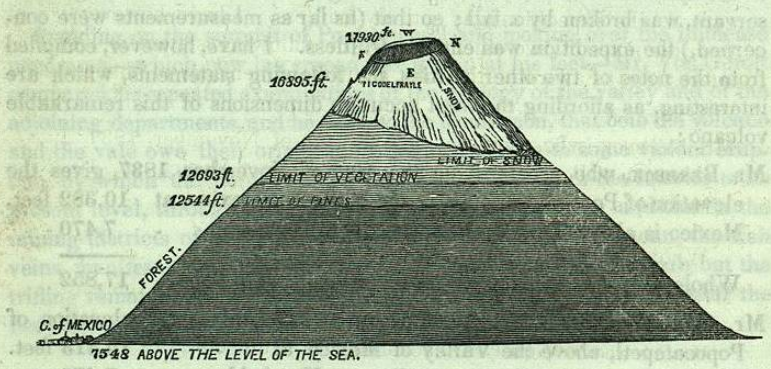
which is within *one foot*, it will be perceived, of the height assigned to this spot by Mr. Glennie.

I present you with a sketch of the outline of the mountain, on which the different elevations are marked, so that the whole of these measurements will be at once mapped out before you.



OUTLINE OF POPOCATEPETL.*

* This is a difficult word to pronounce, but it is easy in comparison with many of the Indian words you may hear uttered every day in the markets of Mexico.

"Nothing," says Humboldt, "strikes the Europeans more in the Aztec, Nahualt, or Mexican language, than the excessive length of the words. This length does not always depend on their being compounded, as in the Greek, the German, and the Sanscrit, but on the manner of forming the substantive, the plural, or the superlative. A kiss is called *tetennamiquiliztli*; a word formed from the verb *tennamiqui*, to embrace, and the additive particles *te* and *liztli*. In the same manner we have *tlatolona*, to ask, and *tetlatolaniliztli*, a demand; *tlayhiouiltia*, to torment, and *tetlayhiouiltiliztli*, torment. To form the plural, the Aztecs in several words double the first syllable; as *miztli*, a cat; *mimiztin*, cats; *tochtli*, a rabbit: *totochtin*, rabbits. *Tin* is the termination which indicates the plural. Sometimes, the duplication is made in the midst of a word; for instance, *ichpochtli*, a girl; *ichpopochtin*, girls: *telpochtli*, a boy; *telpopochtin*, boys. The most remarkable example I have met with of a real composition of words, is found in the word *amatlacuilolitquitcatiaxtlahuilli*, which signifies, the reward-given-to-the-messenger-who-carries-a-paper-on-which-is-painted-tidings. This word, which forms by itself an Alexandrian line, contains *amatl*, paper (of the agave;) *cuiloa*, to paint, or trace hieroglyphics; and *tlaxtlahuilli*, the wages or salary of a workman." The word *notlazomahuiztespixcatatzin*, which signifies, venerable-priest-whom-I-cherish-as-my-father, is used by the Mexicans in addressing the priests. In the Aztec language, the letters B, D, F, G, and R, are wanting."—Humboldt's *Researches*, vol. ii. p. 246. *Pol. Essay* vol. i. p. 139.

JOURNAL OF AN EXCURSION TO

TEZCOCO,

THE PYRAMIDS OF TEOTIHUACAN,

THE HILL OF TEZCOSINGO,

&c. &c. &c.

I left Mexico on the seventh of October, with some friends, to visit the ancient city of Tezcoco, and the Pyramids of St. Juan Teotihuacan. There are two routes; one by the road around the southern margin of the lake, and another by the Indian canoes across the lake itself. We selected the latter, and rendezvoused at the gate of San Lazaro, where the canal enters the city. There was some difficulty in finding a boat, as we had delayed beyond the hour when the vessels usually leave the city, on their return to Tezcoco; but L——, who was well acquainted with the neighborhood, beat up the usual haunts of the Indians about the pulqué shops, and, by dint of persuasion and *clacos*, induced a couple of stout rowers to launch their vessel.

In half an hour we found ourselves on board a flat-bottomed scow, under an awning of mats stretched over saplings, and reclining at full length on the bedding with which we had luckily provided ourselves, against the wants of Tezcoco.

