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I.—Symbolism of the Huichol Indians.

By CARL LUMHOLTZ.

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I.—SYMBOLISM OF THE HUICHOL INDIANS.

By CARL LUMHOLTZ.

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The following alphabet is used in transcribing Huichol words : —

<i>a</i>	like <i>a</i> in <i>bar</i> .	<i>p</i>	like <i>p</i> in <i>pipe</i> .
<i>á</i>	« <i>aw</i> « <i>law</i> .	<i>r</i>	« <i>r</i> « <i>run</i> .
<i>ai</i>	« <i>i</i> « <i>find</i> .	<i>s</i>	« <i>s</i> « <i>sit</i> .
<i>au</i>	« <i>ow</i> « <i>cow</i> .	<i>š</i>	« <i>sh</i> « <i>shoe</i> .
<i>b</i>	« <i>b</i> « <i>babe</i> .	<i>t</i>	« <i>t</i> « <i>tit</i> .
<i>ç</i>	« <i>th</i> « <i>think</i> .	<i>tš</i>	« <i>ch</i> « <i>church</i> .
<i>d</i>	« <i>d</i> « <i>dread</i> .	<i>u</i>	« <i>oo</i> « <i>good</i> .
<i>e</i>	« <i>e</i> « <i>they</i> .	<i>ü</i>	« <i>ü</i> « Ger. <i>für</i> .
<i>é</i>	« <i>e</i> « <i>then</i> .	<i>v</i>	« <i>v</i> « <i>valve</i> .
<i>ě</i>	« <i>e</i> « <i>flower</i> .	<i>w</i>	« <i>w</i> « <i>wit</i> .
<i>f</i>	« <i>f</i> « <i>fife</i> .	<i>y</i>	« <i>y</i> « <i>you</i> .
<i>g</i>	« <i>g</i> « <i>goose</i> .	<i>z</i>	« <i>z</i> « <i>zero</i> .
<i>h</i>	« <i>h</i> « <i>house</i> .	<i>χ</i>	like { <i>ch</i> « Ger. <i>Buch</i> .
<i>i</i>	« <i>i</i> « <i>marine</i> .		{ <i>j</i> « Span. <i>jota</i> .
<i>k</i>	« <i>k</i> « <i>kick</i> .		

l is always thick, almost approaching an *r* pronounced with the tip of the tongue, like the *l* of the peasantry of central Norway. It is sometimes interchanged with *r*.

<i>m</i>	like <i>m</i> in <i>mum</i> .
<i>n</i>	« <i>n</i> « <i>nun</i> .
<i>o</i>	« <i>o</i> « <i>note</i> .

Long vowels are indicated by the long mora, *ā*, *ē*, *ī*, *ō*, *ū*.

Vowels that do not form diphthongs are separated by a hyphen.

A small superior letter at the end of a word or syllable should be pronounced very slightly.

Accents are placed following the accented vowel.

INTRODUCTION.

During the years 1890-98 I made three expeditions to Mexico under the auspices of the American Museum of Natural History, New York, spending altogether more than five years in researches among the natives of the north-western portions of that country.

Without here touching upon the general results obtained during these years, I shall confine myself for the present to one tribe indigenous to the Sierra Madre, the Huichols, of whom little or nothing was known up to the time of my arrival among them in 1895. I visited these Indians on my second expedition, and spent ten months among them, and their neighbors the Cora Indians, this period covering the greater part of the year 1895 and the beginning of 1896. During this time I gained valuable information concerning these people, and collected a vast number of ethnological as well as some archæological objects, that shed much light on the state of their culture and their relationship to other tribes. A short preliminary report on the Huichol Indians, whom I was the first to study, appeared in the Bulletin of the American Museum of Natural History, January, 1898. Soon afterwards, in the spring of 1898, I visited the Huichols a second time, under the same auspices, in order to supplement the material in hand, and to settle some doubts that had arisen in my mind while working up my notes. Much additional information was thus secured, and the collections considerably enlarged. Some of the results of my studies of these people are presented in the following pages. In weighing the value of this contribution, it should be borne in mind that the interpretation of the symbolism was obtained from the natives themselves.

For the accompanying sketch-map of the country of the Huichols and Coras, more than approximate accuracy is not claimed. It is based on notes taken during my travels; and, as it is practically the first attempt at a map of that section, I beg the reader's indulgence for shortcomings, that, under the circumstances, were unavoidable. The illustrations are from drawings made by Mr. Rudolf Weber.

CARL LUMHOLTZ.

March, 1900.

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MAP SHOWING SACRED PLACES VISITED BY THE HUICHOL INDIANS.

I.—BRIEF SKETCH OF THE COUNTRY AND TRIBE.

Historical data regarding the Huichols are rare and sometimes obscure. It seems, however, to be the accepted opinion that the country of the Huichols is included, with that of the Coras, under the term 'Nayarit,' and that the boundaries of Nayarit, or the Province of Nuevo Toledo, as it also was formerly called, were Acaponeta in the west, and Colotlan in the east. This fact would indicate that the conquest of the Huichol country by the Spaniards occurred at the same time as that of the Coras, 1722; but it seems hardly probable that the Huichols should not have been at least partly conquered before that time by Spaniards coming from the east, more especially since they are not as warlike as the Coras. This opinion is confirmed by a manuscript which I came across on my travels, and which will be published on a later occasion. This manuscript places the foundation of the pueblos of Santa Catarina and Tezompa in the seventeenth century. Indeed, there seems to be no doubt that the Huichols were conquered before the Coras. It is doubtful whether missionaries gained much influence among them until later, when, after the conquest of the adjoining Coras, missionary work was firmly established among the two tribes by the Franciscans.

