and enemy of the first, whose reigning family were the Cocomes, "auditors." The worship of Quetzalcoatl extended on the plateaux and in the peninsula, where the chiefs claimed to be descended from him. The symbol by which he is best known is "feathered serpent;" but he was severally called Huemac,* the "Strong Hand," the "white-bearded man," his mantle studded with crosses, or dressed in a tiger's skin; "god of air," when he was the companion of Tlaloc, whose path he swept, causing a strong wind to prevail before the rainy season; and also a youthful, beardless man, etc. The various attributes of Quetzalcoatl and Tlaloc developed according to the people, the country, and epoch. Such transformations have been observed among all nations: in India the great Agni was at first but the spark produced by rubbing two pieces of wood together, which became cloud, dawn, the sun, the flash, Indra, etc. With the Greeks, Apollo was the god of light, poetry, music, medicine, etc. The Christian religion presents the same phenomenon: for we have the Ancient of Days, the Dove, the Lamb, the Vine. Thus Tlaloc, god of rain, is sometimes seen on ancient vases, his eyes circled with paper, his face running with water; or as an embryo cross, a perfect cross; and again in the form of a man lying on his back, supporting a vase to collect rain. The latter representation is found in Mexico, Tlaxcala, and Yucatan. Several writers† mention that crosses were found throughout Mexico, Yucatan, and Tabasco, being another and later personification of Tlaloc. They have all been lost; but we reproduce those found by us, presenting various distinct forms. The cullus of the cross is of great antiquity and almost universal, for we find it in Greece, in India, on pottery of the

* Torquemada, cap. xlv. This author follows the writers whom he quotes in their spelling of proper names, and the result is often great variety.
Bronze Period (the suastica); whilst among the Slaves it was, as in America, the god of storm and rain.

The same may almost be said of the serpent.* It was reverenced in Egypt, in America, and is found at the beginning of Genesis; whilst in the north-west of India, the Nagas were serpent worshippers, whose great ancestor Naga was supposed

* Fergusson's "History of Indian Architecture," introd. p. 41.
to have been present at the Creation as Genius of the Ocean. He was the god of wisdom, the titular deity of mankind; and we find him at Bœroe-Boedor, in Java, beautifully sculptured on a bas-relief, where Buddha is seen crossing the seas on a lotus-wreath, whilst close to him two immense serpents (Nagas) are raising their heads towards him in token of reverence. He is also worshipped in Cambodia, and his image is reproduced on the magnificent monuments of Angcor-Tom.

The festival which was celebrated in honour of Quetzalcoatl during the teozihuitl, "sacred year," was preceded by a severe fasting of eighty days, during which the priests devoted to his service were subjected to horrible penances. He reigned suc-
cessively at Izamal, in Yucatan, Chichen-Itza, and Mayapan, under the name of Cukulcan. To this god were ascribed the rites of confession and penance.

The religion of the Toltecs was mild, like their disposition: no human blood ever stained their altars, their offerings consisting of fruits, flowers, and birds; nevertheless, their laws, which were the same for all classes, were stringent and severe. Polygamy was forbidden, and kings themselves were not allowed concubines, whilst their priests were deserving of the respect which was shown them from prince and peasant alike. They had sculptors, mosaists, painters, and smelters of gold and silver; and by means of moulds knew how to give metals every variety of shape; their jewellers and lapidaries could imitate all manner of animals, plants, flowers, birds, etc. Cotton was spun by the women, and given a brilliant colouring both from animal and mineral substances; it was manufactured of every degree of fineness, so that some looked like muslin, some like cloth, and some like velvet. They had also the art of interweaving with these the delicate hair of animals and birds' feathers, which made a cloth of great beauty. Ixtlilxochitl* is afraid to pursue the panegyric of this people, lest it should appear exaggerated. Their calendar was adopted by all the tribes of Anahuac and Central America; it divided the year into eighteen months of twenty days each, adding five intercalary days to make up the full number of three hundred and sixty-five days; these belonged to no month, and were regarded as unlucky. Both months and days were expressed by peculiar signs; and as the year has nearly six hours in excess of three hundred and sixty-five days, they provided for this by intercalating six days at the end of four years, which formed leap year. Tlapilli, "knots," were cycles of thirteen years;

* Ixtlilxochitl, fourth "Relacion."
four of these cycles was a century, which they called *xiuhmolpilli*, "binding up of knots," represented by a quantity of reeds bound together. Besides the "bundle" of fifty-two years, the Toltecs had a larger cycle of one hundred and four years, called "a great
age," but not much used. The whole system rested on the repetition of the signs denoting the years, enabling one by means of dots to determine accurately to what cycle or what century each year belonged. And as these signs stood differently in each cycle, confusion was impossible; for the century being indicated by a number showing its place in the cycle, the dots would make it easy to determine to what age any given year belonged, according to its place at knot first, second, third, or fourth. Thus for instance, the year tecpatl "flint," calli "house," tochtli "rabbit," and acall "reed," beginning the great cycle, would have one, five, nine, thirteen dots in the first series; four, eight, twelve, in the second; three, seven, fourteen, in the third; and two, six, ten, in the fourth series, which would come first in the new cycle, and the latter having its appropriate sign would enable one to see at once that "Flint" 12 was the twelfth year in the second series of the first cycle or century; that "Flint" 2 was the second year in the fourth series of the first cycle, etc. Example:

<table>
<thead>
<tr>
<th>TLAPILI.</th>
<th>Tlapili.</th>
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<tr>
<td><strong>FIRST SERIES.</strong></td>
<td><strong>SECOND SERIES.</strong></td>
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It will be seen later that the hieroglyph calli is the outline of the Toltec palace and temple, the foundation of his architecture, which never varies, and which we shall find in all monuments, whether we travel north or south, on the plateaux or in the lowlands; so that had everything else been destroyed, we might
nevertheless pronounce with safety that all the monuments in North America were of Toltec origin. The genius of a nation, like that of an individual, has generally one dominant note, traceable through the various expressions of her art. India has topes and pagodas, Egypt sphinxes and hypostyle chambers, Greece three orders of columns. North America has only a plain wall ending with two projecting cornices having an upright or slanting frieze, more or less ornamented but of no appreciable difference.

