

gress at Paris, in 1887, decided to photograph the whole sky down to stars of the fourteenth magnitude. Could this enterprise have borne all the fruits it has if the planets of the thirteenth magnitude had been let pass unperceived?

For all these reasons, I think that the search for minor planets ought to be continued. It demands, indeed, considerable work in calculation; but that can be divided among several scientific establishments. The Bureau of Longitudes is disposed to do its part in the matter.—*Translated for the Popular Science Monthly from the Revue Scientifique.*

THE NATCHEZ INDIANS.

By HOWARD A. GIDDINGS.

THE Natchez were the ancient head of the demi-civilized people inhabiting that part of America called Florida by the first discoverers. It is evident, from the historians of De Soto's expedition, that a state of society prevailed among this people very different from that of their neighbors. The Natchez can not properly be classed as North American Indians; differing widely from all other tribes in language, customs, and condition, they seemed in most respects like another race. They came originally from Mexico, and closely resembled the Aztecs, both in appearance and habits. Possessing none of the roving disposition common to the savage, their houses, furniture, and domestic implements were comparatively comfortable and convenient. We are told that their houses were gathered together into towns, and resembled farm-houses in Spain, being surrounded with bake-houses, granaries, etc., showing a nation no longer in the hunter state, but attached to the soil, with all the corresponding effects of a life advanced a step toward civilization.

Their houses were nearly always a perfect square. They constructed them by bringing from the woods young trees about fifteen feet in length and four inches in diameter, which they planted in the ground fifteen inches apart, the strongest at the four corners; the tops being bent inward to the center and fastened with split canes. The chinks in the walls were filled up with a mortar of mud mixed with a tufted herb called Spanish beard, leaving no opening but the door. The roof was thatched with turf and straw, and over all was plaited a mat of split canes; the walls were covered both inside and out with mats of the same material. With occasional repairs these buildings lasted twenty years.

The Natchez lived under a despotic government, and it is but

natural that the chiefs were lodged in a manner superior to their subjects. The following description (Garcilaso de la Vega, *Historia de la Florida*) will apply generally to all the capitals and habitations of the chiefs in Florida:

They always endeavored to place their towns upon elevated sites; but, because such situations are rare in Florida, or on account of difficulty in procuring suitable materials for building, they raised eminences (mounds). Choosing a suitable place, they brought a great quantity of earth, which they raised into a kind of platform, sometimes of a very considerable height, the flat top of which was capable of holding from ten to twenty houses, to lodge the cacique (chief), his family, and suite. The sides of the mound were made so steep that it was impossible to ascend but by steps, or causeways of earth, sloping gradually to the ground. Around the foot they traced a square, conformable to the extent of the town they intended to build, and around this square the more considerable people built their dwellings. The commonalty built around them in the same manner; the whole population thus surrounding their chief.

The house of the cacique was larger and more commodious than the houses of the people, but not otherwise materially different; though a Portuguese gentleman who accompanied De Soto describes the houses of the chiefs in some parts of the present State of Alabama as having had porticoes to their doors.

It is stated that in the dwelling of the Cacique of Palisema the inner apartment was hung with buckskins so well dried and wrought "that one would have taken them for good tapestry, the floor being also covered with the same." The furniture in the dwellings of the Natchez corresponded with their superior construction. They had an equivalent for a bedstead, and also wooden seats or stools, boxes, baskets, and mats of split cane, finely wrought and ornamented.

Their tools, like those of the barbarous tribes, were made of bones, flints, etc., although copper was sometimes used. In the history of De Soto's invasion we read of copper axes or hatchets, pikes with copper heads, staves, clubs, etc., made partly or entirely of copper. They also made "kettles of an extraordinary size, pitchers with small mouths, gallon bottles with long necks, and pots or pitchers for bear oil which would hold forty pints." They made salt from the water of saline springs near the mouth of the Arkansas River, evaporating it in earthen pans made for the purpose, which left the salt formed into square cakes. Their dress was much like that of the ruder tribes, which, however, they surpassed in the manufacture of clothing from wild hemp, mulberry bark, and feathers. McCulloh states that fans made from feathers were used by the Natchez nobility.