For nearly a mile from the city gate, the canal leads through a tangled marsh, tenanted exclusively by mosquitos. The stings of the annoying insects were not idle on our skins, and I scarcely ever suffered so much as in reaching the waters of the lake through these foul and desolate fens. We, however, soon found our way out of them, stopping for a moment at the Peñon Viejo, a small volcanic hill or pustule rising from the plain,

where there are warm baths,* and the remains of some ancient sculpture, of no great significance.

On attaining the lake itself, the view was exceedingly beautiful. The expanse is a clear and noble sheet, reflecting on its calm bosom every hill and mountain of the valley, while to the north (where it unites with San Cristoval) the lakes and horizon are blended. Yet it is singular, that, sounding in the deepest central part of the lake, we obtained *but two feet and a half of water!* The boatmen *poled* the entire distance of twelve miles, and on every side we saw fishermen wading along in the lake, pushing their boats as they loaded them with fish, or gathered the "flies' eggs" from the tall weeds and flags, that are planted in long rows as nests for the insects. These eggs (called *agayacatl*) were a favorite food of the Indians long before the conquest, and, when baked in *patés*, are not unlike the roe of fishes, both in flavor and appearance. After *frogs* in France, and "*bird nests*" in China, I think they may be esteemed quite a delicacy, and I find that they are not despised even at fashionable tables in the Capital.

Father Gage, at page 111 of his Travels, says that "at one season of the year, the Indians had nets of mail, with the which they raked off a certain *dust* that is bred on the water of the lake of Mexico, and is kneaded together like unto *oas* of the sea. They gathered much of this and kept it in heaps, and made thereof cakes like unto brick-bats. And they did not only sell this ware in the market, but also sent it abroad to other fairs and markets afar off; and they did eat this meal, with as good a stomach as we eat cheese; yea, and they hold the opinion, that this scum of fatness of the water is the cause that such great number of fowl cometh to the lake, which in the winter season is infinite."

This was written early in the seventeenth century, and "*infinite*" still continues to be the number of wild fowl with which these lakes and the neighboring marshes are covered during the winter. I have elsewhere said, that the plains and the waters seem actually *peppered* with them.

There can of course be but little skill in sporting among such clouds of birds, and the consequence is that they are slain for the market, by persons who rent the best situated shooting-grounds from the proprietors of the

* According to Humboldt, (Pol. Essay, vol. ii. p. 188.) There are two sources of mineral waters in the Valley of Mexico; one at Guadalupe, the other at the Peñon. Those waters contain carbonic acid, sulphate of lime and of soda, and muriate of soda. The temperature of the waters at the Peñon is quite high.

At this place the Indians, also, make *salt*.

"Of the five lakes of the Valley of Mexico, the lake of Tezcoco is most impregnated with muriate and carbonate of soda. The nitrate of barytes proves that this water contains no sulphate in solution. The purest and most limpid water is that of the lake of Xochimilco, the specific weight of which I found to be 1.2009, when that of water distilled at the temperature of 54° Fahr. was 1.090, and water from the lake of Tezcoco was 1.0215. The water of this last mentioned lake is consequently heavier than that of the Baltic sea, and not so heavy as that of the ocean, which, under different latitudes, has been found between 1.0269 and 1.0285. The quantity of sulphureted hydrogen which is detached from the surface of the Mexican lakes, and which the acetate of lead indicates in great abundance in the lakes of Tezcoco and Chalco, undoubtedly contributes in certain seasons to the unhealthiness of the air in the valley. However, the fact is curious, that intermittent fevers are very rare on the banks of these lakes, the surface of which is partly hidden by rushes and aquatic herbs.—*Vide* HUMBOLDT—et MOD. TRAVELLER, vol. vi. p. 251.

lake margins. The gunners erect a sort of infernal machine, with three *tiers* of barrels—one, level with the marsh or water, another slightly elevated, and the third at a still greater angle. The lower tier is discharged at the birds while they are setting, and this of course destroys a multitude; but as some must necessarily escape the first discharge, the second and third tiers are fired in quick succession, and it is rare indeed that a duck avoids the wholesale slaughter. From 125,000 to 200,000 annually load the markets of Mexico, and form the cheapest food of the multitude; but it is rare that you can procure one delicate enough to bring to your table.