A description of the ceremonies which took place at the end of every great cycle, will find here a natural place, and enable us to understand subsequent events.

The Aztecs celebrated their great festival of the new fire at the end of each century of fifty-two years, called by Sahagun toxiuilpilli, and by others xiuhmolpilli. As the end of the century drew near they were filled with apprehension, for if the fire failed to be rekindled, a universal dissolution was expected to follow. In their despair at such a contingency they threw away their idols, destroyed their furniture and domestic utensils, and suffered all fires to go out. A lofty mountain near Iztapalapan, some two leagues from Mexico, was the place chosen for kindling the new fire, which was effected by the friction of two sticks placed on the breast of the victim. The fire was soon communicated to a funeral pile, on which the body of the victim was placed and consumed. This ceremony always took place at midnight, and as the light mounted up towards heaven shouts of joy burst forth from the multitudes who covered the hills, the house-tops, and terraces of the temples, their eyes directed towards the mountain of sacrifice. Couriers, with torches lighted at the blazing fire, rapidly bore them to the inhabitants of the surrounding districts, whilst every part of
the city was lighted with bonfires. The following days were
given up to festivity, the houses were cleansed and whitewashed,
the broken vessels were replaced by new ones, and the people
dressed in their gayest apparel. It we except human sacrifice, this
must have been a Toltec ceremony.*

* Sahagun, "Historia de las Cosas de la Nueva España," lib. vii. cap. x. to xiii.
Tula extended over a plain intersected by a muddy river winding round the foot of Mount Coatepetl, which commanded the city. The modern town occupies but a small proportion of the area of the ancient capital, and the few antiquities that adorn the plaza were found in clearing the river of some of its mud or whilst ploughing the adjacent fields.

First in order are three fragments of caryatides: one, a gigantic
The statue which we reproduce, is about 7 ft. high; the head and upper part of the body below the hips are wanting, the legs are 1 ft. 3 in. in diameter, and the feet 4 ft. long. The two embroidered bits below the waist were no doubt the ends of the royal maxtli, the exact copy of which we shall see later on bas-reliefs in Chiapas, Palenque, and Lorillard City. The greaves, of leather bands, are passed between the toes and fastened on the instep and above it by large knots, recalling the Roman cactes. This statue is of black basalt, like all the other fragments; and although exceedingly rude and archaic in character, is not
wanting in beauty in some of its details. Next comes a column in two pieces, lying on the ground, having a round tenon which fitted closely into the mortise and ensured solidity; it is the only specimen we have found where such care had been bestowed. The carving on the outward portion of the column consists of feathers or palms, whilst the reverse is covered with scales of serpents arranged in parallel sections. This fragment answers Sahagun's description about the columns of a temple dedicated to Quetzalcoatl, already mentioned, where rattlesnakes formed the ornamentation. It is also interesting from the fact that we shall see a similar column at Chichen-Itza in a temple of the same god. Here also among other fragments I noticed a Greek column with a Doric capital, but on which I dare
not pronounce definitely, although there is nothing else in the place denoting Spanish influence. All we can say is that it shows the marvellous building instinct of the Toltecs, and that we found some remains of a like description in the Yucatan peninsula. By far the most interesting object seen here, on account of the study and the archaeological issues it entails, is a large carved stone ring about 6 ft. 5 in. in diameter, having a hole in the centre some 10 in. in circumference, evidently a tennis-ring. Tennis, tlacheo, tlachtli, was first known in Anahuac and transmitted to the Chichemecs, Acolhuans, and Aztecs by the Toltecs, who carried it with them to Tabasco, Yucatan, Uxmal, and Chichen; and in the latter place we found a perfect tennis-court with one ring still in place.

We must turn to Torquemada* for full particulars respecting this national game, which was played in buildings of so typical a character as to be easily recognised. It consists of two thick parallel walls 32 ft. high, at a distance of 98 ft. from each other, having a ring fixed in the walls 22 ft. high, as seen in our cut; whilst at each extremity of the court stood a small temple in which preliminary ceremonies were performed before opening the game. It was played with a large india-rubber ball; the rules required the player to receive it behind, not to let it touch the ground, and to wear a tight-fitting leather suit to make the ball rebound. But the greatest feat was to send the ball through the ring, when a scramble, a rush, and much confusion followed, the winner having the right to plunder the spectators of their valuables. Sending the ball through the ring required so much dexterity, that he who succeeded was credited with a bad conscience or supposed to be doomed to an early death. Tennis seems to have been in such high repute with the Indians that it was not confined to individuals, but also played between one city and another, and

* Torquemada, "Monarquía Indiana," lib. ii. cap. xii.
accompanied, says Veytia, by much betting, when they staked everything they possessed, even their liberty. But this writer errs in ascribing the game to the Aztecs in honour of their god Huitzilopochtli, as we shall show.

Among other objects which we found at Tula is a large curiously-carved shell of mother-of-pearl; the carving recalls Tizoc’s stone, and notably the bas-reliefs at Palenque and Ocosinco in Chiapas; also two bas-reliefs, one in a rock outside the town, the other, by far the most valuable, in the wall of a private house, but very old and much injured, representing a full-face figure and another in profile; their nose, beard, and dress are similar to those described by Veytia* in the following passage: “The Toltecs were above middle height, and owing to this they could be distinguished in later times from the other aborigines. Their complexion was clear, their hair thicker than the nations who followed them, although less so than the Spaniards. This is

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* Veytia, tome i. chap. xxxiv.
still observable among the few who remain claiming Toltec descent."

These remains are priceless in every respect because of their analogy and intimate connection with all those we shall subsequently discover, forming the first links in the chain of evidence respecting our theory of the unity of American civilisation, which it is our object to prove in the course of this work.