They cultivated maize, beans of several kinds, the large sunflower, sweet potatoes, melons, and pumpkins. Bartram found around the ancient monuments of Georgia and Alabama fruit trees, supposed to have been planted by the Natchez. Among them were persimmon, honey locust, Chickasaw plum, mulberry, black walnut, and shell-bark. On one occasion De Soto's troops came upon a pot of honey, "though neither before nor after did they see bees or honey."

The language of the Natchez was easy in pronunciation and expressive in terms—that of the nobles being slightly different from that of the people. For instance, in greeting a noble, one would say "*apapegonaicke*," which is equivalent to "good morning"; while to express the same thing to one of the people, we would say "*tachte-cabanacte*." To request a noble to be seated we would say "*cabam*," while to a common person we would say "*petchi*." The two languages are nearly the same in all other respects, the difference in expression seeming only to take place in matters relating to the persons of the Suns and nobles, in distinction from those of the people.

The Natchez were celebrated for their feasts and festivals. They began their year in the month of March, as was the practice for a long time in Europe, and divided it into thirteen months or moons. At the beginning of each moon they held a grand festival, which took its name and character from that of the moon. The first moon was called Deer, the second Strawberry, the third Small Corn, the fourth Watermelons, the fifth Fishes, the sixth Mulberries, the seventh Maize, the eighth Turkeys, the ninth Buffalo, the tenth Bears, the eleventh, which corresponds to our January, was called the Cold-meal Moon, the twelfth Chestnuts, and the thirteenth Walnuts, these nuts being ground up and mixed with their food at this season of the year.

The Natchez nation consisted of numerous villages, each of which was governed by its own Sun, or chief, all of whom admitted their inferiority to one great chief, who was considered the head of the nation, and was called the Great Sun. Herriot (*History of Canada*) graphically describes the dwelling and etiquette of the *levées* of the Great Sun: "The cabin of the Great Sun contained several beds on the left of the entrance; on the right hand was the bed of the Great Sun, adorned with different painted figures. This bed consisted only of a *paillasse* made from canes and reeds, with a square piece of wood for a pillow. In the center of the cabin was a small boundary, around which any one who entered the apartment was obliged to perform the circuit before he was permitted to approach the bed. Those who entered saluted with a kind of howl, and advanced to the extremity of the cabin, without casting their eyes toward the side where the Great

Sun was seated. They afterward gave a second salute by lifting their arms above their heads and howling three times. If they were persons whom the Great Sun respected, he answered by a faint sigh and made them a sign to be seated; he was thanked for his courtesy by a new howl, and at every question the Sun made they howled once before returning an answer. When they took their leave they drew out one continued howl until they retired from his presence."

From the history of De Soto's invasion it is evident that not only the Great Sun, but all the caciques of Florida, were attended with some rude state. The chief of Cosa, when he visited De Soto, was carried in a litter, wearing on his head a diadem made of feathers, while around him attendants "sang and played upon instruments."

The government of the Natchez is what especially distinguished them from the other tribes of North America. Du Pratz says: "The authority which their princes exercise over them is absolutely despotic, and can be compared to nothing but that of the first Ottoman emperors. Like them, the Great Sun is absolute master of the lives and estates of his subjects, which he disposes of at pleasure," etc. As soon as the presumptive heir of the Great Sun was born, every family in which there was a child at the breast gave that child for his service. When the chief died, all these individuals were put to death, to serve their master in the world of spirits.

The Natchez were divided into nobles and common people, which last, with an arrogance not peculiar to savages alone, were designated "stinkards."

The nobles themselves were divided into Suns, nobles, and men of rank. The Suns, according to tradition, were descended from a man and woman who came down from the sun to teach them how to live and govern themselves. They enjoyed immunity from punishment by death, and their nobility was transmitted only through the female line. Although the children, both male and female, bore the name of Suns, the males enjoyed this honor in their own persons alone. Their male children were only nobles; the next generation were men of rank, and the third lowered them to plain stinkards, although distinguished actions might retard the deterioration of the blood. But the case was very different with the female posterity. They enjoyed through all generations the privileges of their rank. Laudonière speaks of a queen "who was much revered by her subjects when he visited Florida."

