

A California Verde Antique Quarry

By Prof. Charles F. Holder
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"The question whether we are advancing in the mechanical arts and great schemes of engineering is often suggested when we are confronted with the work of the ancients. The pyramids are the most stupendous works of man ever contemplated and there appears to be nothing new under the sun. Interest in irrigation in the Southwest dawned within the past twenty years, yet in Arizona and New Mexico there are traces of a civilization so old that the mind falters in following it back. We see beds of streams cut through miles of country, even mountain ranges, and a maze of irrigation streams crossing and recrossing the land, made unknown ages in the past years, so perfect from an engineering standpoint that the experts of to-day are emptying them of the sand and debris of centuries and using them as the arteries that shall bring new life to this fertile part of what was the old American Desert. Everywhere we follow in the steps of the ancients, and on the island of Santa Catalina there is an interesting illustration of this.

"When the whites first visited Southern California, they found in use among all the mainland Indians richly shaped ollas or mortars of steatite or serpentine, while scores of articles were formed of finer grades of the same, which experts have pronounced verde antique. In almost every grave ollas were found, and hundred had been handed down and were in the possession of the Mexican descendants of the Indians. There were flat stones, perforated to hang on pegs, quaint ornaments, sculpturings of various animals and tally stones with lines cut in them. One found by the writer at Santa Cruz Island on the breast of skeleton bore fifty or more straight marks – which might have been the man's age – and were all that could be made out.

"Verde antique was valuable, and a search was made for the point of supply. Finally Prof. Schumacher, of the Smithsonian, discovered it on Santa Catalina Island, which lies off Southern California, in a locality named Pott's Valley, about fifteen miles from the little town of Avalon. Prof. Schumacher found on this island a perfect treasure house, and carried to the National Museum hundreds of objects representing the ancient California islanders. All the islands of this group were inhabited by a hardy race that had camps in every canon where there was water, and Santa Catalina abounds in kitchen middens and places where these people live. That they were a commercial ...ace is shown by the ollas they made, and they were the merchants who supplied the races of Southern California with their pots and mortars or ollas.

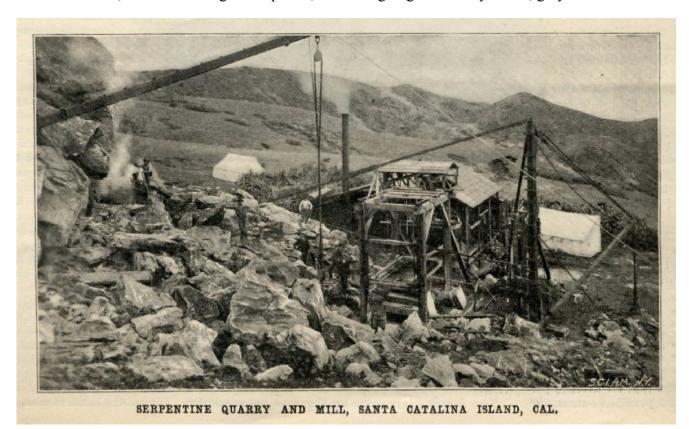
"Prof. Schumacher's attention was attracted at Pott's Valley by the remarkable rock shown in the accompanying illustration, where the scars of ollas that have been broken off by the islanders are plainly seen. The rock is a lofty mass of steatite that rises in the center of Pott's Valley, now called Empire Landing. It is a land-mark from a long distance at sea, and is overgrown and surrounded with cactus and various kinds of vegetation; indeed, the cactus hides a large portion of it – an almost impregnable chevaux de fries. The scars are circular and are the marks where the round ollas were broken off. The method of work was very primitive, the natives having only slate and quartz knives to work with. With these rude implements they carved out an object the shape of a cannon ball and as a large as a football. Gradually this was picked away until, finally, it hung by a narrow stem, which was broken off. The inside was then slowly dug out with the same rude tools, and in time the olla acquired the smooth and often artistic form so familiar in all the museum collections. The common shape is round, but fine mortar shapes three feet in height are not unusual.



THE ROUND SCARS INDICATE THE PLACES FROM WHICH THE OLLAS WERE BROKEN BY THE INDIANS.

"The writer some weeks ago went over this old manufactory very carefully and found it most interesting. Here was an aboriginal manufactory – an out-door workshop – in the immediate vicinity of which were found verde antique implements in various stages from the olla just outlined to the one that had been broken off leaving the scars in the rock. In a word, the complete evolution of the olla could be traced here, especially at the head of Cottonwood Cañon, back of Pott's Valley, where verde antique crops out in ledges in every direction. On many of these can be seen the work of the native carvers, while beneath are the piles and heaps of chips as they were left centuries ago.

"The early Spanish Navigators, Cabrillo and Viscaino, who discovered the island three hundred years ago, described the fine canoes of the natives. These, laden with ollas, crossed the Santa Catalina channel, and the natives exchanged them for game and skins not found here. The present owners of the island, recognizing the value of the stone for commercial purposes, have followed out the mute suggestion of the ancients by establishing at Empire Landing a sawing plant, opening up a valuable quarry and one that is unique, it is believed, having no prototype at least in this country. The verde antique resembles soapstone in the crude rock and would easily escape observation. If is of different degrees of hardness and while so soft that it can be readily worked, it has great tensile strength, its chief value being in the remarkable manner in which it can be worked. Almost every possible object can be made from it from a boat to a screw. A great value lies in its imitation when polished of the darker grades of marble; and owing to its cheapness and durability it is in demand among architects for mantles, lining, electrical slabs, and where a perfectly polished surface is required with the strength of marble. The new city hall of Los Angeles and many of the fine buildings in that city and San Francisco are finished in it, the stone taking a rich polish, abounding in greens and yellows, grays and black.



"A visit to this quarry is most interesting. Here, eight or nine hundred feet above the sea, is an elaborate plant and a series of saws that are capable of cutting out hundreds of feet of verde antique a week. The rock is first bored into with a steam rock drill, a modern improvement on the flint chips of the ancient owners of the soil. A series of borings make it an easy matter to break off the slab, which is then by means of a huge crane lowered upon a car and run under the saws and blocked for cutting. The term saw would be misleading to the layman, as it is really a gang saw with blunt surface, and worked by the steam engine moves back and forth on the edge of the stone, not touching it, but cutting by the grinding into it of a mass of steel shot which are really the teeth of the saw. The rapidity with which this is accomplished is marvelous, and large slabs are cut out with ease – huge slabs for the side of a wall, fronts for fireplaces, aquarium sides or plates, tiles for flooring, etc. All the tanks of the Geological Station here were made from this stone, which apparently solves the question of producing a cheap but attractive aquarium one so far as the tanks are concerned that can be built rapidly. The stone is cut into the proper shape and shipped to Los Angeles, where it is polished and applied to many purposes, and its development has become one of the valuable industries of Southern California."