On beholding these caryatides, the question naturally arises as to what monument they were intended for; and in turning to Veytia,* we read that under the Emperor Mitl (979—1035) the Toltecs reached the zenith of their power; that their empire extended over one thousand miles, bordering on the Atlantic and Pacific Oceans; and that the population was so dense as to cause the soil to be cultivated on the highest mountains, whilst an influential priesthood performed the sacred rites within innumerable sanctuaries. The great cities of the high plateaux were Teotihuacan and Cholula, as later Palenque, Izamal, and Cozumel were those of the warm region. This emperor, jealous of the flourishing state and religious superiority of Teotihuacan, "the habitation of the gods," wished to set up a new and rival deity for the veneration of his people; to this end he chose the songstress of the marsh, the "Frog," whom he presented as the goddess of waters. And that the new deity should be ushered in with due pomp and solemnity, he had a magnificent temple built in her honour, and her gold statue placed within the temple, covered with emeralds, the size of a palm, and cunningly worked so as to imitate nature. Up to that time, temples had been large mounds erected on the summits of mountains, like that of Tlaloc, or on artificial pyramids like that of Teotihuacan, where the idols were ex-

* Veytia, tome 1. chap. xxxiv.
posed to the elements; that of the Frog was the first which was built with stones and given a rectangular shape, having a kind of solid vault (boveda), also of stone, which by a skilful arrangement covered the whole edifice. Here, then, we have a very plain description of the Indian vault, the Yucatec vault, a vault we have observed in the north and the whole extent of our Toltec journey; seen by Guillemin Tarayre in the tombs at Las Casas Grandes, mentioned by Ixtililxochitl as the dis-

*TOLTEC BAS-RELIEFS.*

* Mariano Veytia, tome l. chap. xxviii.
tistinguishing feature in the monuments of Toluca and Cuernavaca, and by Humboldt at Cholula in the following passage: "On visiting the interior of the pyramid, I recognised a mortuary chamber, having the bricks of the ceiling so arranged as to diminish the pression of the roof. As the aborigines were unacquainted with the vault, they provided for it by placing horizontally and in gradual succession very large bricks, the upper slightly overlapping the lower, and in this way replaced the Gothic vault."* This remarkable writer further says, that "Yucatan and Guatemala are countries where the people had come from Atylan and reached a certain degree of civilisation."† Far greater would have been his appreciation, had his investigations been directed to the Toltecs and Central America, where the overlapping vault was introduced by them in all public edifices, temples, and palaces. With the testimony of these writers, we may consider the vault question definitely settled.

The town, or rather the plaza, with its diminutive garden, planted with a few consumptive shrubs and flowers, with its porticoes giving access to the Town Hall, the Law Courts, the Church and shops, only gets animated on Sundays and market-days, when the population of the surrounding districts pours in for the purpose of buying or selling. Except meat, all articles are sold on the ground, spread on plantain leaves or clean cloths; where vendors dispose themselves in long rows about the plaza, offering their goods, crockery, and fruit. Customers stand about in groups, surveying the animated scene, enjoying a little gossip, or trying to drive a hard bargain; whilst Indian matrons ply from one vendor to another in almost silent dignity, accompanied by their daughters, who look at this

* Humboldt, "Vue des Cordillères," p. 29.  † Id. p. 27.
de su país, ni tiene fuerza para fecundarlo; á pesar de lo cual no se le puede tachar de perezoso ni de indolente á sabiendas.

Hay ciertas leyes naturales que no se pueden violar ni burlar, y en primera línea las de aclimatación. Aunque la raza blanca es la única que conserva la mayor parte de sus facultades en todas las latitudes, pudiendo llamarse por lo mismo la única raza civilizadora, no posee este don de un modo absoluto ó ilimitado. Para convencernos de ello, no tengo más que reparar en mí: cada vez que cambio de centro climatológico siento cierta debilidad intelectual y perturbaciones fisiológicas. Como no he nacido en este clima cálido y húmedo, no gozo de la plenitud de mis facultades; mis nietos, debilitados ó faltos de energía, no podrán ser responsables de su postración moral ó física.

Hay muchas cosas en este mundo que se deben consignar, teniendo el derecho de lamentarlas, pero sin razón para censurarlas ni para criticarlas siquiera. Los pueblos padecen sus grandes dolores como las familias, como los individuos, dolores que se deben respetar cuando no es posible aliviárslos.

28 de diciembre.—A pocos hectómetros más arriba de Tabatinga está Leitia, puesto militar de la frontera peruana, y en el que sólo falta el comandante, los soldados y los fuertes. El gobierno central ha gastado unos cuantos millones en este fuerte, pero el dinero se ha malgastado ó distraído, no se ha construido ninguna obra militar, y Leitia continúa siendo selva virgen.

A la caída de la tarde entramos en Loreto: al saltar á tierra, me meto hasta la rodilla en un barro espeso, del cual me sacan tres hombres, no sin trabajo. Mientras me mudo de ropa vienen dos hombres á bordo. Uno de ellos, de origen portugués, era sustituto del gobernador la primera vez que pasé por este puerto: este Sr. Rubens me presenta á su compañero don Juan Ramos, nacido en el Perú y criado en el Brasil, donde ha residido más de cincuenta años, y el cual sólo habla en portugués. El Sr. Rubens, sustituto del gobernador, ha delegado su sustitución en Ramos, que sustituye al sustituto de un teniente (es decir, de un teniente-gobernador). Estas autoridades por duplicado me piden mis papeles, y por toda respuesta hago que les sirvan cofías; es de suponer que hayan encontrado en el fondo de la copa los informes que buscaban, por cuanto no me vuelven á hablar de ello.

A la mañana siguiente partimos de Loreto, y aquella misma tarde largamos anclas delante de Caballo-Cocha, tres kilómetros más arriba de una quebrada muy angosta. Cuando entramos en este canal empezaba á anochecer; los árboles de ambas orillas juntan sus copas á modo de arcada, formando una bóveda enorme; ni una estrella se refleja en la superficie del agua. No sé cómo nos hemos librado de tener una grave avería.

Al otro día muy temprano llegamos á Pevas. El Sr. Alfredo Bastos, único comerciante de la localidad, el rey de la aldea, viene á bordo y se ofrece á nuestra disposición. Teniendo yo motivos para estar descontento del piloto, le ruego que nos proporcione uno seguro.

—No hay en toda esta región mejor piloto que yo, me dice el Sr. Bastos; voy á guiar á Vd.

