

could be broken up and removed. I related this theory to two or three railroad contractors who had had a great deal of experience in removing the same kind of material and they were unanimous in the opinion that it could never have been removed in that manner; that the nature of the cement is such that fire and water would not have the effect upon it stated above. If this be true then the question still remains unanswered. One gentleman told me he did not see how the old builders could have ever made the excavation with the rude instruments that they had, but they must have done it, as numbers of stone hammers and axes were scattered around the cut. This I believe is the general opinion among those who have given the matter any thought. For my part I see no very strong argument in the above. It is not improbable that the stone implements referred to could have been left there by a more recent people; still, even if they were left there by the builders themselves, as I believe, it does not argue that they had no other and far better implements to work with; no more than the discovery of numerous arrowheads of flint on the plains of Marathon would force us to the conclusion that the great armies who participated in that battle were armed with such rude instruments of war as this would indicate. We know from history just how these armies were armed; but suppose we had no history of those times and were compelled to judge of the civilization of the old people by just such finds as that at Marathon—would we not place an estimate on it far below what it really deserved? It seems to me that that is just what all archaeologists are doing with our ancient American civilizations. They see about them stupendous works, such as the great roads of Peru, the great blocks of stone so beautifully wrought in Peru and Central America, these old canals and many other things that would seem to point to a degree of civilization equal to any of the old civilizations of the east, and works too that seemingly would require tools of the best iron and steel to execute; yet for all this they say these metals were never known to the ancient people of this continent, for the reason that no traces of them are found; and they close their eyes to the fact that history records no such accomplishments by any other people without iron, and that it would seem impossible that it could be accomplished without that metal. They seem to forget that iron is the most perishable of all metals, that it rapidly oxidizes unless protected from air and moisture, and that notwithstanding we know that the ancient Assyrians and Babylonians had great quantities of that metal yet very few traces of it are now found in the ruins of their cities. Then, too, the fact should not be overlooked that in the ruins of people whose history we know and who were experts in working iron, today large quantities of stone and flint implements are found, and which is accounted for on the basis that they were used by them for many purposes at the same time iron was. If then these facts are true of a people whose history we know, could not they be equally true of a people whose history we do not know when all other conditions are equal?

In a former letter we referred to the watch towers on the mountain peaks, where guards were maintained; this would indicate that the old people were accustomed to war. Indeed it seems probable that for a long time they had to guard against invasion from the wild tribes that surrounded them. This being true we would naturally expect to find in the ruins of their cities some remains of their implements of war, just as we find in the old Mexican and Peruvian ruins large numbers of flint arrow-heads and spear-heads, and stones with sharp points used on war clubs, and many other things to indicate the nature of the implements of war used by the old people. All who visit these ruins must be struck with the scarcity of these things here. True, a few arrow-heads are found, but not in numbers that would be expected if they were used to any extent. No other instruments of war have been found as far as I could learn. Had their implements of war been made of iron they must have all perished long ago, so that no trace of them would now remain. While we have no conclusive evidence on this point it is difficult for us to understand how they could accomplish the works that we see here without the aid of that important metal.

JOEL RICKS.

#### ON CORAL ISLANDS.

TUCAROA, Tuamotu, June 29, 1893. —Perhaps you would like to learn of the progress the Elders are making among this remnant of the house of Israel, and also the character of the country and the customs of its inhabitants.

When I first received my call here I felt rather discouraged, but realizing that I had been chosen by those possessing the highest authority under the Almighty upon the earth, I heartily responded, knowing that God used the weak things of the earth to battle against the powerful, and that if I put my trust in Him and did my part faithfully He could make my mission a successful one.

Tahiti is as pretty a spot as one would wish to gaze upon. Papeete magnificent harbor, which is surrounded by a coral reef, is a suitable resting place for the sea's transit vessels, and is calm when the ocean's billows are raging in their greatest fury. The island is of volcanic formation, like its companions in the Society group. I think the highest peak aspires to a elevation of some 8000 feet above the great Pacific's level. The mountains and hillsides are clothed with shrubbery and grasses, very different to the snow-capped peaks of Utah, while the ravines are bedecked with dense forests and abound with such fruits as the orange, banana, lei, bread-fruit, pine apple, cocanut, guava, etc., and many beautiful flowers and ferns. It is a beautiful place, so far as appearance goes, but "beauty is only skin deep." The disadvantages are many; the climate is hot, being located in a tropical region, and the customs and habits of the people in their great city Papeete are not of an elevated character. They are a shiftless set, as a rule, and a more immoral people I have never met. When I arrived here I found little to encourage me. The

English speaking people discouraged us; the ministers of the day scorned us, besides circulating false reports of our actions and intentions, while the doings of the inhabitants were of the most loathsome character. I now write of the people of Papeete and my first impressions.

To render our prospect on arriving still more discouraging, we met no converts or Mormon missionaries, so that our undertaking seemed more formidable than before. Our prayers were continually ascending to the Almighty to send some one to our rescue, and after a considerable delay we were cheered by the arrival of President James S. Brown and his son Elando.

Although we were called to labor on the Society islands, the president thought it would be better for two of us to spend our time among the inhabitants of the Tuamotu group. These are sometimes called the Lower Archipelago Islands. As a result, Brother C. S. Larsen and I were chosen to come to this section of the vineyard, which lies some two hundred miles north of Papeete.

Unlike Tahiti, these islands are of coral formation, none reaching an elevation of twenty feet, while the most of them stand six feet above sea level at their greatest altitude. Cocoanuts abound here, the earth not being adapted to the growth of other fruit.

Situated in the center of each island is a large lagoon, where the people make their living by diving for the valuable pearl shell which is secreted within this animal-made basin. Another pursuit is the making of copra from the cocconut. The nut when ripe is opened and the meat dried. Thousands of tons are annually shipped to San Francisco, where the finest of toilet soap is manufactured from the same. The natives of this group are of a darker cast than are those of Papeete, but far ahead of them in morality and good works. Some of their customs and actions might be patterned after by the whites with profit.

On Sunday at home we always expect the best of meals. How different here. Your meals are cold, being prepared the day previous. The women folks don't stay home, but go to church, as do the men. Since my arrival here Tucaroa has been my abiding place. There are four missionaries in this group—Brothers Damron, Jones and Larsen, and myself. Within the last six weeks we have baptized seven and blessed one child. There are some four hundred "Mormons" on these islands. The Josephites have quite a band of followers. These were all members of our Church at one time, but have been led astray by one Thomas Smith, an apostle of their creed.

Mr. Mopuhi is a half-caste; he is wealthy and treats us with all the kindness we could expect from a native. We have been staying here for six weeks with him, and he will take no pay from us. He goes to our meetings regularly and has charge of the work of building the "Mormon" meeting house, which is 68 by 35 feet, and is to be sixteen feet high. This is a fine edifice for a people like this to attempt to complete in three months; but I think they will do it. We have had the best of food obtainable in this section of the country, and I hope we