Six pueblos—San Andrés Coamiata, Guadalupe Ocotan, San Sebastian, Santa Catarina, Tezompa, and Soledad—are in existence. All these except San Andrés, which lies on a high mesa on the western side of Chapalagana River, are on the eastern side of that river, which traverses the Huichol country from north to south. Tezompa and Soledad are at present inhabited by a mixed population consisting of Huichols and Mexicans, but the other pueblos are entirely owned by the Huichols. As usual among the tribes of Mexico, the Indians do not like to live in villages, but prefer to live on their ranches. Only the elected officers of the tribe stay in the pueblos.

In spite of the missionary work of the past, to-day there is no priest among them, the churches are in ruins, and the Huichols are living in the same state of barbarism as when Cortés first put foot on Mexican soil. The introduction of sheep, cattle, and iron implements has modified to some extent their mode of life, but not so much as one would expect. Many of them are knowing enough to put on an external show of Christianity towards people from whom they expect some favor. Some, the most civilized, know how to make the sign of the cross, and are familiar with the name of the Virgin Mary, of Dios and Diabolo. Still their ancient beliefs, customs, and ceremonies all remain in their pristine vigor, these Indians jealously guarding their country against encroachment by the whites.

The Mexicans call them *los Huicholes*,—a corruption of the tribal name, Vira'rika, in the western part of the country pronounced Viša'lika. According to some Indians, the name means 'prophets' (Sp. *adivino*). According to

others, it means 'healers,' 'doctors,' (Sp. *curandero*). This latter would be very appropriate, as every third person seems to be a doctor, and the fame of the Huichol healers extends far beyond their own country. Many of them make annual tours, practising their profession among the neighboring tribes, especially among the Coras and the Tepehuanes.

The Huichol tribe numbers to-day about four thousand souls, and they live in a mountainous country, difficult of access, in the northwestern part of the State of Jalisco, on a spur of the great Sierra Madre. This range runs in a northerly and southerly direction, parallel to the Sierra del Nayarit, both sierras forming the southern part of the Sierra Madre del Norte, which ends at the Rio Alica (also called Rio Santiago and other names). Of this sierra the Jesuit Father Ortega says, in the first chapter of his 'Historia del Nayarit : ' " It is so wild and frightful to behold, that it, more than the quivers of its warlike defenders, took away the courage of the conquerors, because not only did its ridges and valleys appear inaccessible, but the extended sphere of towering mountains and peaks perplex even the eye."

The country is well watered by the river Chapalagana, which runs at the bottom of a mighty, deep valley, a great many small tributaries forming as many side valleys. While very narrow and steep at the bottom, the valley gradually broadens out, the sides rising to a height of from twenty-five hundred to three thousand metres. The country thus consists of two parallel ridges and the valley between, the tops of the ridges being covered with immense pine forests, the abode of numerous deer (the Sonoran deer, *Dorcelaphus couesi* Allen).

On the banks of the river, as well as in the little steep side valleys, the climate is tropical. Most of the natives live here only temporarily, coming occasionally to catch fish and crayfish. Small orchards of bananas and sugar-cane may be seen. The Indians consume the latter crop by chewing the cane. Also a small crop of cotton is raised. Most of the ranches are situated at a moderate elevation above the sea, dispersed all over the district in its numerous valleys. The Indian is rarely found living on the pine-clad heights, which are his hunting-grounds.

Corn, beans, and squashes are the main agricultural products, all raised on a very moderate scale. On account of the mountainous character of the land, ploughing is not resorted to except in a few places, the old-fashioned Indian way of planting corn being still in vogue. For the purpose trees and bushes are cut down, to be burned a few months later, and the corn is then planted in holes made with a stick. This mode of cultivating, which is still used among several tribes in Mexico, is called in Mexican Spanish *coamilear*, and the field is called *coamil*. There is generally an abundance of rain from July till November; but, owing to the primitive way of planting corn on the declivities of the cañons, an extraordinary amount of rain is needed, because most of it runs off without penetrating far into the soil.

The northern part of the country, around the pueblos of Tezompa and Soledad, is not so mountainous, and therefore has already been occupied by the

Mexicans, as stated before. The southern part, from the ranch Ratontita southwards, presents the same natural features as the northern; but the Huichols here still manage to keep the Mexicans out. It is probably only a matter of time, however, before this section too will become Mexicanized. Mexicans have also encroached on the outskirts of the country, towards the east and west, on both slopes of the Sierra.

All that now remains of the country owned solely by the Huichols is the central part. Here the population is fairly safe from advancing civilization, on account of the ruggedness of the country and its difficulty of access. It would hardly pay white men to settle here, because of the small extent of land suitable for cultivation by the plough. I should estimate the present territory of the Huichols to be about forty miles long by twenty-five miles broad. This, however, gives no adequate idea of the length of time required to traverse this country of precipitous hillsides and deep gorges.

The Huichol Indians are of medium height, and the color of their skin is light reddish-brown. They are a very healthy people, the women are good-looking, and the children are generally very pretty. Their principal food all the year round is corn and beans. In the wet season one or two kinds of fungi are eaten. The hunting of deer and the killing of cattle are always connected with religious ceremonials, their meat being eaten at religious feasts.

The Huichols are exceedingly emotional, and are easily moved to laughter and to tears. They are also intemperate and licentious, as well as thievish, and do not speak the truth unless it suits them. They have little personal courage, preferring to assassinate an enemy to facing him in open fight. They are musical, their voices for singing being better than those of any other tribe that I ever met with. Their songs are all religious.