The nobility never intermarried. As we have already noticed, one of their laws prohibited their being put to death for any reason whatsoever. Another law decreed that when a Sun died, his

or her conjugal partner should be put to death at the time of burial. To fulfill these two laws they only married stinkards.

McCulloh states that the Natchez believed mankind to be immortal, and that after death their souls went to reside in another world where they would be rewarded or punished according to their present life. They believed that such as had been faithful observers of the laws were to be conducted to a region of happiness, where their days would pass in pleasure, in the midst of feasts, of dances, and of women; but they believed that the transgressors would be cast on lands unfertile and marshy which would produce no grain. There they would be exposed naked to mosquitoes, and they never should eat but of the flesh of alligators and the worst kinds of fish.

The sun was the principal object of their veneration, and to its honor a perpetual fire was maintained in their temples. The Great Sun, supposed to be the brother of the sun, honored the appearance of his elder brother every morning by a repeated howling, and, having had his pipe lighted, he offered him the first three mouthfuls of smoke, after which he raised his hands above his head and turned from east to west, the course the sun would follow during the day. The temples of the Natchez, like the abodes of the Suns, were built upon mounds erected for the purpose. They were usually about thirty feet square and built of the heart of the cypress tree, which was supposed to be incorruptible.

Du Pratz, who lived among them eight years, relates from their traditions the following history of the institution of the perpetual fire so religiously preserved: The original Sun told them that, "in order to preserve the excellent precepts he had given them, it was necessary to build a temple into which it would be lawful for none but those of royal blood to enter to speak to the Spirit; that in the temple they should eternally preserve a fire which he would bring down from the sun, from whence he himself had descended; that the wood with which the fire was supplied should be pure wood and without bark; that eight wise men of the nation should be chosen to guard the fire night and day; and that if any of them neglected their duties they should be put to death," etc.

Though oral traditions are considered to be of little authority, and are materially perplexed in being handed down from one generation to another, we can still admit that these accounts were originally true. The historical tradition of the Natchez was this: "Before we came into this land, we lived yonder, under the sun" (here the relator pointed nearly southwest, toward Mexico). "We lived in a fine country, where the earth is always pleasant; there our Suns had their abode, and our nation maintained itself for a

long time against the ancients of the country, who conquered some of our villages in the plains, but never could force us from the mountains. Our nation extended itself along the great water, where the large river loses itself; but, as our enemies were become very numerous and very wicked, our Suns sent some of their subjects, who lived near this river, to examine whether we could retire into the country through which it flowed. The country on the east side of the river being found extremely pleasant, the Great Sun, upon the return of those who had examined it, ordered all his subjects who lived in the plains, and who still defended themselves against the ancients of the country, to remove into this land; here to build a temple, and to there preserve the eternal fire. A great part of our nation accordingly settled here, where they lived in peace and abundance for several generations. The Great Sun and those who remained with him were tempted to continue where they were, by the pleasantness of the country, which was very warm, and by the weakness of their enemies, who had fallen into civil dissensions, etc. It was not till after many generations that the Great Sun came and joined us in this country, and reported that warriors of fire, who made the earth to tremble, had arrived in our old country. and, having entered into an alliance with our brethren, conquered our ancient enemies; but attempting afterward to make slaves of our Suns, they, rather than submit to them, left our brethren, who refused to follow them, and came hither attended only by their own slaves."

Their tradition also says that after their removal to Louisiana their nation in the height of their prosperity extended from the river Manchac, or Iberville, to the Ohio, or about four hundred leagues; and that they had about five hundred Suns or princes to rule over them.

At the time we become acquainted with the Natchez their nation was nearly destroyed, though from what causes we do not exactly know. They were expelled from the country originally known as Florida about A. D. 1730, a part being driven across the Mississippi, and the remainder incorporating themselves with the Chickasaws and other neighboring tribes; the new confederacy of the Creeks arising upon their ruins. It is probable that their final downfall was caused by De Soto's ferocious and bloody invasion, during which for three years their country was ravaged with fire and sword, and the inevitable consequence of which was an inability to defend themselves against the hostile tribes around them, who probably broke into their country from all directions, and smothered the partial civilization which once distinguished this part of the United States.