

about their figure and their mien, there is that about the shape of their head—the haughtiness yet gentleness of their manner, which impresses us with the feeling that there is at any rate the possibility if not the probability of their being the remnants of a once great people.

And now, what are those ruins of stone, cities and palaces to which we have referred, the remains of which are still to be seen, and some of which were found in all the hum of busy life by the first Spanish explorers?

Many persons have heard of the "mounds" of the Ohio valley, and of the various theories which from time to time have been brought forward in regard to the mysterious "mound builders," of whose history all trace appears to have been lost. The present Indians can tell us nothing about them. For this reason it has been thought that the mounds must have been the work of an extinct race; but recent investigations have proved the contrary. There seems to be little doubt now but that they were the work of American Indians. There are about two hundred of these mounds altogether and they are scattered over a wide area, traces of them being found as far south as the Gulf of Mexico, and as far north as the borders of Lake Erie and Lake Superior. The principal ones, however, are those on the Scioto River, in the Ohio valley. There are seven of these mound-built towns all within a distance of twelve miles; they consist of mounds of earth thrown up like a railway grade, generally from forty to fifty feet wide at the base, from three to twelve feet in height, and about 450 feet in length, and arranged in squares or rectangular figures or circles. One called the "High Bank Pueblo" is arranged in the form of an octagon, and has a diameter of 950 feet. These mounds or embankments are supposed to have been the foundations of long joint tenement houses; the outside walls of the houses, which were probably built of the slabs of wood covered with a thick coating of earth (as was the custom of Indians in later times) it is thought must have sloped upward at the same angle as the earth embankment on which they rested. By this contrivance the open space of twenty acres or so enclosed by the mounds would be strongly fortified and protected from the attacks of enemies, the earth foundation and the slab building on the top of it making together a strong and solid wall more than twenty feet in height. No remains of stone or brick have been found in these mounds so that the buildings, of whatever shape they were, must have been built wholly of wood, which has since decayed. Articles of pottery, many of them highly ornamented have, however, been found, also textile fabrics of cotton or flax, and chisels and axes made of copper.

These mounds of the Ohio Valley represent the very far past; what they were, by whom made, and by whom occupied, can be only very vaguely conjectured; the few relics, however, that have been found in them go to prove that the people who inhabited them, had advanced beyond the lowest

stages of barbarism.

We next come to the ruins of Yucatan, Central America, and Mexico. Here we have stone buildings, many of them of immense size, built generally on terraces rising one above the other. The Governor's house at Uxmal, the ruins of which are still in existence, is 322 feet long, 39 feet deep, and 25 feet high, and it stands on the highest of three large terraces or plateaux which have been formed artificially and rise one above the other. It is built of solid stone, the rear wall being nine feet thick. The stones used do not appear to have been quarried; indeed no quarry has hitherto been found; they appear to have been but roughly dressed with rude implements, and are not generally more than twelve inches in length by six inches in width. The labor must have been immense to have constructed such huge buildings with such inefficient material. The lintels over doorways and windows are wooden, and have in most instances decayed and fallen, bringing down the stone-work with them. The manner in which the arched ceilings of some of the chambers have been formed, is unique; the builders had no idea of the scientific arch, they had not learned the secret of the key stone; they filled their chambers first with solid masonry, and then constructed a triangular arch over it; and when they reached the apex, instead of allowing the two sides of the triangle to meet, they carried in the centre vertically for two feet or so, leaving a space about a foot wide, and then covered this box-like space with a cap stone. The sloping sides of the ceiling were of course allowed some time to set and harden before the inside core was removed. Some of these vaulted ceilings still remain and can be seen by travellers. It is thought that three or four thousand or even ten thousand persons must have inhabited some of these ancient cities in Central America.

We have now to visit the deserted Pueblo villages of the Rio Chaco at the north-west corner of New Mexico in the United States. Here we are brought down more nearly to modern times and are able to perceive at once a resemblance and analogy between these deserted halls and piled up buildings of a people who lived three hundred years or so ago, and the clay built terraced villages of the Pueblo, Moqui and Zuni Indians who still inhabit—ten thousand or so in number—the plains and mountain ridges of New Mexico and Arizona. Take one of those ancient ruins (there are eight or nine of them in all) for an example, the Pueblo of *Hingo Pavié*, or "the crooked nose." It is deserted and in ruins now, but three centuries or so ago was in all the busy hum of life. Like the cities of Central America it is built of stone; small slabs or tables of reddish grey sandstone laid carefully and cleverly and cemented with a mortar which bears no trace of lime. The walls of the pueblo are 872 feet in length and 80 feet high; the houses of which it is composed are honey combed together in one block and rise in three terraces, one above the other; there are 73 apartments in the