* * * * * *

It was near four o'clock, when, under the slow impulse of our *polers*, we approached the eastern border of the lake. The shores were dotted with white-walled haciendas and lines of beautiful groves, while at the distance of a few miles, in the interior, rose the lofty sierra, in the midst of which, the mountain of Tlaloc, "the god of Storms," was brewing a heavy thunder-storm. The clouds were thickly gathered around the top of the mountain, and as we disembarked on the waste-like quay, among sands and marshes, the first premonitory drops began to patter on our hats. Here we had expected to find a carriage, or at least horses, waiting to convey us the remaining league to the town of Tezcoco. But as we did not arrive by the early boats of the morning, our friends had returned home, presuming that we had relinquished our proposed expedition.

While our baggage was landing from the boat, the rain increased rapidly. There was no place for shelter, except an open shed occupied by the boatmen during the day. Thunder and lightning were soon added to the storm; and yet, in the midst of these accumulated discomforts, we took up our line of march, as the prospect of remaining was worse than the danger of a drenching. None of the Indians could be bought or bribed to leave their boats and carry our luggage, nor were there any idlers about, willing to earn an honest penny as porters. I therefore put on my serape, and the oil-skin cover of my hat; and fastening my valise by a handkerchief on my back, balanced it (*aguador* fashion, in front,) by my gun and sword,—and thus set forth for a dreary tramp over the lonely waste.

As we advanced, the rain and tempest of wind, thunder and lightning, increased; and I have no recollection, in the course of my travels, of a more disagreeable pilgrimage than the one we made to Tezcoco. Our anxiety was greatly increased by the loss of one of our party in the darkness among some morasses, and by the rise of a considerable stream that crossed the road near the town. We however waded the brook, and, about eight o'clock, arrived at the hospitable dwelling of an American, who, after wandering about the world in various capacities, has settled down in the city of Tezcoco, where (from his connection with an extensive menagerie, that once astonished the Mexicans with its lions and monkeys,) he passes by the significant cognomen of "*El de los fieros.*"

A kindlier heart, however, exists not on earth; and to him and to his Mexican wife, I am indebted for many a pleasant hour, beguiled by the exquisite music of the one, and the story of wild adventure of the other.

TEZCOCO.

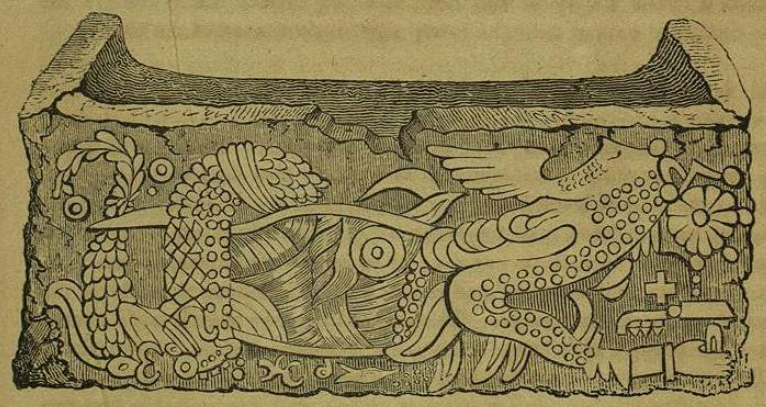
8th October. We rose early. Every symptom of yesterday's storm was swept from the sky—a clear and beautiful day, mild as our June.

After breakfast we sallied forth to make arrangements for our journey to Teotihuacan, but found that the person who was to furnish us with horses had gone on a bull-catching expedition to a neighboring hacienda. Finding it, therefore, impossible to make any excursions to the neighborhood to-day, we amused ourselves by strolling over the town and seeing all that is interesting in the way of antiquarian research.