A certain difference exists between the people living on the eastern and those on the western side of the river in regard to character, details of dress, and arrangement of the hair, and even the pronunciation of some words. The Santa Catarina side includes the eastern pueblos, with the exception of that of Guadalupe Ocotan, which, although situated on the eastern side, belongs socially and religiously to the San Andrés side.

The San Andrés people, as I shall call those on the western side, are slightly more naïve, and somewhat more gentle and quiet, than the Santa Catarina people, who are more fearless and impulsive. Hair-ribbons worn on the eastern side are very narrow, but the designs are better executed and more artistic. The shirts are of shorter cut in Santa Catarina than in San Andrés.

In the whole country there are three styles of wearing the hair. 1. It is braided into a single queue, which hangs down the back, a colored ribbon being braided in with the hair, and tied around it toward the end. This is specially the men's fashion, and is called *pí'rai*. 2. It is gathered into a bunch at the back of the head, and a ribbon is passed under it, the ends of the ribbon being tied into a bow-knot over the middle of the forehead, and the hair falling ungracefully over

the ribbon at the back. This is specially the women's fashion, and is called *kū'pa* or *tapoli'*. 3. It is worn flowing. This style is called *tō'stēgali* or *mayoru'na*, and is used by either sex. A narrow ribbon is in all cases bound round the heads of both men and women. Men wear their hair in all three modes, style No. 1 being much more prevalent in Santa Catarina than No. 2 or No. 3. Women on the Santa Catarina side use either No. 2 or No. 1, while on the San Andrés side they use only No. 3.

The differences in pronunciation are but slight. In San Andrés they pronounce their words thick, as the Indians of Santa Catarina assert. In many cases *r* is replaced by *š*, and in others by *l*. Thus *Vira'rika*, the tribal name, is in San Andrés pronounced *Viša'lika*; *ri'kuli*, a woman's tunic, is on the San Andrés side called *ši'kuli*.

The people of the western side are somewhat better off than the easterners. Those of Santa Catarina, although poorer than the rest, are imbued with their own importance, being in possession of the chief temple of the country and of the principal sacred places. Jealousy and ill-feeling exist between the people on one side and those on the opposite side. This, however, does not seem to have arisen from religious reasons, but from the fact that the pueblo of Santa Catarina is continually trying to push its boundary too far over on the western side. This may be the result of the old division of the country into districts, or the effect of the efforts of the missionaries to confine the Indians in pueblos with ill-defined boundaries.

At the present time the dress of the men consists mainly of a shirt (*kami'ra*, Sp. *camisa*), either made of a cheap quality of cotton-cloth (Sp. *manta*) obtained from Mexican stores, or woven from wool, and often embroidered. The women wear a skirt and a short tunic, both of cotton-cloth. Sandals of the usual cowhide pattern are worn. Ancient sandals braided from strips of palm-leaf are now only used as ceremonials. The same is the case with ancient girdles woven from *ixtle*, the fibre of the maguey (*Agave americana* L.). Throughout the memoir I shall use the word 'ixtle' (Nahuatl, *ichtli*¹) in the Mexican sense, as an expression for fibre of all century-plants, but especially of the maguey.

The women weave tunics, girdles, and hair-ribbons of ancient designs, from wool. Cotton-cloth is gradually taking the place of woollen stuffs, as it is cheaper, and easier to work on. The women are clever at embroidery, with which they adorn both their own dress and that of the men. Some few of the men are also quite skilful in this art. The tribe make two kinds of alcoholic beverages. One is a weak brandy called *tātš*, distilled from the sweet stem of a certain species of century-plant called in Mexican Spanish *sotol*.² The other is a kind of sweet, thick beer called *nāwa'*, made from corn. Both these drinks play an important part at feasts.

The Huichols live mostly in circular houses (*ki* or *iki'*) made from loose

¹ Dictionnaire de la Langue Nahuatl, par Rémi Siméon, Paris, 1885.

² See Bulletin of the American Museum of Natural History, X, p. 13.

stones, or from stone and mud, and covered with thatched roofs. The temples of their gods (Plate I, Fig. 1) are of similar shape, but much larger, having their entrance towards sunrise. They are called *toki'pa*, which means 'house of all.' Inside may be seen niches for the gods of the temple. In the temple of Santa Catarina, which is dedicated to the god of fire, I used to see people deposit flowers in his niche, burning copal as incense, and muttering prayers in a low voice. The centre of interest in a temple, however, is the fireplace, which is situated in the middle of the building. It consists of a circular bed of clay 1.20 metres in diameter, surrounded by a thick clay wall some 15 cm. high. When no feast is going on, this circular bed, which is called *a'ro*, is always brimful of ashes. To the west of the fireplace, on a level with the floor, is a disk of solidified volcanic ash, generally ornamented with carvings of deer. It is called a *tê'pali* (see p. 24); and on this the shaman, when singing in the temple, places his drum, seating himself behind it with face turned towards the east. Outside, in front of the door, is an open space surrounded by small god-houses, rectangular or circular in shape, and covered with thatched, gabled roofs. The entrance to the god-houses faces the open place in front of the temple. Such small god-houses, which are called *ši'liki*, are found near every house, and may also frequently be met with at lonely places in the forests. In these houses, as well as in sacred caves and springs and other consecrated localities, are placed ceremonial arrows, votive bowls, ceremonial chairs, and other symbolic objects, which will be described hereafter. These ceremonial objects lose their value after five years, and are thrown out of the house. The roof of the temple, with certain symbolic objects attached to it, is renewed every five years, simultaneously with the election of new officers.

