

bronze, that peculiar composition which the Mexicans and Peruvians employed, their state of civilization doubtless would have been much higher when the whites arrived in their country. They lacked, however, as far as investigations hitherto have shown, the knowledge of rendering copper serviceable to their purposes by the process of melting, contenting themselves by hammering purely metallic masses of copper with great labor into the shapes of implements or articles of decoration. These masses they doubtless obtained principally, if not entirely, from the copper districts of Lake Superior.* Owing to the arborescent or indented form under which the copper occurs in the above-named region, nearly all copper articles of aboriginal origin exhibit a distinct laminar structure, though quite a considerable degree of density has been imparted to the metal by continued hammering. It must be admitted, furthermore, that the aborigines had acquired great skill in working the copper in a cold state. From an archæological point of view this peculiar application of natural copper is certainly very remarkable, and, therefore, has often been cited, both by American and European writers. To the native population, however, the comparatively sparing use of copper cannot have afforded great material aid, and its chief importance doubtless consisted in the promotion of intercourse among the various tribes.

The first travelers who visited North America saw copper ornaments and other objects made of this metal in the possession of the natives, and very scrupulously mention this fact in their accounts, while they often leave matters of greater importance entirely unnoticed. This cannot surprise us, considering that the first discoverers were possessed of an immoderate greediness for precious metals, and therefore also paid particular attention to those of less value. The Florentine navigator, Giovanni Verazzano, who sailed in 1524, by order of Francis the First of France, along the Atlantic coast of North America for purposes of discovery, noticed, as he states in his letter to the French king, on the persons of the natives pieces of wrought copper, "which they esteemed more than gold." Many of them wore copper ear-rings.† In the narrative which the anonymous Portuguese nobleman, called the Knight of Elvas, has left of De Soto's ill-fated expedition (1539-'43) it is stated that the Spaniards saw, in the province of Cutifachiqui, some copper axes, or chopping-knives, which apparently contained an admixture of gold. The Indians pointed to the province of Chisca as the country where the people were familiar with the process of melting copper or another

* Some of the natives of the northernmost part of the United States, lately purchased from Russia, worked copper before the European occupation. Their industry was, of course, entirely independent of that here under consideration. (See, for instance, Von Wrangell, *Russische Besitzungen an der Nordwestküste von Amerika*, St. Petersburg, 1839.)

† The Voyage of John de Verazzano, in Collections of the New York Historical Society, Second Series, Vol. I, New York, 1841, pp. 47 and 50.