At the period of the conquest, Tezcoco was the second city of the Mexican Empire; and what it must have been in splendor and vastness, may be judged from the account I have heretofore given of the Capital itself. Situated, then, on the borders of the lake, (the spot from which Cortéz launched his brigantines when he invested Mexico by water,) it perhaps resembled Pisa both in power and importance; but every trace of its former magnificence has disappeared, and it has dwindled to scarcely more than a respectable village, where a few herdsmen, fishermen, and farmers have gathered together for mutual protection and traffic. The large Plaza is silent and deserted—the people loll about their shops and houses as on a holyday—a universal quietude rests over the whole town—and a general listlessness seems to prevail both in regard to the present and the future.*

I was particularly struck with one bad feature in the character of the Tezcocans—a disregard for their dead. In passing through the western portion of the town we came to the parish church, which was being repaired. On entering the square in front of it, I stumbled against a human skull; a little farther on, I found the niches in the walls filled with them;—the floor of the edifice was taken up, and the dead-pits had been cleaned and scraped, yet the remains of the human frame were still plenteously scattered over the bottom, and the stench was intolerable. The whole surface of the yard was strewn with ribs and thigh bones—lower jaws—teeth—and fragments of skulls, and a huge pile of *rich, black mould, mottled with human bones, was thrown in a corner—the contents of the pits within.*

* When Cortéz entered the city of Tezcoco, on the last day of the year 1520, the nobles came out to meet him, and conducted him to one of the Palaces of the late King Nezahualcojotl, which was large enough, according to the Conqueror, "*to contain not only the six hundred Spaniards who were lodged in it, but as many more.*"—CLAVIGERO, Book x., vol. 2, p. 139.



ANCIENT BAS RELIEF.

PYRAMIDS.

In the northwestern corner of Tezcoco is a pile of earth, bricks, mortar and pottery, entirely shapeless, and covered with a field of aloes; on the top of this I found several very large slabs of basalt, squared with the chisel and laid due north and south. Tradition says, that these are the remains of the Palace of Montezuma.

On this spot, some years ago, the small fragment represented in the opposite drawing was found, and immediately transferred to the collection of the Condé del Peñasco, in Mexico, where it is now preserved.

It appears to be the remains of a trough or basin, and the sculpture is neatly executed in relief. I imagine that it was designed to represent a conflict between a serpent and bird, and you cannot fail to remark the *cross* distinctly carved near the lower right-hand corner of the vessel.

At the southern end of the town, there are still distinctly traceable three immense pyramids, the forms of which are not so much obliterated as might be supposed after the lapse of centuries. They lie in a line with each other from north to south—are about four hundred feet in extent on each side of their bases, and are built partly of *adobes* and partly of large *burned bricks* and fragments of pottery. In many places I discovered remains of a thick covering of *cement*, through which small canals or gutters had been formed to carry off the water, or, perhaps, the blood, from the upper terrace. The sides of these pyramids were strewn with fragments of idols, clay vessels, and obsidian knives. It is related by Bernal Diaz del Castillio, that the great temple of Tezcoco was ascended by one hundred and seventeen steps; and it is probable that one of these pyramids was the base of the Teocalli to which the historian alludes.

These were all the antiquities I could find in the town of Tezcoco, except the spot where tradition says that Cortéz launched his vessels. It still passes by the name of "*Puente de las Brigantinas*," and is now probably rather more than a mile in a direct line from the lake.

While I was in Mexico a most interesting piece of antiquity was sent from Tezcoco to General Tornel, and presented by him to Mr. Morphy, an opulent English merchant, who has since returned to England. It was a group, modelled in clay, about a foot and a half high, representing a sacrifice, and consisted of two figures—the priest and the victim. The latter (a female) had been thrown over a tall and narrow stone; the priest had just made a deep incision in her back—torn out her heart—and was in the act of offering it to the idol. The expressions of death and agony in the countenance of the woman—and of pride and enthusiasm in the priest, were admirably rendered. I intended making a drawing of this group, but Mr. Morphy sent it to the coast for shipment immedi-

ately after its reception, and I scarcely regret the occurrence now, as one of the best antiquarians of Mexico cast considerable doubt on its genuineness. It is the fashion here, as in Italy, to manufacture antiquities by the gross, and it requires a keen eye to detect the imposture.

As we left the Pyramids of Tezcoco, after our morning's examination, we were beset by several of the burghers who professed to sell large collections of interesting fragments and statues. Among these worthies was an old Indian who lived directly opposite the largest of the pyramids, and spent his leisure hours in groping among the ruins. We accompanied them, one after the other, to their houses, but found scarcely anything worthy of purchase except a few small idols of *serpentine*, and some personal ornaments cut from an exceedingly hard and brittle stone. As to the Indian—his idols were the dolls of all his progeny, and had been pounded about the yard of his mud hovel for so many years, that their features were entirely obliterated.