There are at present nineteen temples in the country, and although one may generally find ranches near them, still it is only at the time of the feasts that the population of the district congregates there, officials and their families camping on such occasions in the god-houses. I shall not enter into a complete exposition of the religious system of these Indians. Suffice it here to give an outline, — so much only as is requisite for the understanding of our present subject.

The Huichol country is divided into three sections, each dedicated to one of the principal gods. What was formerly the fourth section, dedicated to another of the principal gods, has been almost entirely taken by the Mexicans.

1. The section in and around the pueblo of Santa Catarina, in the east. This pueblo is called by the Indians *Toapu'li*, which is the name of two small mountains at the foot of which it lies. In the pueblo, close by the mountains, stands the temple, on the same site where it has been from time immemorial. It is the principal temple of the country, and dedicated to the god of fire (*Tate'vali*). All the people of this section are said to be 'of *Toapu'li*.'

2. The section in and around the pueblo of San Sebastian, the southeastern part of the Huichol country. The pueblo is called by the Huichols *Tâte'* [our Mother] *Wau'tëga*, or simply *Wau'tëga*, which is the name of a spring in the

neighborhood. The temple here, recently destroyed by fire, belonged to the second god of fire (Tato'tsi Ma'ra Kwa'ri). The people of this section are said to be 'of Wau'tëga.'

3. The section in and around the pueblo of San Andrés, comprising the western part of the country. The pueblo is called by the Huichols Täte' I'ki^a, which means 'the house of our Mother.' It alludes to a mythological event concerning a serpent (Täte' Īpou) which was born here, and then went down to the coast. This section is ruled over by the Sun (Tayau' or Tavê'rik^a), and all the people there are said to be 'of Tavê'rik^a.'

The fourth section was without doubt the country now comprising the pueblos of Soledad and Tezompa, in the northeast. The temple of Lajas is the only remaining portion of it. This is dedicated to the god of wind or air (Tama'ts Pa'likë Tamoye'kë).

Each of these sections contains many temples, where feasts are held; and the people of each section are welcome guests at the feasts celebrated in their temples, but those of other sections of the country are not invited to take part.

I once counted forty-seven gods recognized by the tribe; but the number is practically unlimited, since every hill and every rock of peculiar shape is considered a deity. The stones and rocks are alive, representing the mythical ancestors or their belongings, — their bows and arrows, their pouches, *tamales* (Fig. 241), etc. However, it would be a mistake to assume that all gods are in reality different. The principal ones have as many as eight or ten names, and thus the number of distinct deities may be placed very much lower. A great number are necessarily only different impersonations of the same god. The gods are supposed to dwell in lagoons, water-holes, and springs, or, as the Indians express it, "all gods arrived from the sea, but here they made water-holes or springs." Every god has one. Women are considered as the daughters of the goddesses, and men as the sons of the gods, each one belonging to a particular god. Each god has his animals, which, as an Indian explained to me, stand in the same relation to the god as do the hens to the master of the house. The four principal gods are: —

1. Tate'vali, the god of fire. His name means 'our [ta] grandfather [te'vali].' I shall call him Grandfather Fire. The fire is called among the Huichols tai, but the fire in the temple is Tate'vali. He is the god of life and health. He is the curing and prophesying shaman, and the particular god of the shamans, especially of those who cure and prophesy. Animals belonging to him are the macaw, the royal eagle, the cardinal bird, the tiger, the lion, and the opossum. Herbs and grass also belong to him. This god, together with Tato'tsi, made the first temple of the Huichols.

2. Tato'tsi, the second god of fire, and the chief deer god. His complete name is Tato'tsi Ma'ra Kwa'ri, which means 'our [ta] great-grandfather [to'tsi] deer-tail [ma'ra kwa'ri].' I shall call him Great-grandfather Deer-Tail. He is the singing shaman. The white-tailed hawk belongs especially to this god.

The relations between these two deities are interesting. Great-grandfather Deer-Tail is the son of Grandfather Fire, having, according to tradition, sprung forth from the plumes of his father. Still he is older. The explanation of this is as follows: Great-grandfather Deer-Tail is the spark produced by striking flint; and Grandfather Fire, the fire fed by wood. The two, therefore, are also brothers, and older than the Sun. The names of these two gods are constantly on the lips of the people. When Huichols meet, especially after separation for a time, they first speak of the gods, and one hears the names of these two most prominently.

The implements of to-day for making fire are a piece of flint, tinder (a fungus from oak-trees), and a piece of steel bought from the Mexicans. Evidently the Indians formerly made fire by striking flint against pyrites; the more convenient steel implement, which is called tau'tsu or tau'tsyu, being a later introduction. I have heard the following interpretation of the fire-making implements: The steel is Tate'vali, and the sparks his facial painting (Tate'vali urai'ya); the flint is Tato'tsi; the tinder, Tate'vali's food (Tate'vali i'ně^{wa}).

3. Tayau' (or Tau) or Tavé'rik^a, the Sun. The former name means 'our father.' The significance of the latter name I was unable to learn. It may have some reference to riku'a ('rattle' or 'bell'). I can only say that it is the name given by the rabbit to the Sun, as related in the following myth.

