



Research Paper July 1, 2016 by Steve Cox

Southwest American Historic Artifact Research Association, S.A.H.A.R.A.

This is a research paper on an arm band from the Ashley Wyant collection that was obtained from the Burkhart Jesuit Collection of Ontario, Canada. The Burkhart Jesuit Collection was a privately owned collection of Trade Silver which was acquired between 1939 and 1943. During this period presumably because of a loss of revenues by the Catholic Church in Canada due to World War II, unopened casks of valuables left by Indian parishioners as offerings at the various Missions and Churches in Canada were sold for weight. The material had not been considered valuable as anything but scrap and was liquidated as such. Most people who purchased these casks melted the contents into silverware. Fortunately the previous owner who compiled the collection was too intrigued with the material to destroy it. To his wife's great chagrin he made at least two more trips to a place he remembers as being called Burkhart Ontario, where the Jesuit order was selling the casks. He never collected again from any other source. The workmanship in this armband is very fine in detail, and is an excellent example of the high quality work rarely found in Indian Trade Silver. This piece is marked 2



Mark used by both James Hanna Sr. and James Godfrey Hanna

times with the same touch mark, the letters JH in script, in a rectangle, and it is that used by James Hanna Sr. and his son James Godfrey Hanna, as well as appearing with other marks belonging to various partners. James Hanna Sr. worked in Quebec from 1763 to 1807 and made a lot of Trade Silver. He died in 1807 and his apprentice son James Godfrey Hanna took over and worked in Quebec from 1803-1819. J.G. Hanna was well known, and made a very wide variety of silver items, specializing in jewelry, and it was stated in a period advertisement that he also made all sorts of Indian silver. I have seen this same type of edge design on a hat crown made by James Hanna Sr. in the L.M. Lorraine Collection of St. Jean,



Hat Crown, made and marked by James Hanna Sr. It measures 32 1/2" X 1 11/16". From the L. M. Lorraine Collection, St. Jean, Quebec.

Quebec. At this time I conclude this piece could have been made by either of the Hanna's. Most of the pieces of Trade Silver I have found by James Hanna Sr. are marked with the block letters JH in a rectangle. I also found the JH script mark questionably attributed to 2 other silversmiths, J. Hallowell, and John Husband. I put little relevance on that fact owing to wrong period for Hallowell, and wrong business location for Husband. I calculated the specific gravity of the arm band, and it matched an experimental Silver/Copper alloy I suspected from the odd colored patina. The properties of Silver Copper alloys were well known by silversmiths of the day, and there were a lot of chemical reactions that were advantageous in the alloying of silver and copper, Plate, double plate, electrolysis, silvering, amalgamation, etc. , so it's pretty safe to assume this alloy is for the most part, if not totally, an alloy of silver and copper. With this said the specific gravity I measured at 9.98 which would be about 40% Silver and 60% Copper, this is the reason for the odd gray brown patina on this piece. It was an experimental alloy. They were trying a lot of things to decrease the silver content, but the more copper used, the more the luster migrated away from that of silver. This result of course, would make the piece unacceptable to the Indians. The silversmiths discovered that when given a hot mild sulfuric acid bath, the copper was ate away from the outer most layer, making the piece appear to be solid coin silver. This was fine, and some of the best silversmiths, including Charles Arnoldi started to use it. It did not take long to find out the silver layer was extremely thin, in fact even far thinner than today's electro plate. So this method came and went within a few years. With the slightest amount of wear, or even just a few years of age alone the surface silver would oxidize, and the color would revert back to the original unattractive gray brown color. The Indians most certainly would not have been satisfied with that at all. I have found that this alloy was likely invented around 1797, and I have found no evidence of it after 1817. Just speculation, but from microscopic examination of the wear, I suspect this piece was worn very few times, before the silver color had been polished away, and it may have never been worn after that. That may even be a factor in the reason for offering it to the Jesuit Mission.