbei Shami (1651-1728) a famous sword and sword-fitting maker who lived in the Akita prefecture of Japan. He laminated at least two different colored metals that shared ductility and malleability properties. Denbei Shami used no flux or solder but rather heat or pressure. The resulting diffusion changed the molecular structure and created new topographical patterns. Those patterns can be chased, engraved, subject to repousse work or any other metalworking techniques.

Japan is unique among metalworking countries in that no other country ever used this process to produce patterns inherent in the metal.

Most metalworkers traditionally produced the Mokume-gane patterns by using a special cutting chisel shaped like a wood gauge on the block of diffused metals and treated it like a single piece

of metal. Often the use of tools to produce the patterns was unnecessary as the skillful forger [Ed. Note: A worker in metals] could produce arresting patterns by merely manipulating the forging techniques. After patterning, the metal was acid washed and a coloring agent was used to add patina. The piece was then waxed. The example shown is the only match safe that I know of that has been made by the Mokume-gane technique. The piece is signed, and the mark looks like an "L".



It measures 1-1/4" x 1-3/4" x 1/4". It has an applied oval striker and is made from silver and copper (which gives it the brown to orange coloration). It was made circa 1890-1910.