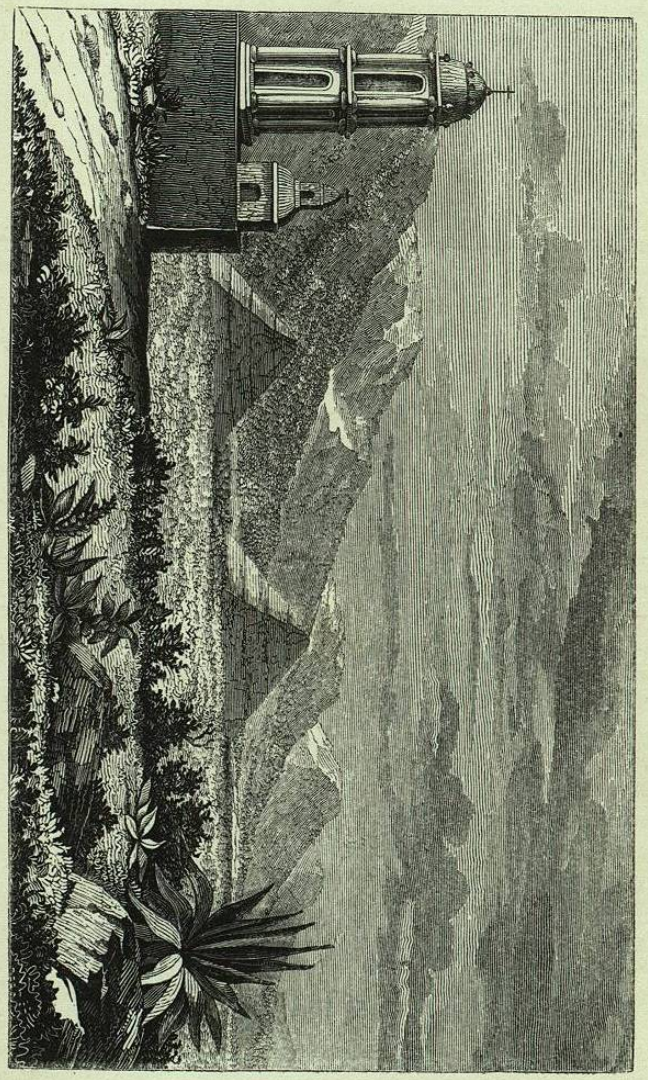
* * * * *

In the evening, the person who was to be our guide in the neighborhood, came into town and immediately visited us. I found him to be an honest, open-hearted, rollicking fellow; who passed his time in catching cattle—looking after a small *milpa*, or corn-field—and hunting in the neighboring mountains. His hands and face were scarred by his numerous encounters with the beasts; yet before he left us he made one of the girls of the family tune her guitar, and leading out another, danced a *fandango*, while he chanted a song in a *patois* that I could not understand, but which seemed highly amusing from the merriment of the company.

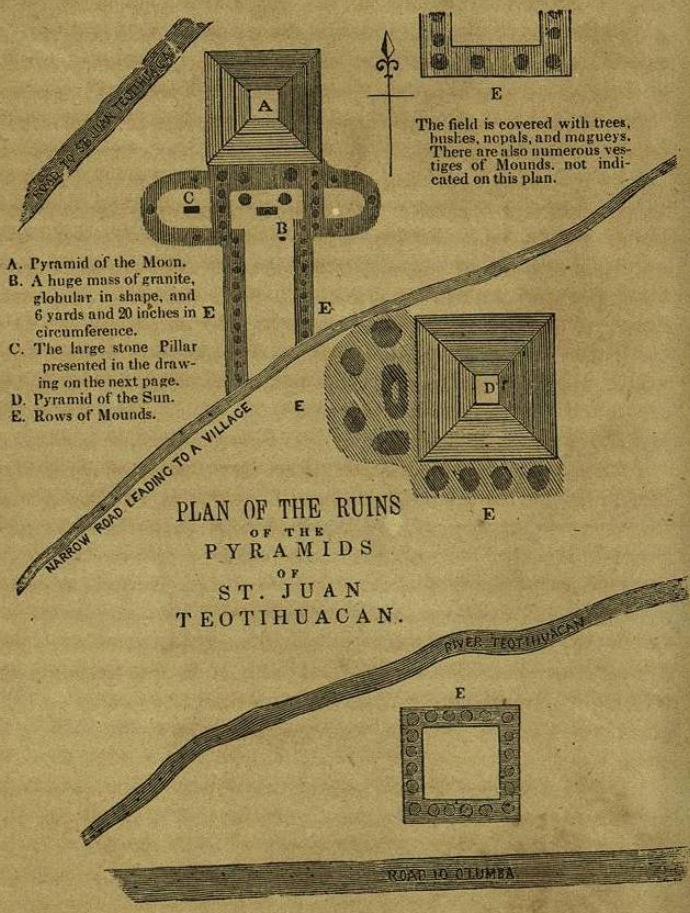
9th October.—Sunday. A night passed in *fleadom!* We were, consequently, abroad early—and the day was beautiful. At half-past nine we were in our saddles, and on our way to the

