Fragments continued from p. 14-A

Advances in Wood Identification and Thereby Attributions

by Yuri Yanchyshyn

Philip Zimmerman's recent workshop "Strategies for Recognizing American vs. English Furniture," under the auspices of the Appraisers Association of America, afforded this wooden objects and furniture conservator an opportunity to comment on an icon of American decorative arts: the 17th-century Elder Brewster chair, owned by Pilgrim Hall Museum in Plymouth, Massachusetts.

This chair is noteworthy not only for its age (it is recognized as one of America's oldest chairs) but also because it was the basis for one of the most famous fakes in American decorative arts. The actual fake was on permanent display at the Henry Ford Museum in Dearborn, Michigan. This occasion also provided an opportunity to revisit the Brewster chair's attribution, whether it is truly of American or English manufacture.

This chair dates to the mid-1600s and was named after the owner, William Brewster, the ruling elder of the Pilgrims in the Plymouth Colony. It has an unimpeachable provenance, having been donated to the museum by the descendants of the Brewster family in 1838. It was well known to collectors by 1891, when Irving W. Lyon wrote *The Colonial Furniture of New England*.

During the early 1970s, however, questions were raised as to whether this chair was in fact of American or of English fabrication. A 1972 letter highlighted the concern of Benno Forman, then research fellow and teacher in the Winterthur Program in Early American Culture, regarding its attribution. Since this was a time when scientific methods were beginning to be accepted as an important component of a new field called furniture conservation, it was felt that if it could be proven that the chair's wood was unique to the North American continent, the case for its attribution would be very strong. Subsequently, a wood sample was taken of the chair and submitted to the Winterthur Museum for microscopic wood analysis. This analysis examined woods' anatomical features and compared them to known samples and feature lists. Unfortunately, the specimen had crumbled and thereby did not provide a reliable analysis.

Five years later, however, in 1977, the chair was resampled, and the wood positively was identified as *Fraxinus pennsylvanica*, green ash, which is native only to eastern and central North America. This laid to rest the supposition that the chair could possibly have been made in England. This form of analysis solidified the Elder Brewster chair's place as an important contribution to early American cultural history.

Or did it? Twenty-five years later, in 2002 after considerable research, Harry Alden, microscopist at the Smithsonian, published an article on the Smithsonian Center for Materials Research and Education website, entitled "Scientific Limits of Microscopic Wood Analysis of Objects d'Art." He posited that all 65 species of the genus *Fraxinus* (ash) including those found in the United Kingdom "look alike."

Are we back to where we started from?

Not completely. Since 2002 there has been an even greater interest in wood identification, primarily due to the illegal trafficking of endangered species and vulnerable woods. Many governments are concerned with this activity, and much effort has been devoted to developing new analytical forms of wood identification that would be timely and reliable, especially when one has to examine many logs and boards at ports of entry.

These new techniques attempt to bypass the limitations of microscopic wood identification: the difficulty in identifying woods down to the species level; the necessity of taking numerous samples; the need for highly trained wood anatomists; and the time that analysis required. They focus instead on analyzing particular woods' chemical markers, those unique molecules and compounds that lend themselves to rapid and reliable scientific instrumentation analysis.

Some of these new methods include DNA analysis and bar coding, stable isotope tracking, near infrared analysis, and DART-TOFMS (Direct Analysis in Real Time-Time of Flight Mass Spectrometry). At the moment, this last technique appears to hold the most promise and has been successfully implemented by the U.S. Department of Fish and Wildlife under the direction of Dr. Ed Espinoza. It requires a wood sliver sample of only 1 mm x 1 mm x 2 mm (a dime is about 1 mm thick) and can perform an analysis in about a minute. In addition to *Dalbergia nigra*, Brazilian rosewood, there are databases for seven other vulnerable woods, and the U.S. Department of Fish and Wildlife is actively participating in wood identifications associated with criminal investigations.

This approach will eventually filter down to the conservation community, so the ability to reliably identify a wood down to the species level will become routine, and thereby provide decorative arts historians with another tool for well-grounded attributions. This is a very exciting time in wood identification.

Great chair, ash, Plymouth, Massachusetts, 1630-70, PHM 0942. Gift of Daniel Brewster, 1838. Photograph by Gavin Ashworth. Courtesy Pilgrim Hall Museum, Plymouth, Massachusetts.

Yuri Yanchyshyn is professional associate, American Institute for Conservation, and principal and senior conservator, Period Furniture Conservation, LLC, Long Island City, New York.