Cierra su tienda, se mete la llave en el bolsillo, y tal como está, es decir, con zapatillas y
and handle that, sometimes with the intention of buying, often
to exchange a few words with the merchant or an acquaint-
ance. Some look quite pretty, with their glorious eyes, their
long hair reaching below the waist in two long plaits, with
glass or stone beads around their necks; their scanty costume
leaving uncovered their shapely arms, necks, and ankles. On
looking at them, I seem to myself to be carried back a
thousand years amidst that grand old race whose ruins I am
here to study. Further on, under a monumental ash-tree,
primitive kitchens have been set up, round which a dense
throng of customers, settled on the ground, are enjoying their
tortillas, or when they are well-to-do, their portion of black
beans, frijoles, pork or turkey, in jicaras, the whole highly
seasoned with Chili pepper; the best dinner not costing more
than threepence.

Every human type seems to have congregated here, from
the Egyptian sharp outline of features to the flat-nosed, flat-
faced Kalmuk. Most women are bare to the waist; but as
this seems a matter of course, no one notices it.

The area of ancient Tula has now been under cultivation
for three hundred years—hardly a desirable condition for the
explorer. We know that the city stood here; but its only
vestiges are to be found on the hill overlooking the town to
the north. It was called Palpan in the time of the Toltecs;
but now it is known as Cerro del Tesoro, because a poor
shepherd-boy, some twenty years since, whilst scratching the
moist ground, discovered a vase with five hundred gold ounces
in it; but not knowing the value of his newly-found treasure,
he parted with it for a few coppers. We are going to try
our luck on the same hill; and better advised than the poor
shepherd, we shall not give up our discoveries in favour of
any one.
CHAPTER VI.

PALPAN AND THE TOLTECS.

The plateau on the Palpan hill, of which we give a ground plan, was occupied by a royal park, and maybe those of a few notables. Its direction is south-west, north-west, about a mile in length and half-a-mile in breadth, growing to a point towards the south-west, and fenced on two sides by a natural wall of perpendicular rocks overhanging the river. The plateau is covered with mounds, pyramids, and esplanades, showing that here were the royal villas, temples, and public edifices, but no trace of building, wall, or ruin, is visible, for the whole area is shrouded with immense
cactuses, nopals, gorambullos, gum-trees, and mesquites, amongst which towers the \textit{biznaga}, a cactus which grows here to nearly 10 ft. high by 6 ft. wide. I was shown a plant of this kind near Pachuca, in which an Indian couple have established themselves.

The summits of pyramids, called \textit{mogotes} by the natives, were always occupied by temples and palaces; the largest here, No. 4 and No. 5 in our cut, must have served as basements for the temples of the Sun and Moon. Unfortunately they have been opened and ransacked by treasure-seekers, and half-demolished by bricklayers, who found here materials ready to hand for their constructions.

I began my excavations by sounding the small mound No. 1 to the northeast, where the side of a wall was visible; and I found everywhere the ground connecting houses, palaces, and gardens, thickly coated with cement; but in the inner rooms the flooring was of red cement. The rubbish was cleared away, and in a few days a complete house was unearthed, consisting of several apartments of various size, nearly all on different levels; having frescoed walls, columns, pilasters, benches, and cisterns, recalling a Roman \textit{impluvium},

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{ground_plan}
\caption{Ground plan of first Toltec house unearthed at Tula (from Lemaire).}
\end{figure}
whilst flights of steps and narrow passages connected the various apartments. We had brought to light a Toltec house!

I picked out of the rubbish many curious things: huge baked bricks, from one foot to nine inches by two and two and a half in thickness; filters, straight and curved water-pipes, vases and fragments of vases, enamelled terra-cotta cups, bringing to mind those at Tenenepanco; seals, one of which (an eagle’s head) I had engraved for my personal use; bits which were curiously like old
Japanese china; moulds, one having a head with a huge plait and hair smoothed on both sides of her face, like an old maid; besides innumerable arrow-heads and knives of obsidian strewing the ground. In fact, a whole civilisation.

This house, the first it was our fortune to discover, was built on a somewhat modified natural elevation; the various apartments follow the direction of the ground and are ranged on different levels, numbering from zero elevation for the lowest to 8 ft. for the highest. The walls are perpendicular, the roofs flat; and a thick coating of cement, the same everywhere, was used, whether for roofs, ceilings, floors, pavements, or roads.

On examining the monuments at Tula, we are filled with admiration for the marvellous building capacity of the people who erected them; for, unlike most primitive nations, they used every material at once. They coated their inner walls with mud and mortar, faced their outer walls with baked bricks and cut stone, had wooden roofs, and brick and stone staircases. They were
acquainted with pilasters (we found them in their houses), with caryatides, with square and round columns; indeed, they seem to have been familiar with every architectural device. That they were painters and decorators we have ample indications in the house we unearthed, where the walls are covered with rosettes, palms, red, white, and gray geometrical figures on a black ground.

My next soundings were towards the centre of the hill, at a mound marked No. 2, which I took at first for a tomb; but finding nothing, I directed my men south-east, at the extremity of the hill, No. 3. Here we attacked a pyramid of considerable size, thickly covered with vegetation, having a hole and a thick plaster coating, which, to my extreme delight, revealed an old palace, extending over an area of nearly 62 ft. on one side, with an inner courtyard, a garden, and numerous apartments on different levels, ranged from the ground-floor to 8 ft. high, exactly like the first house; the whole covering a surface of 2,500 square yards. We will give a description of it, together with the probable use of the various apartments. No. 1 (see plan) is the inner courtyard, which we take as our level; No. 3 to the right, paved with large pebbles, is the main entrance. Facing this to the left, No. 7 is a small room about 4 ft. high, which was entered by a flight of seven low steps; it is a Belvedere, from which a view of the whole valley could be obtained. Next comes No. 4, perhaps a reception-room, 32 ft. long, having two openings towards the court. On the other side, to the north, is a smaller, narrower Belvedere, from which an ante-room, on a slightly lower level, furnished with benches, was reached. The main body of the palace consists of ten apartments of different size, with stuccoed walls and floors. The façade, No. 2, 8 ft. high, opens on the courtyard; whilst two winding stone staircases to the right, and an equal number to the left, led to the apartments on the first storey. Brick steps, covered with a deep layer of cement,
connected the various chambers. The cells on both sides of the main apartments may have been the servants' quarters. No. 6, No. 6, are a kind of yards, without any trace of roof, and if we are to judge from Aztec dwellings, they were probably enclosures for domestic and wild animals. The Americans, says Clavigero,* had no flocks; nevertheless their table was well supplied by innumerable animals to be found about their dwellings, and unknown to Europe; whilst the poor people had an edible dog, teochichi, the breed of which was lost by the abuse the Spaniards made of it in the early times of the Conquest. Royal palaces had extensive spaces reserved for turkeys, ducks, and every species of volatile, a menagerie for wild animals, chambers for reptiles and birds of prey, and tanks for fish; so

