Queen Anne's Revenge

Laboratory Excavation Report, March 2003

UAB Preservation Laboratory, Fort Fisher

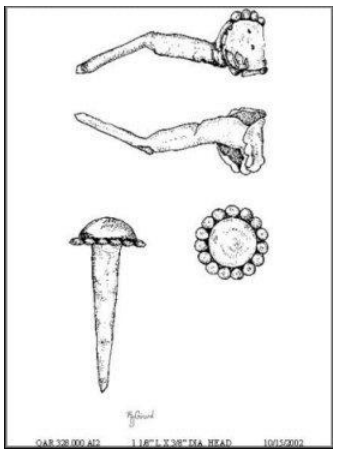
Nathan Henry, UAB Conservator
Wendy Welsh, *QAR* Conservator Technician
Chris Southerly, *QAR* Digital Information Manager
Michael Tutwiler, *QAR* Conservator Technician

In March, emphasis was placed on reducing the lead shot concretions previously identified through x-ray analysis. The concretion material was placed in vats of hydrochloric acid that dissolved the calcium carbonate matrix. The remaining material was screened to recover any previously embedded artifacts.

Hydrochloric acid does not damage fabric and rope, thus allowing the recovery of these fragile artifacts. It is damaging to ferrous metals (iron) so close scrutiny of the process is required and iron objects must be mechanically removed when they appear. This also allows iron artifact molds to be cast prior to their destruction by the acid.

Along with the recovery of thousands of lead shot, numerous glass fragments, decorative studs, a wooden button, and a glass bead were recovered.

Possibly the most significant find was recovered not from a lead shot concretion, but from the concretion containing the brass sail needle described in February (QAR 232). A fragment of a thin leather strap, possibly a belt or bandolier, was recovered during the mechanical cleaning process (QAR 232.020). This leather fragment, approximately three-inches in width, contained the section of the strap where two ends were fastened. The ends were overlapped approximately one-inch and fastened with two decorative lead rivets.



The significance of this find lies not in the fact that the leather survived 280 years under the sea, amazing as that is. The significance is in the two decorative rivets. These lead rivets, the heads of which were cast in crude sunflower motifs, are identical to fifteen previously recovered artifacts described as decorative studs or tacks. Quantities of these artifacts were also recovered from the Whydah shipwreck (Hamilton 1992). Their function, until now, was

largely speculative.

Each rivet was attached by passing the shank through holes in the leather and simply twisting the shank into a small coil on the backside of the strap, thereby securing the rivet. This efficient, though rather unorthodox method of securing the rivets suggests the work of a seaman, possibly repairing or customizing the leather article. The fact that most of the previously discovered rivets have been in an unused condition (straight shanks) suggests that the rivets were carried in bulk to effect on board repairs whenever non-structural riveting was required.