the T) and the blind hole is 9 mm deep. The blind hole goes beyond the cross bore and makes an indentation 1.0 mm deep in the wall of the cross bore. The exterior diameter of the blind hole is 3.0 mm while the blind end is 2.0 mm. The cross bore is also tapered but less dramatically going from 2.5 mm to 2.3 mm. The interior measurements are limited to a sample of one which was broken for inspection.

The equatorial ridge is in a plane at a right angle to the cross bore, the two holes being at the poles. The blind hole thus opens upon the equatorial ridge and appears to cut it sharply as if the blind hole had been made after the basic bead form had been made. The larger end of the cross bore is granular and rougher than the rest of the bead. This trait plus the equatorial ridge both indicate the Prosser process of manufacture dating after 1840 (Sprague 1983). It is *speculated* that a normal globular Prosser bead had a blind hole plunged into it after the bead had been compressed but before it was fired. It was glazed and fired after all of the holes had been made because glaze is found equally in all openings.

The beads had been strung with wound beads both clear spherical and tubular blue-green plus claw-like or paisley-shaped beads probably formed from a wound base. My informant described these last beads as *magatama* which translates from the Japanese literally as "carved jewels."

Any other known occurrences of these Prosser T-hole beads might help in defining the geographical and temporal limits of this unusual bead.

## **References Cited**

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# 84. MORE ON TILE BEADS, by Roderick Sprague (1988, 13:3-4)

In a recent article, Peter Francis, Jr., has done us all a favor by once and for all showing that the term rocaille bead has no uniform meaning and should be avoided in the bead literature. There are, however, two items in the article that are worthy of further comment.

Francis (1988:17) quotes van der Sleen (1967:114) in part thus: "...straight as a military drum...." While not germane to Francis' discussion, it should be noted that while we may understand what van der Sleen meant, that technically he

is incorrect. One of the most consistent traits of tubular tile beads is their slight taper. This taper is a necessary factor to permit the easy removal of the consolidated mass of unfired clay from the cast iron forms in which they are pressed.

A second and more important point is that Francis suggests because tile beads are made of clay it is "a bit difficult to correlate" this with Sprague's (1983:169) observation "that they were made of glass." A review of my observation will show that based on chemical analysis, tile beads differ very little from glass beads and thus properly can be included in the study of glass beads. Also the analysis utilized in my work was with a microprobe which gives an analysis of only the surface. A review of the Prosser process shows that the final glazing is very high in quartz and gives what might best be described as a glass glaze to a high temperature fired clay body. There can be absolutely no doubt that the physical nature of glass and Prosser beads/ buttons is quite different. Glass has no crystalline structure, hence is often called a semi-liquid, while Prosser products have a very definite and fairly gross crystalline structure, not one at a microscopic level or even finer as is observed in cryptocrystalline stone.

I am in press (Sprague 1989) as expressing concern and dismay that professional historical archaeologists are labeling Prosser buttons as glass buttons rather than ceramic buttons. My position is and has been that anything made by the Prosser process is correctly classified as ceramic but that because of the history of their manufacture, trade, and use and because of their chemical structure and surface appearance that tile beads are more logically studied with glass trade beads than with ceramic beads. In my experience the typical ceramic bead is a large, crudely made clay object of local hand manufacture, not a precise, uniform, mass-produced object.

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