that the purpose we ascribe to these enclosures becomes highly probable. Here and there closed-up passages, walls rebuilt with materials other than those employed in the older construction, seem to indicate that the palace was occupied at two different periods; this would agree with Veytia\(^1\) when he says, "that on the Chichemecs invading the country under the command of Xololl, they found Tula (cir. 1117) deserted, and grass growing in the streets; but that the King was so pleased with the site that he ordered the monuments to be repaired and the town inhabited. He followed the same policy at Teotihuacan and other places, ordering his people to preserve old names, and only authorising them to give new appellations to those they should build themselves."\(^1\)

The building we unearthed is entire, its outer wall intact; presenting a valuable specimen of the houses dating long before the Conquest. Here we found the same kind of objects as in our first excavations: plates, dishes, three-footed cups having striated bottoms and used for grinding Chili pepper; fragments of pottery, enamels, terra-cotta whorls of different size covered with sunk designs having a hole in the centre. These whorls are called "malacates" by the natives, and used by Indian women to this day. A round piece of wood or spindle-stick is introduced in the hole of the whorl, projecting about five inches from the lower plane, and about nine inches from the upper. The spinner, who is sitting, rests the point of her spindle on a varnished plate, and impels it round with her thumb and forefinger, twisting the cotton or wool attached thereto.\(^1\) In Mexico, rich ladies used a golden plate.\(^5\)

\(^1\) Veytia, tome ii. chap. i.  
\(^1\) Ibid. chap. ii.  
\(^1\) Similar spindles, with whorls attached, have been found in Egypt and the Swiss Lakes.  
The edifice No. 7 is undoubtedly a tennis-court, for it answers exactly the description given by historians of such structures; moreover, I found one of the rings still in place. Veytia is wrong, therefore, in crediting the Mexicans with the invention of the game; were it so we should not have found a tennis-court at Chichen-Itza. Mendieta* relates how Tezacatlipoca came down from his celestial abode on a spider’s ladder, and how in his long peregrinations on earth he visited Tula, brought thither by his jealousy of Quetzalcoatl, whom he challenged to play tennis; but the latter turning into a tiger discomfited him utterly. The spectators were so terrified that they fled, and in the tumult which ensued many were drowned in the river flowing close by.

This tradition shows plainly that tennis existed in the remote period of Quetzalcoatl’s rule at Tula; that the game was of Toltec origin, that the court was on the hill, since the spectators in their precipitancy to run away were drowned, that Quetzalcoatl was a good tennis-player, and that the expression, “he was turned into a tiger,” is merely honorific, applied to him on the spot for having sent his ball through the ring. This passage also explains the tiger frieze over the tennis-court at Chichen-Itza.

The Toltecs had public granaries which were opened to the people in time of famine. A passage in Cuauhtitlan seems to indicate that the resistance they opposed to a grasping and bloodthirsty priesthood, was one of the chief causes of their downfall.† “Under the mild rule of Quetzalcoatl, demons tried in vain to persuade him to allow men born at Tula to be sacrificed. As for himself, his offerings were birds, serpents, and butterflies he had captured in the valley.”

† Cuauhtitlan’s Annals, translated by Sanchez Solis, “Annals of the Mexican Museum.”
The Toltecs were peaceful, their organisation was feudal and aristocratic, indicative of conquest, yet their government was paternal. Besides the great feudatory lords, they had military orders and titles, which were bestowed on distinguished soldiers for services in the field or the council, and finally the celebrated order of the Tecuhtlis, which was divided in sub-orders of the "tiger," the "lion," the "eagle," and other animals, each having its peculiar privileges. The initiatory ceremonies resembled somewhat those attending our knights of the Middle Ages, and may interest the reader.

At the nomination of a candidate, all the tecuhtlis assembled in the house of the new knight, whence they set out in a body for the temple, where the high priest, at the request of the neophyte, perforated his nose and ears with a pointed tiger's bone, or an eagle's claw, inserting in the holes thus made twigs, which were changed every day for larger ones, until the healing of the wound; pronouncing the while invocations to the gods that they would give the novice the courage of the lion, the swiftness of the deer, etc.; followed by a speech in which he was reminded that he who aspires to the dignity of a tecuhtli, must be ready to perform the duties of his new office. He was henceforth to be distinguished by greater meekness, patience, forbearance, and moderation in all things, together with submission to the laws. After this speech, he was deprived of his rich garments, and dressed in a coarse tunic; the only articles of furniture allowed him were a common mat and a low stool. He was besmeared with a black preparation, and only broke his fast once in twenty-four hours with a tortilla and a small quantity of water. Meanwhile the priests and tecuhtlis came in turns to feast before the novice, and make his fast more intolerable, heaping insults and injurious epithets
upon the man who stood meekly before them; jostling and pointing their fingers jeeringly at him. At night he was only allowed to sleep a few minutes at a time; and if overcome by sleep, his guardians pricked him with the thorn of the maguey.