The *American Eagle* by James Bard: A Closer Look

by A. J. Peluso, Jr.

A painting signed by Antonio Jacobsen or Fred Pansing of a named ship is a ship's portrait. Simple as that? Well, not really. No, it's more. Like the title of an essay—or a short story—it is filled with the details that abide behind the name, details about the builder, the sailmaker, and its place in history. It poses questions that beg to be answered. It makes some of us insatiably curious.

James Bard's sloop *American Eagle* will alert you to its many secrets. Not all.[1]

The name was useful. The mundane advertising business needs of the shops on New York City's Chatham Square found the American Eagle Fire Company a useful landmark. For example, there was "The Best Cough Candy shop...sold for a shilling a package." The proprietor urged customers to find the sign of the American Eagle Fire Company and its shop nearby. Or Jones' Chemical Soap Company, whose product was really, singularly mollifying, advertised that the genuine was sold nowhere in the city but at the sign of the American Eagle.[2]

The *American Eagle*'s mainsail is inscribed with the name of Benjamin Bennett, probably Bard's client, whose sail loft was located at 305 West Street, within walking distance from Bard's Perry Street address. Bennett's name also appears on the paintings of the schooners *Robert Knapp* (painted in 1854) and *William Bayles* (painted in 1854) and the sloop *Ella Jane* (painted in 1852). Bard painted sailboats in the years 1852-68. None later.[3] The Hudson River's commerce was rapidly changing. Sailboats were being inevitably replaced by steamboats. Bard had good sailboat business while it was available.[4]

The *American Eagle* flies an Indian peace flag, created in 1803, to be given as a gift to friendly and cooperative Native Americans. We don't know the particular reason why this pennant was flown. Perhaps the cooperative efforts described here could qualify. "The Hudson sloops experienced much…. They had seen clouds of pigeons so thick that the sunlight of a fair day had been shut out and the big shining surface had been turned to a sullen gray."[5] There was apparently a truly huge (i.e., millions of birds measured in square miles) nesting ground of passenger pigeons in New York state in 1868. Both Seneca and white hunters camping there during the nesting season killed the birds by the tens or hundreds of thousands.[6]

Another example was the annual "great autumn bush-burnings—to clear away the underbrush to make hunting and berry picking easier—the Indians had set forest fires on both sides of the River."[7]

Or it could have represented the towering flames from black pine torches burned while Indians and whites hurled spears into the twisting flanks of leaping 200-pound sturgeon whose scales were aglitter with reflected light.[8]

No matter, if you were fortunate, you could have been on the deck or within earshot of the sloop *Samsondale* and Captain George Davis Woolsey standing at the tiller on the quarterdeck as he lifted his rich baritone in sentimental melodies through the dark hours.[9]

But then came the noise of the Hudson River's steamboat engines.

Photo courtesy Northeast Auctions.

Notes

1. Before the sloop, there was the ship, 1855, the bark, 1858, and later the steamer, 1880. Their secrets will not be discussed here.
2. *New York Daily Tribune*, October 25, 1843, and March 4, 1845.
3. Bard did paint a portrait of the schooner *George S. Wood* (undated) for another sailmaker, John T. Taylor. His loft was also on West Street and the corner of King Street. The sailmaker is listed in Doggett's New York City directories.
4. As possible commentary, the painting of the steamboat *Peter Crary* (1858) depicts the towing of a becalmed sloop, victim of the wind but rescued by *Peter Crary*'s steam. Steamboats could carry more bricks and ice.
5. *The Hudson* by Carl Carmer (1939), page 124.
6. *Bull's Birds of New York State* by Emanuel Levine (1974), page 67. See also "Passenger Pigeon" in *A History of the Game Birds*, *Wild-Fowl and Shore Birds of Massachusetts and Adjacent States* by Edward Howe Forbush (1912, 1916).
7. *The Hudson* by Carl Carmer (1939), page 125.
8. Ibid.
9. *The Sloops of the Hudson: An Historical Sketch of the Packet and Market Sloops of the Last Century, with a Record of Their Names; Together with Personal Reminiscences of Certain of the Notable North River Sailing Masters* by William E. Verplanck and Moses W. Collyer (1908), page 69. And note that George Woolsey was from a different line of Woolseys than John Woolsey the builder of the *American Eagle* as well as *Victorine* and *Wanderer*. They were well known to each other.