

## “Evidences of Ancient Civilization in America.”

A Lecture delivered for the Guelph Mechanics' Institute, on Tuesday, 1st March, 1870, by Dr. W. E. Bessey.

LADIES AND GENTLEMEN.—We are met this evening to take into consideration some of the evidences of an ancient civilization which have been found to exist in the American continent. The immense deserts of the west afford an interest beyond that of their natural beauties: they offer a wide field to the *archeologist* and the *antiquarian*, whose every footstep is met by countless ruins, the origin of which disappears in the night of time. These monuments of an extinct civilization, which include mounds, tunnels, fortifications of immense proportions, gardens, wells, artificial meadows, ruins of towns and cities, once wealthy and populous, are to be found scattered throughout the continent, from Peru on the south and Mexico on the west, to Lake Superior on the north and Florida on the east.

The valleys of the Ohio and Mississippi abound in ancient mounds, tunnels, extensive fortifications and traces of wells, salt mines, and artificial meadows, which speak in unmistakable terms of a long period of time, during which a numerous and powerful people of settled agricultural habits had made considerable progress in civilization, so as to require large temples for their religious rites, and extensive fortifications to protect them from their enemies. Near the river Gila, on the banks of the Blue river, the Black river and the St. Charles, and upon an alluvial soil, which reposes upon basaltic rocks, the remains of ancient colonies are very numerous. Rows and piles of stones show the plan of houses, though nearly obscured by the accumulated soil of ages. Here is seen a ruined circular stone wall about 250 yards in circumference, with an entrance on the eastern side, and containing in its centre the ruins of a dwelling, in which no traces of wood exist;  $\frac{3}{4}$  of a mile from here the soil is strewn with enormous remnants of spacious edifices, which contained rooms 15 feet square. In most of these the traces of decaying cedar wood have been found amidst the fragments of painted pottery. These houses are surrounded by a rampart 300 yards in length. Speaking of this locality one writer observes: “Subterranean fires appear to have ruined all this country and converted it into a barren waste; the country may also have been deserted in consequence of volcanic convulsions spreading death and misery among the inhabitants.” All this region of country seems once to have been very populous, judging from the walls, houses and remains of pottery met at every step. Near the Rio Grande, in the Apache territory, is a *copper mine*, which shows distinct

traces of ancient workings. A little to the east are lofty rocks, (the *Sierra Madre*) traversed by veins of copper, so richly mixed with gold that the ore was formerly transferred to Mexico for the purpose of smelting and separation. An ancient fort is here erected, of a square shape with a tower at each corner. The walls are four feet thick and in a state of tolerable preservation. The banks of the Rio Verde abound in ruins of stone dwellings and fortifications, which appear to have belonged to a more civilized people than the Aztecs. They are found in the most fertile valleys, where traces of former cultivation, and of small canals for artificial irrigation are yet visible.

The solidly built walls of these dwellings are twenty and thirty yards long, to thirty or forty-five feet high, and from four feet thick at the base, gradually taper to the top. The houses were four storied, with small openings for doors, windows, and loopholes for defence against outside attacks. Excavations among these majestic ruins, have yielded abundant fragments of beautiful pottery, red, yellow, black, striped, scolloped, and ornamented, with brilliantly colored paintings. Of the ruins in New Mexico, the most modern are the *pueblos* or stone dwellings, they comprised usually a main portion and two receding wings at right angles to the main part, from the extremities of which extended a circular wall enclosing a large yard or court. They had the appearance of an immense barrack, being of four stories high, each receding from the preceding one, like a series of terraces, rising above one another. The outside wall had no openings in the first or lower story, and each story is reached from the court or yard, having no doors, by ladders, which can be drawn up after the inmates, thus giving no opportunity for the enemy to enter. The smaller details of these structures are indicative of much art and ingenuity. Some of them appear, in the distance, like splendid mosaic-work, being constructed of stones of various colors. They are built of small, flat slabs (in some cases) of very fine grained sandstone (a material never used in any of the modern monuments of Mexico,) and the walls show no trace of cement, the intervals being neatly filled up with small coloured pebbles, incrusting in mortar made without lime. Remains of ancient towns are extremely numerous in the country of the Zunis, the Navago and Jemez. But it is more than probable that the *pueblos* which I have just re-