"At the expiration of sixty days the new knight, accompanied by friends and relatives, repaired to some temple of his own district, where he was received by the whole order of tecuhtlis, ranged in two rows on each side of the temple, from the main altar down to the entrance. He advanced alone, bowing right and left to each tecuhtli, until he reached the idol, where the mean garments he had worn so long were taken off by the oldest tecuhtli, his hair bound up in a knot on the top of his head with a red string; whilst a wreath, having a medallion with his motto graven on it, circled his brow. He was next clad in rich and fine apparel, ornamented and delicately embroidered; in his hands he received arrows and a bow; balls of gold were inserted in his ears and nostrils, and a precious stone, the distinctive badge of his order, hung from his lower lip. The ceremony ended with another discourse to the effect that the neophyte should aim at being liberal, just, free from arrogance, and willing to devote his life to the service of his country and his gods." *

The Toltecs paid great attention to the instruction of youth. Texuco possessed schools of art, in which the broad principles laid down by their forefathers were doubtless remembered, differing from those of the Aztecs, whose exaggerated religiosity caused them to leave the education of children entirely in the hands of the priests. That the latter were less influential with the Toltecs seems indicated in the following passage: "Among the various sumptuous edifices at Utatlan was the college, having a

* Veytia, tome i. chap. ix.
staff of seventy teachers, and five or six thousand pupils, who were educated at the public expense."* The truth of this account is borne out by the fact that the city was only destroyed in 1524 by Alvarado, so that the early missionaries had ample opportunity given them to collect materials for a trustworthy history.

Marriage among the Toltecs was celebrated with ceremonies it may interest the reader to know something about. On this occasion friends and relations were invited, the walls of the best apartment were adorned with pretty devices, made with flowers and evergreens, whilst every table and bracket was covered with them. The bridegroom occupied a seat to the right, the bride sat on the floor to the left of the hearth, which stood in the middle of the room, where a bright fire was burning. Then the "marriage-

maker," as he was called, stood up and addressed the young people, reminding them of their mutual duties in the life they were about to enter, and, at the termination of his speech, they were given new cloaks, and received the good wishes and congratulations of their friends, who as they came up threw each in turn some perfume on the hearth. Now the bride and bridegroom were crowned with chaplets of flowers, and the day was wound up with dance, music, and refreshments. There was also a religious ceremony similar to this in all respects, in which a priest officiated; when instead of cloaks they put on costly dresses with a skeleton head embroidered on them, and thus attired, the new married couple were accompanied to their home and left to themselves.*

In order to have a complete idea of this extraordinary people, a few words upon their philosophy and ethics may find an appropriate place here. A Toltec maiden, about to enter into life, was admonished with great tenderness by her father to preserve simplicity in her manners and conversation, to have great neatness in attire and attention to personal cleanliness. He inculcated modesty, faithfulness, and obedience to her husband, reminding her that this world is a place of sorrow and disappointment, but that God had given as a compensation domestic joys and material enjoyments; softening his advice by such endearing words as: "daughter mine, my beloved daughter, my precious," etc. Nor was the advice of a mother less touching—breathing throughout a parent's love: "My beloved daughter, my little dove, you have heard the words which your father has told you. They are precious words, such as are rarely spoken, and which have proceeded from his heart. Speak calmly and deliberately; do not raise your voice very high, nor speak very low, but in a moderate tone. Neither  

* Veytia, tome ii. chap. iii.
mince, when you speak, nor when you salute, nor speak through your nose; but let your words be proper, and your voice gentle. In walking, see that you behave becomingly, neither going with haste, nor too slowly; yet, when it is necessary to go with haste, do so. When you are obliged to jump over a pool of water, do it with decency. Walk through the streets quietly; do not look hither and thither, nor turn your head to look at this and that; walk neither looking at the skies nor at the ground. See likewise that you neither paint your face nor your lips, in order to look well, since this is a mark of vile and immodest women. But that your husband may take pleasure in you, adorn yourself, wash yourself, and wear nothing but clean clothes, but let this be done with moderation, since if you are over nice—too delicate—they will call you tapetzelon, tinemaxoch. This was the course and the manner of your ancestors. In this world it is necessary to live with prudence and circumspection. See that you guard yourself carefully and free from stain, for should you give your favour to another who is not your husband, you would be ruined past all recall; since for such a crime they will kill you, throw you into the street for an example to all the people, where your head will be crushed and dragged upon the ground," etc.*

We will end these quotations by the advice to a son: "My beloved son, lay to heart the words I am going to utter, for they are from our forefathers, who admonished us to keep them locked up like precious gold-leaf, and taught us that boys and girls are beloved of the Lord. For this reason the men of old, who were devoted to His service, held children in great reverence. They roused them out of their sleep, undressed them, bathed them in cold water, made them sweep the temples and offer copal to the gods. They washed their mouths, saying that

* Sahagun, lib. vi. cap. xix.
YOUNG TOLTEC GIRL, FROM MODERN INDIAN TYPES AND FATHER DURAN'S "HIST. DE LAS INDIAS."
Ilustración de AMÉRICA PINTORESCA

objeto de verificar estudios antropológicos y etnográficos. Observo que estos indígenas de la costa se parecen, hasta el punto de confundirlos, a todos los indios que he visto en las Guayanas francesa, holandesa, inglesa y brasileña.

Me embarco el 15 de abril a bordo de un aviso francés que me conduce a Cayena con mi tripulación y dos hermosas piraguas construidas por los negros bonis. Al llegar a aquella ciudad, me dicen que el gobernador va a hacer una excursión por el Oyapock dentro de cinco ó seis días; precisamente el tiempo necesario para hacer mis preparativos de viaje y para que Apatí termine su curación. Me ocupo de las últimas compras, hago calafatear mis piraguas y el 21 me embarco con el gobernador M. Huart, el director del interior Quintrie y muchas autoridades del país que me demuestran sus simpatías por el feliz resultado de mi misión.

El 22 por la mañana divisamos la montaña de Plata, así llamada porque en ella abunda un árbol de tallo fistuloso llamado madera cañon, cuya corteza y cuyas hojas tienen reflejos plateados. Esta eminencia, conocida de todos los navegantes franceses porque es un excelente punto de referencia para acercarse a tierra, estaba há tiempo ocupada por una colonia penitenciaria que producía un café muy apreciado.

Una hermana de la Caridad de Cayena a quien he enseñado los grabados de los antiguos indios del Maroni me dice que ha encontrado otros análogos en unas rocas de la montaña de Plata. Una de estas rocas es sin duda la que tanto dió que pensar a los portugueses cuando buscaban argumentos para hacer valer sus derechos al territorio comprendido entre el Amazonas y el Oyapock. Nuestros vecinos pretendian haber hallado una piedra grabada, un antiguo mojon de límites en el que habian reconocido las armas de Carlos V. Habiéndose nombrado una comisión franco-portuguesa para que examinase dicho monumento, sólo vió en él figuras extrañas que en nada se parecian á los grabados de un pueblo civilizado. Podemos creer que los dibujos de esta piedra no tenian más significacion que los que hemos encontrado en el Maroni.