"The ancient shamans made Father Sun by throwing the young son of the Corn Mother, Tâte' Otegana'ka [or, according to another tradition, of Young Mother Eagle, Tâte' Vê'lika Uima'li], into an oven, arrayed in full attire, with sandals, pouches, and tobacco-gourds, and carrying his bow and arrow. From the oven the boy travelled underneath the ground, and rose as the Sun, where it rises to-day, in the east. Five days after the birth of the Sun the chief men wanted to give him a name, and the Rabbit made five ceremonial circles and turned his face towards the Sun, saying, 'Vê'rik^a, vê'rik^a, vê'rik^a!' The Rabbit had horns in those days, and was the son of one of the tama'ts [our elder brothers]; but the Rabbit changed 'clothes' with his father [the Deer]. The Turkey next made five circles and said, 'Šripi' [he is starting], tau, tau, tau!' He was the brother of the Sun." I shall call this god Father Sun or the Sun.

The principal animals belonging to Father Sun are the turkey and the rabbit, the tiger, the red-tailed hawk (Kwir or Kwiš), the quail, the gigantic woodpecker, the swallow, and the cardinal-bird.

The Huichols sacrifice a turkey to the sun in the latter part of May, when the sun is on its return, and at the same time a sheep is sacrificed to the fire. They sing all night, and next day drink their two beverages. They are careful observers of the annual course of the sun. Near Santa Catarina there is a notch in the mountains that stands out against the horizon; and they know that when the sun "arrives" there, as they say, the rainy season is not far off.

The Setting Sun, Tayau' Sakaimo'ka, or Sakaimo'ka alone (sometimes called Sakaimo'ta), is considered as the assistant of Father Sun. An idol of him is standing on a mesa above the Cora pueblo of Sierra del Nayarit, "looking

towards Mexico," as the Indians express it. This mesa is the one called Tonati by the chroniclers, while by the Coras it is called Nayarit. The Huichols call it Sakaimo'ka. The same names are given to a cave in the same locality, where the Coras and the Huichols deposit ceremonial objects and other offerings. This god is worshipped equally by the Cora Indians, whose religion and language are related to those of the Huichols.

4. Tama'ts Pa'likě Tamoye'kě, the god of wind or air. His name means 'our elder brother [tama'ts] big hi'kuli [pa'likě] (walking) everywhere [tamoye'kě].' These translations were given to me by an Indian, but I do not know whether they are philologically correct. According to another informant, Tamoye'kě is a rock near the mining town Catorce. This rock is considered one of the ancestral gods of the Huichols. Hi'kuli is said to grow in the form of a cross on his face, his hands, and his feet. Probably my informant meant to say that the plants formed a cross on each of these parts of the body. He is also commonly called only Tama'ts, and I shall speak of him as Elder Brother. His name indicates him as the god of hi'kuli and as a deer god. The hi'kuli (Sp. *peyote*) appeared first as a gigantic deer (p. 18), which left a plant in each of its footprints. When Elder Brother was out running deer, so the myth relates, he met two women, who were roes, and followed them to their home. There they invited him to eat grass, which he did, and became a deer. He still had no antlers; but Tate'vali applied his plumes to the right side of the deer's head, producing plumes or antlers of Tama'ts Wawatsa'li (deer god in the south), and to the left side, producing plumes or antlers of Tama'ts O'to Ta'wi (deer god in the north). Tama'ts again became a man, but the deer thereafter remained with antlers. The antler on the right side of a deer is considered as the plume of the royal eagle (mōye'li Tate'vali); and that on the left side, as the plume of the red-tailed hawk (mōye'li Tato'tsi).

Elder Brother is the messenger of the gods, and when the shamans sing, he communicates their songs and wishes to the other gods. The animals over whom he rules are the deer, the rattlesnake, the rabbit, the gray squirrel, the hummingbird, and all parrots, a hawk called Šūli'kwai, the hawk Piwa'mi, the owl, and also the hens. The cock belongs to him, because it is supposed to follow the course of the sun, and to know always where the sun is. Every time it crows, it signals the location of the sun to Elder Brother, who, as said above, is a go-between of the gods.

Tama'ts [Elder Brother] Kauyuma'li, also called Te'vali [Grandfather] Kauyuma'li, is the name of the god who put the world into shape, and had to fight with the people in the underworld to accomplish his purpose. He appears in different impersonations, — as a deer, a wolf, a pine-tree, and a whirlwind, — and it is he who taught the ancients "all they had to do in order to comply with what the gods wanted at the five points of the world,"—to make ceremonial arrows, chairs, and votive bowls, to run deer, and to drink hi'kuli; but the god of hi'kuli

taught them to sing. "The principal men requested Tama'ts Pa'likě Tamoye'kě, who resides in the east, to sing during the day, while they went off running deer."

Among female deities should be mentioned first of all Tako'tsi Nākawe'. This name means 'our grandmother [tako'tsi] growth [nākawe']'. She is frequently called by either name alone. I shall speak of her as Grandmother Growth. All vegetation (nā'ka, 'to grow') is her product. She is also the mother of the gods, especially of Grandfather Fire. All the earth belongs to her, and she lives in the underworld. People implore her for long life, because she is very old. Salate (a large kind of fig-tree), a certain species of bamboo, a tree called capome (which grows in the cañons), and other trees, also belong to her, as do in the animal world the armadillo, the peccary, and the bear, that is considered her son. This goddess has, like other deities, many names, according to her functions. She is frequently called Tāte' Yuliana'ka (yu'li, 'wet;' nā'ka, 'to grow:' i. e., 'wet [the earth] in order that corn may grow'), and as such she is mistress of pottery utensils, because these are made of earth. She is also called Tāte' Īku' [corn] Otegana'ka, and is, as the name implies, the special goddess of corn: in this impersonation, therefore, we shall speak of her as the Corn Mother. She is a water and rain serpent in the east. Squashes, beans, and sheep also belong to her.