PYRAMIDS OF ST. JUAN TEOTIHUACAN.

On leaving the town our road lay in a northeasterly direction, through a number of picturesque villages buried in foliage, and fenced with the *organ cactus*, lifting its tall pillar-like stems to a height of twenty feet above the ground. The country was rolling, and we passed over several elevations and a stream or two before we turned suddenly to the right, and saw the village of St. Juan with an extensive level beyond it, bordered on all sides by mountains, except toward the east, where a deep depression in the chain leads into the plains of Otumba. In the centre of this level are the Pyramids of Teotihuacan, and the opposite engra-



PYRAMIDS OF ST. JUAN TEOTIHUACAN—WESTERN VIEW.



PLAN OF THE RUINS
OF THE
PYRAMIDS
OF
ST. JUAN
TEOTIHUACAN.

ving will give you an accurate idea of their position and present appearance from this point.

After we passed through the village, the high-road was soon lost among paths leading between the walled fields of Indian farmers. At short distances, as we advanced in the direction of the pyramids, I observed evident traces of a well made ancient road, covered with several inches of a close and hard cement, which, in turn, was often overlaid with a foot or two of soil. We crossed the plain, and, in a quarter of an hour, stood at the foot of the *Tonatiuh Ytzagual*, or, "House of the Sun," the base line of which is six hundred and eighty-two feet, and the perpendicular height, two hundred and twenty-one.*

There is no other description of these monuments to be given than by saying that *they are pyramids, three stories or stages of which are yet distinctly visible.* The whole of their exteriors is covered with a thick growth of *nopals* or prickly pears; and, in many places, I discovered the remains of the coating of cement with which they were incrusted in the days of their perfection. A short distance, northwestwardly, from the "House of the Sun," is the *Metzli Ytzagual*, or "House of the Moon," with a height of one hundred and forty-four feet. On the level summits of both of these, there were erected, no doubt, the shrines of the gods and the places of sacrifice.

I ascended, clambering among the bushes and loose stones with uncertain footing, to the top of the "House of the Sun." The view from it was exceedingly picturesque over the cultivated fields to the east and south. Immediately to the south were a number of mound-like clusters, running toward a number of elevations arranged in a square, beyond the streamlet of *Teotihuacan*, and bordering the road that leads to Otumba. On the western front there were also five or six tumuli extending toward a long line of similar mounds, running from the southern side of the "House of the Moon." These lines were quite distinct, and the whole plain was more or less covered with heaps of stones. It is extremely probable, that at one time they all formed the sepulchres of the distinguished men of the Empire, and constituted the *Micoatl* or "Path of the Dead"—a name which they bore in the ancient language of the country. It was perhaps the Westminster Abbey of the Toltecs and Aztecs.

You will, however, obtain a much better idea of the arrangement of these pyramids and smaller tumuli by reference to the opposite plan, made some years since by a scientific friend of mine, and compared by me with the remaining ruins on the spot, in 1842.