Muy en breve doblamos la tierra baja del cabo de Orange y entramos en el Oyapock. La naturaleza parece haber hecho algunos gastos para recibirmos. Millares de garzotas de plumaje blanco y airoso penacho, é ibis de color rojo de fuego, sirven de batidores a nuestro buque: reemplazándolos algo más adelante legiones de vistosas cotorras verdes que cruzan la corriente. Encallamos al remontar el río, y eso que el capitán del buque, M. Couy, es el autor de un trabajo hidrográfico desde la desembocadura hasta la penitenciaria de San Jorge; pero el percance ha consistido en que el piloto nos hace pasar fuera del canal so pretexto de que desde los últimos sondeos ha cambiado de sitio un banco de arena. Esta equivocación, que nos hace perder un día, da ocasión á los oficiales para ir á cazar cotorras posadas en los árbo-
God heard their prayers and accepted their exercises, their tears, and their sorrow, because they were of a pure heart, perfect, and without blemish, like *chalchihuitl* (precious stones). They added that this world was preserved for their sake, and that they were our intercessors before Him. Satraps, wise men, and those killed by lightning were supposed to be particularly agreeable to the Sun, who called them to himself that they might live for ever in his presence in a perpetual round of delight," etc.* 

And what can be more beautiful than the prayer addressed to Tlaloc: "O Lord, liberal giver of all things, Lord of freshness and verdure, Lord of sweet-smelling paradise, Lord of incense and copal. Alas! your vassals, the gods of water, have disappeared, and lie concealed in their deep caverns, having stowed away all things indispensable to life, although they continue to receive the *ulli yauhtli* and copal offering. They have also carried away their sister, the goddess of substance. O Lord, have pity on us that live. Our food goes to destruction, is lost and dried up for lack of water; it is as if turned to dust and mixed with spiders' webs. Wilt thou have no pity on the macehuétes and the common people, who are wasted with hunger, and go about unrecognisable and disfigured? They are blue under the eyes as with death; their mouths are dry as sedge; all the bones of their bodies show as in a skeleton. The children are disfigured and yellow as earth; not only those that begin to walk, but even those in the cradle. This torment of hunger comes to every one; the very animals and birds suffer from dire want. It is pitiful to see the birds, some dragging themselves along with drooping wings, others falling down unable to walk, and others with their mouth still open

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* Sahagun, lib. vi. cap. xxi.
through hunger and thirst. O Lord, Thou wert wont to give us abundantly of those things which are the life and joy of all the world, and precious as emeralds and sapphires; all these things have departed from us. O Lord God of nourishment, most kind and compassionate, what hast Thou determined to do with us? Hast Thou utterly forsaken us? Shall not Thy wrath and indignation be appeased? Wilt Thou destroy these Thy servants, and leave this city and kingdom desolate and uninhabited? Is it so decreed in heaven and hades? O Lord, grant, at least, that these innocent children, who cannot so much as walk, and those still in the cradle, may have something to eat, so that they may live and die not in this terrible famine. What have they done that they should be so tried, and should die of hunger? They have committed no iniquity, neither do they know what thing it is to sin; they neither offended the gods of heaven nor the gods of hell. We, if we have offended in many things, if our sins have reached heaven and hades and the uttermost parts of the world, it is but just that we should be destroyed. O Lord, invigorate the corn and other substances, much wished for and much needed, now sown and planted; for the ridges of the earth suffer sore need and anguish from lack of water. Grant, O Lord, that the people receive this favour and mercy at Thine hand; let them see and enjoy the verdure and coolness which are as precious stones. See good that the fruit and the substance of the Tlalocs be given, which are the clouds that these gods carry with them and that give us rain. May it please Thee, O Lord, that the animals and herbs be made glad, and that the fowls and birds of precious feather, such as the quichotl and the cacuan, fly and sing and feast upon the herbs and flowers. And let not this come about with thunder and lightning, symbols of Thy wrath: for if our lords
the Tlalocs come in this way, the people, being lean and very weak with hunger, would be terrified.*

The degree of culture of a nation can be gauged from its religion, and notably its ideas of a future life. The beauty and eloquence-loving Greek discoursed upon philosophy walking under noble porticoes; the thoughts of the barbarous worshipper of Woden were of bloody fights, and of wassail in which he drank hydromel out of his enemies’ skulls; the Arab goes to sleep cradled on the lap of houris; the Red Indian dreams of endless hunting-fields, whilst the starving Bushman hopes for a heaven of plenty. The Toltec is the only one whose aspirations beyond the grave are free from grossness and cruelty; his heaven is a resting-place for the weary, a perpetual spring, amidst flowers, fields of yellow maize, verdure and flowers.

From these graver matters we will pass to the legend, told by Veytia, which makes Papantzin the inventor of pulque; and although, in our opinion, he places this event too late, it is none the less instructive as showing another side of Toltec history. In the year 1049, or, according to Clavigero, 1024–1030, Tecpancaltzin was one day taking his siesta in the palace, when Papantzin, one of his great nobles, presented himself together with his daughter, the beautiful Xochitl (“flower”), bearing, with other gifts to the king, a kind of liqueur, made from the maguey juice by a process of which Papantzin was the inventor. The new drink pleased the royal palate, and the lovely form and face of the young maiden were still more pleasing to the royal taste. The king expressed his desire to have more of the new beverage at the hands of the fair Xochitl, adding that she might bring it unattended save by her nurse. Proud of the honour shown him, Papantzin a few days later sent Xochitl,