The other female deities are called tāte' ('our [ta] mother [te]'), and there are five principal ones:—

1. Tāte' Naaliwa'mi, in the east,—a red serpent because she appeared in lightning. She is mainly a water and rain serpent, bringing rain from the east, and I shall call her Mother East-Water. Her supposed dwelling, and accordingly her principal place of worship, is in a deep gorge with caves, near Santa Catarina, in the eastern part of the Huichol country. Cattle, mules, and horses are under her protection. Lightning is thought to be the baton of this Mother; and as rain accompanies the lightning in the springtime or in the wet season, flowers, which are the result of the rain, belong to her, "are her skirt," say the Indians. In this connection it is worthy of note that colored paper bought in the Mexican stores, generally in the shape of artificial flowers, is attached to her objects almost exclusively.

2. Tāte' Kyewimo'ka (sometimes called Kyewimo'ta), in the west,—a white serpent because she appeared in a white cloud. She is a water and rain serpent, bringing rain from the west, and is also the morning mist in the autumn, that sometimes freezes the corn. I shall call her Mother West-Water. She is the Aphrodite of the Huichol Indians, as are also Mother East-Water and Tāte' Tūliriki'ta (p. 52). Her dwelling and principal place of worship is due west of the Huichol country, in a cave situated in the territory of the Cora Indians, near the pueblo of San Francisco, on the western side of the river of San Juan Peyotan. To her belong deer and corn, as well as ravens.

3. Tāte' Rapawiye'ma, in the south,—a blue serpent because she appeared in a lagoon. She is a water and rain serpent, bringing rain from the south, and I

shall call her Mother South-Water. She is also the lagoon itself, which is called by the Mexicans *Laguna de Magdalena*, and is situated four days' journey south of the Huichol country, on the road which leads from Guadalajara to Tepic. She is also a kind of water-lizard (Imo'koy), described to me by the Indians as being about 30 cm. long, spotted, and very smooth. It may be the axolotl. She is more intimately connected with the singing shaman than all the other Mothers. To her belongs the seed-corn.

There is also another lagoon called Tâte' Rapawiye'ma, which is near the sea and much farther from the Huichol country, viz., in the neighborhood of Talpa, State of Jalisco. At present the Huichols rarely deposit sacred objects there.

Still another Tâte' Rapawiye'ma is mentioned, which is situated near Mascota, and is called *Laguna de Laja*. The water of this lagoon is credited with medicinal properties. Goitre, for instance, is said to be cured in four months by external application of the water and by drinking it.

4. Tâte' Hau'tse Kūpu'ri, in the north, — also a serpent. Hau'tse means 'rain and fog hanging in the trees and grass;' Kūpu'ri means 'cotton-wool,' the symbol of white clouds. I shall call her Mother North-Water. She is, besides, a fish that lives in a lagoon called Hauli'pa, which is situated in the mountains north of the Huichol country. This fish is also called Kia'tsu riè'vi or šiè'vi (Sp. *bagre*), and is about 20 cm. long, much spotted, and with some marks on the shoulders considered by the Indians as 'eyes' or si'kuli (Chap. VI.). To her belong corn, squashes, beans, also flowers, besides cattle, mules, horses, and sheep.

5. Tâte' Vê'lika Uima'li, above. The word vê'lika means 'royal eagle' (Sp. *Aguila real*); uima'li, 'young girl.' Thus the whole name means literally 'mother eagle young girl,' and I shall call her Young Mother Eagle. She is intimately connected with the cult of the Sun, and, as stated before, according to one account, is his mother. She holds the world in her talons, and guards everything from above, where she dwells. The stars are her dress.

These five Mothers, and Grandmother Growth, or rather the districts where they reside, constitute the six cardinal points of the tribe. The color of the south is red; of the north, white; of the west, black; of the east, white; of the region above, blue or green; of the region below, brown. According to another informant, the names of these regions, in the order in which water is sacrificed to them, are the following: 1. Rapawiye'ma, south; 2. Kūpu'ri, north; 3. Sakaimo'ka and Kyewimo'ka, west; 4. Naaliwa'mi and Otegana'ka, east; 5. Vê'lika Uima'li and Tayau', above; 6. Tato'tsi and Tate'vali, below. It should be noted that the number 5 is the ruling number of these Indians. Sometimes they also speak of five points of the world or of five winds. Compare the regions, pp. 38, 39.

From what we now know of the four principal gods and the Mothers, we readily perceive a conception in the Huichol mind of the four elements, — fire and air (male), earth and water (female).

The moon (Mětsa'ka) is a grandmother. She is not highly valued among the Huichols, and ceremonial arrows and votive bowls are not sacrificed to her. She is the companion of Grandfather Fire, guiding by her light people who travel at night. She is also of importance in the making of native beer, since the latter becomes strong through her influence, so that people get 'beautifully' drunk, as the Indians say. But her greatest service is to help the Sun in protecting the Huichols against the god of death, Toka'kami.

The stars are of considerable importance in the mythology of this tribe. They are comprised under the name rula'vč, and all are gods or goddesses. The star from which they gain knowledge is Tonoa'mi ('singer'), the morning star, the Tšu'lavêťe of the Coras. He is a shaman, singing all the time, and is supposed to guard the Sun. The Huichols bathe in the morning at dark, and before descending into the water-hole they sing a while to him, praying that he be with them, and give them health and knowledge. It is also a belief that they gain power ('medicine') of bringing rain from him; therefore the bath is also useful in this regard. In the country of the hi'kuli, as well as in the sea, ceremonial arrows are left for Tonoa'mi as prayers for long life.