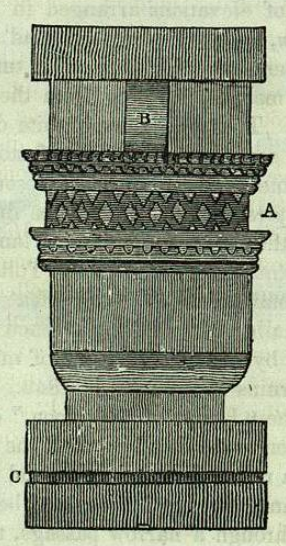
An examination of the "House of the Moon," or lesser pyramid, affords no more information to the inquirer than the "House of the Sun." Like its neighbor, it is a mass of stones, rocks and cement; but, within a few years past, an entrance has been discovered between the second and third terraces, leading through a narrow passage, that may be traversed on hands and knees on an inclined plane for about twenty-five feet, to

*Glennie.

two walled chambers, or sinks, like wells;—one of which has a depth of about fifteen feet, and the other rather less. The walls of the entrance and of the sinks are of the common adobe, and there are no remains either of sculpture, painting, or human bodies, to reward the groper through the dark and dusty adit. I could perceive no sign of an entrance in the "House of the Sun."

It is useless to inquire into the antiquity of these pyramids. There is no authentic tradition of their builders, although they are usually referred to the Toltecs. Clavigero* is very brief in his remarks in regard to them, but says that in the temples dedicated to the Sun and Moon, there were two idols of huge bulk carved of stone and covered with gold. The breast of the idol of the Sun was grooved out, and a massive image of the planet, in solid gold, was fixed in the hollow. Of this the conquerors immediately possessed themselves, while the idol was destroyed by order of the Bishop of Mexico, and the fragments remained in the neighborhood until the end of the seventeenth century. A huge globular mass of granite at the spot indicated on the *plan* by the letter B—measuring nineteen feet and eight inches in circumference—may probably be either part of its ruins, or the sacrificial stone upon whose convex surface thousands have been offered to the gods.

A short distance west of this ball, at the place marked with the letter C, in the middle of the small semicircular elevation of ground and stones, (on the top of which are three tumuli with five more on its eastern base,) is the curious stone of which the following is an exact design.



* Vol i, p. 288 and 286

It lies due east and west, and is ten feet six inches in length by five feet in breadth. The material is granite, and though the sculpture on the northern and upper sides is very faint, yet, on the side facing the south, it is quite as distinct as represented in the drawing. The dark shade B is a hollow, three inches deep at the sides, and six at the top and bottom. In looking at this stone one might imagine that it had been a pillar, thrown down accidentally on its side; but the *exact east and west position—precisely in the centre of the group of tumuli*—would seem to forbid such an idea. It is said, that all who sit or recline on this singular fragment are immediately seized with a fainting fit; and, although we had heard of this remarkable property of the relic, we forgot to test the truth of it.

Clavigero tells us, that in the principal temple of Teotihuacan there dwelt constantly four priests, who were remarkable for the virtue and austerity of their lives. Their dress was of the most ordinary stuffs, and their food was confined to a loaf of maize, weighing two ounces, and a cup of *atollé* or gruel of the same grain.

Every night two of these devotees kept watch—offering incense, singing hymns to the gods, and shedding their blood on the stones of the temple. Their fastings and vigils continued for four years, except during a monthly festival, when they were permitted to indulge in as much food as they desired; but, while preparing for this enjoyment, they were obliged to undergo additional mortifications. At the end of four years they retired from the temple, and an equal number supplied their places, to go through the same rites and sufferings—and, in honor thereof, to receive the same homage and respect both from the people and their sovereign.

But high as was the recompense of their virtues, the punishment of vice, or of a violation of chastity, was proportionably severe. If the crime was proved after strict investigation, the culprit was beaten to death—his body burned—and his ashes scattered to the winds.

* * * * *

TRADITION.

There is a singular tradition in regard to the reappearance of the Sun and Moon after the regeneration and multiplication of the human race, which I will here recount to you.

Omecihuatl—the wife of the god Ometeuctli—after having borne many children in heaven, happened once to bring forth a *knife of flint*, which her enraged offspring flung to earth—when lo! from its fragments, sprang sixteen hundred *heroes!* Immediately they petitioned their mother to grant them power to create men for their servants. But she disdained to aid her children, and sent them to the god of Hell, who, she declared, would furnish them with *a bone of one of the men* who had perished in the general destruction of the races. This fragment she ordered them to