*Sahagun, lib. vi. cap. viii.*
accompanied by a dueña, with some pulque. Xochitl was introduced alone to the presence of Tecpancaltzin. Bravely the maiden resisted the monarch's protestations of ardent love, but alone and unprotected she was unable to resist the threats and violence used against her. She was then sent to the strongly-guarded palace of Palpan near the capital; and there, cut off from all communication with parents or friends, she lived as the king's mistress. Her father meanwhile was told that his daughter had been entrusted by the king to the care of some matrons, who would perfect her education and fit her for a high position among the court ladies. Meanwhile the king visited Xochitl, and in 1051 a child was born, who received the name of Meconetzin ("child of the maguey"), and later that of Topiltzin (the "Justicer" *), by which he is known in history. But at last Papantzin, suspecting that all was not right with his daughter, visited the palace of Palpan in the disguise of a labourer; he found her and listened to the tale of her shame. His wrath knew no bounds, but he was quieted with the king's promise that the child should be proclaimed heir to the throne, and that, should the queen die, Xochitl would succeed her as his legitimate consort. It should be mentioned that polygamy and concubinage were strictly forbidden among the Toltecs of that period; that the laws were binding on king and peasant alike; and this explains why Tecpancaltzin was obliged to keep his love for Xochitl secret, until he was free to proclaim her publicly his queen; a step which was fraught with endless evils for his country, since after his death the Toltec princes, who were thus deprived of their hope of succession, broke out into open hostilities. The most powerful of these and nearest to

* Veytia, tome 1. chap. xxix.
INDIAN KING, DRAWN FROM CLAVICERO, RAMIREZ MS., AND FATHER DURÁN.
esta vez he tenido intención de cazar, si no como recreo, al menos para proporcionarme alimento.

A las nueve llegamos a una isla pintoresca, en la que hay dos chozas de indios oyampys. Dicenme que han sido abandonadas á consecuencia de una epidemia que ha arrebatado la mitad de los habitantes. Temeroso mi patron del contagio, no quiere desembarcar, pero el resto de la tripulación salta en tierra. Los indios oyampys no queman sus muertos como los rucuyos, sino que los entierran en una fosa muy profunda, pero que sólo tiene un metro de lon-

gitud, metiendo en ella el cadáver verticalmente, con los brazos, las piernas y la cabeza doblados, como el feto en el vientre materno. A veces lo dejan descomponerse en el bosque, y cuando ha transcurrido un año guardan sus huesos en una vasija de arcilla. Mons. Egmont me ha regalado una de estas urnas funerarias.

Los indios no civilizados dejan siempre transcurrir algún tiempo antes de dar sepultura a sus muertos: los galibis los conservan una semana. Tienden el cadáver en una hamaca, debajo de la cual ponen un cacharro para recoger en él el líquido que sueltan las carnes en descomposición; y, cosa horrible pero atestiguada por los negros bonis, los futuros piayys, es decir, los estudiantes de medicina, han de probar su fuerza de voluntad y energía de carácter bebiendo una maceración de hojas de tabaco y de una planta llamada quinquina, a la cual se agregan unas cuantas gotas de este virus cadavérico.
the throne was Huehuetzin;* with him were banded the caciques of the northern provinces beyond Jalisco and those bordering on the Atlantic Ocean, when after years of warfare, followed by calamitous inundations, tempests, droughts, famine, and pestilence (1097), the Toltecs, greatly reduced in numbers, dispersed; some directing their march south (the Toluca and Cuernavaca branch), others going north (the Tula and Teotihuacan branch) founded establishments at Tehuantepec, Guatemala, Goatzacoalco, Tabasco, and Campeche; whilst a few remained at Cholula and Chapultepec.† Ixtlilxochitl‡ places this event in 1008. Sixteen hundred are said to have settled at Colhuacan, intermarried with Chichemec caciques, and founded the family from which the kings of Texcucan were descended. Clavigero writes that the miserable remains of the nation found a remedy in flight (1031—1050), some settling in Yucatan and Guatemala, whilst others, with the two sons of Topiltzin, remained in the Tula valley, and that their grandsons were subsequently closely connected with the royal families of Mexico, Texcucan, and Colhuacan.§ Finally Torquemada|| writes "that they were counselled by the devil to abandon their country to escape utter annihilation, and that the account of their migrations is to be found in Acolhuan histories, written in peculiar characters as is the custom of these aborigines."

The Toltec soldiers wore a quilted cotton tunic that fitted closely to the body and protected also the shoulders and thighs; their offensive weapons consisted of spears, light javelins, and clubs studded with steel, silver, or gold nails. They used a copper currency, which a short while ago was still found among the Tutupecans.*

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* Veytia, tome 1. chap. xxxiii
† Ibid.
‡ Ixtlilxochitl, "Relaciones," Kingsborough, tome ix. pp. 332 and 333.
§ Clavigero, tome 1. lib. ii. p. 54.
|| Torquemada, "Monarquia Indiana," tome 1. lib. i. cap. xvi.
¶ Ixtlilxochitl, ut supra.
These quotations, which might be multiplied, clearly prove that the Toltecs migrated south, following the coasts of both oceans; that they ceased to exist as a nation after the disruption of their empire; but that their scattered remnants carried on the work of civilisation in Central America, on the high plateaux, and in Anahuac; evidenced in the strong resemblance that the civilisations of these various regions bear to one another.

We will close this chapter with a few words about the Chichemecs, who occupied the valley after the Toltecs. Their emperor Xolotl made Tenayuca, to the west of Lake Texcoco, his capital, and despatched four chiefs, with a strong escort, to explore the country in every direction. They were absent four years, and in their report (1124) they stated that they had met with some Toltecs in the region formerly held by them; but that the greater proportion had founded important colonies in the far-off provinces of Tehuantepec, Guatemala, Tecocotlan, and Tabasco. Nopaltzin, the son of this emperor, sent likewise emissaries from Teotihuacan, whose report was to the effect that they had found a few Toltecs scattered in five different places, who told them of their hardships, adding that most of their fellow-citizens had gone farther west and south.

From these quotations it is clearly seen that the date of the oldest edifices in Tabasco cannot be anterior to the beginning of the twelfth century;* that Toltec influence was felt simultaneously on the high plateaux and in Central America, shown by the flourishing small Toltec state of Colhuacan, where King Architometl (1231) had revived those arts and sciences his ancestors had initiated, and which, since their extermination, had fallen into utter decay. This king succeeded so well in

* Veytia, tome ii. chaps. ii., iii.