Sacrifices of all kinds are offered to the gods, but the principal offering is the deer. It does not belong to any special god, for all the principal deities are masters of the deer, and the deer themselves are gods. Since the introduction of cattle, the latter animals are used prominently as sacrifices, especially at rain-making ceremonies. Roosters are also now and then offered to Elder Brother. These animals, and foods prepared from corn, beans, or squashes, etc., are offered to the gods before being eaten by the people. The food is sacrificed at night to Mother East-Water and to Young Mother Eagle; in the daytime, to the four principal gods and to the Setting Sun, to the Corn Mother (in the morning), to Mother South-Water and Mother North-Water (in the middle of the day), and to Mother West-Water (at sunset).

Besides sacrifices of this kind, the Huichols offer to their gods remarkable symbolic objects, which form the main topic of this memoir. They are embodiments of prayers, and are mainly found in the god-houses and sacred caves, where they present a grotesque and striking appearance. Ceremonial arrows, sometimes in great numbers, are very generally stuck into the inner sides of the thatched roofs of the god-houses or into the seats of ceremonial chairs. A great many symbolic objects of various colors and shapes are attached to the arrows, and others hang down under the roof, while on the altar may be seen rudely carved and decorated wooden images of the animals dedicated to the god. But idols are rarely found in the god-houses.

The ceremonial objects are not very numerous in the temples, still one usually sees a few arrows or some 'eyes' stuck into the roof. Thus in the temple of Santa Catarina ceremonial arrows may nearly always be observed above the niche of Grandfather Fire, but the Indians tell me that it is much

better to leave them in Têaka'ta (p. 17). Such symbolic objects may also be frequently met with in the crevices of rocks or at some sacred spring, etc. Sometimes they are actually left in some water-hole or lagoon; for instance, in the country of the hi'kuli, or even in the sea.

All sacred things are symbols to primitive man, and the Huichols seem literally to have no end of them. Religion is to them a personal matter, not an institution, and therefore their life is religious, — from the cradle to the grave wrapped up in symbolism. Even the material of their bows is taken from a kind of wood which belongs to the special god of the district. Thus the people of Santa Catarina and surrounding country, who all belong to the god of fire, use bows made from Tepemezquite, a light reddish-brown wood; while the people of San Andrés, who belong to the Sun, make theirs of the mahogany-colored Brazil-wood.

The interpretation of their symbolism is not always easy to get, since sometimes the Indians have reasons for not wishing to tell the truth, or, though they have none, they dislike to divulge their ideas on this subject. Even when they are quite willing to explain, they are hampered by their inability to express themselves. Occasionally it happens that the shaman has made a special arrangement of things according to instructions given him in a dream, which of course no one else understands. However, it has always astonished me how well, in a general way, the Huichol shaman is able to explain symbolic objects. The common run of people are also very well instructed in symbols and ceremonies, although they sometimes, but rarely, make mistakes by placing the ceremonial things in the wrong god-house. There is a certain uniformity in the patterns of all these symbolic objects. The quality of the work varies much, although it is seldom actually poor.

The gods are implored, naturally, for material benefits only, and extensive research has convinced me that every god is asked for almost anything. Of course a person may give preference to a certain god, for instance to the one under whose protection he was placed as a child, or to one about whom he or the shaman has dreamed; but I find that the goddess of child-birth may be implored for success in killing deer and raising cotton, while Grandfather Fire may be asked for luck in weaving, embroidering, etc.; and Elder Brother, for the health of children. Still we recognize certain spheres peculiar to each god. To illustrate: The god of fire, who is the healing god, is implored specially by the curing shamans; Elder Brother is the particular god of the hunter, and the special helper of women in their textile and embroidery work. In making bows or fishing-nets, or nets for carrying burdens, as well as in making bowls, Grandfather Fire is implored; in making fishing-lines, the Corn Mother; in sowing squash-seed for making tobacco-gourds, Great-grandfather Deer-Tail.

In the neighborhood of the pueblo of Santa Catarina is a deep valley, at the bottom of which a river rushes on its way. Along this river are many caves

and god-houses dedicated to various male and female deities. Generally the caves contain some small spring or pool of water, called a kutsa'la, in which children must be bathed at certain seasons. At the kutsa'la of Grandmother Growth every Huichol must wash himself once a year with the holy water. Sacred caves are called by the same name as the god-houses,—š'i'liki. The caves of Grandmother Growth and Mother West-Water are called their houses (ki^a or iki^a).

Plate I, Fig. 2, shows a place in this valley which is the most important of the sacred spots in the Huichol country. Its chief feature is a little temple dedicated to Grandfather Fire, adjoining which are three god-houses consecrated to three other great gods, and three dedicated to lesser ones. These stand on a small level space scarcely ten metres square, situated at the foot of an argillitic rock that rises almost perpendicularly about fifty metres. The rock inclines slightly forward. Its color is dark red, hence its association with Grandfather Fire. The heat reflected from the rock, besides, forcibly suggests his presence. In the little temple of this god, which in the picture stands in the background, an ancient idol was until recently to be seen. This locality, which is called Têaka'ta, owes its name to the presence of the temple. The name is the same as that applied to the hole in the ground in which the Huichols cook deer-meat, mescal, etc., between hot stones covered with an earth mound. It here refers to the cavity underneath this temple, where stands a still more ancient and important idol of the same god. The food dearest to the Huichols, and on which they no doubt in ancient times had mainly to subsist, is cooked by the fire god underneath the ground. He thus becomes the god of life, as the deer is the god of sustenance *par excellence*.

The Huichol spends a great part of his life at ceremonies and feasts. From May to August, that is to say, the dry and part of the wet season, there are frequent feasts for making rain. During the wet season, if it stops raining only for two or three days, the principal men gather in the temple and decide to sacrifice an ox or two, which means a 'feast,' or propitiation of the gods, lasting for two days. Then there is the feast of new squashes and of the new corn; and also that of toasted corn or *esquite*, connected with the cult of hi'kuli, which will be mentioned below; but the greatest of all is the feast for eating corncakes made from ground whole corn baked in an oven, and called by Mexicans *tamales* (different from the usual ones). This feast is held for the underworld, and is called in Spanish that of *tamales de maíz crudo*, which name we shall hereafter use when referring to it. The last two feasts can be held only after successful deer-hunts.

The cult of hi'kuli is very important in the life of the Huichol. It would, however, carry us too far to enter into a detailed description, and a brief mention must therefore suffice. Hi'kuli is the name of a small cactus (*Anhalonium lewinii* Hennings) which grows in the central part of Mexico, and which, when eaten, has an exhilarating effect on the nervous system, and causes color-visions. The Tarahumares, who also use this plant, have the same name for it. It is

thought to be necessary to procure it every year to insure the country against drought; and therefore in October parties of from two to twelve start on a pilgrimage to the interior or central mesa of Mexico; the journey, which is accompanied by much fasting and praying, consuming forty-three days. The locality where the hi'kuli-seekers gather the plant is not far from the mining town Real Catorce, in the State of San Luis Potosi. The name of this country is Palia'tsia, derived from the name of the god Tama'ts Pa'likē Tamoye'kē (Elder Brother). The leader of the party and the one who follows after him carry a front-shield (Chap. IV.) of Grandfather Fire, while the rest carry those of other gods.

During the months of preparation for the feast, these people may always be seen eating slices of the fresh fruit, and are in a constant state of excitement, although intoxication does not show itself in the same way as that produced by alcoholic drinks. The balance of the body is maintained even better than under ordinary circumstances, and they walk fearlessly along the edges of precipices.

They are able to endure hunger, thirst, and fatigue to an incredible extent. A marked effect of the plant, important to note, is that it takes away temporarily all sexual desire. This fact, no doubt, may contribute to the requirement of abstinence from sexual intercourse as a necessary part of the hi'kuli cult from the time of the start for the hi'kuli country till the feast is over, which covers a period of at least four months. Neither is bathing nor eating of salt permitted during this time. The Huichols generally preserve the plant by stringing a number of them, say fifty, longitudinally on a string of ixtle, and hanging them up in coils (Fig. 1) on the walls of the temple, or in their houses, to dry. Occasionally they are planted in the ground. In Fig. 2 may be seen a plant as it appears when growing.

Fig. 1 ($\frac{6}{7}$ nat. size). Part of a String of Dried Hi'kuli-Plants ($\frac{1}{2}$ nat. size).

The feast of hi'kuli, which is included in that of toasted corn, takes place generally some time in January; but it cannot come off until a certain number of deer have been killed, as said above, nor until the field has been cleared and made ready for the harvest of the coming year.

The myth relating to the discovery of the hi'kuli is the following:—

“Long ago, when the forefathers of the Huichols first arrived in the country where the hi'kuli now grows, they saw a deer, and allowed him to go five steps, when he disappeared. When they came closer to the tracks, they discovered that each footprint was a hi'kuli. All together, there were five,—one for each footprint.

“They shot arrows at every hi'kuli without hurting it, two arrows above each, and in such a manner that the end of one arrow pointed to the east, and the end

of the other to the west (Fig. 2). At the place where the deer disappeared a large hi'kuli was found, which was called Pa'li or Wapa'li. After a while they proceeded to take up their arrows and put them into their quivers. Only the two arrows which they had shot above the big hi'kuli remained, because Great-grandfather Deer-Tail ordered them to leave them. Then they sat down and ate hi'kuli. Tama'ts Palisi'kẽ remained on the high mesa where hi'kuli first appeared, and there he may be seen to-day in the form of an altar. He is the principal altar, — a big hi'kuli."

Fig. 2. Diagram showing Manner of shooting at a Hi'kuli. (About $\frac{1}{2}$ nat. size.)

I was told by the Indians that the hi'kuli-seekers, up to the present day, perform the following ceremony:—

On arriving at the ground, as soon as the mules have been unloaded and taken care of, the Indians fall into line, and each man places an arrow to his bow and stretches the string as if ready to shoot, pointing the arrow first towards the sun (east), then to each side, then backwards, then upwards, and at last downwards, without letting the arrow fly. The captain says, "Yonder is the deer, standing at the first altar (mesa);" but it is only he who sees him. Then they march forward, still with their bows drawn and aiming ahead, the advance being directed by the captain and three others. If any one of them sees a hi'kuli, he shoots towards it, not quite hitting it; but one arrow lodges to the right, and one to the left, over it. In this way every one shoots at five hi'kuli on the march, without stopping to pick up the arrows. They proceed to ascend the first mesa where the captain saw the deer. Having ascended, they all make the ceremonial circuit, and the deer is seen in the appearance of a whirlwind, whereupon he disappears, leaving behind two hi'kuli, — one toward the north, and the other toward the south. Here they leave votive bowls, arrows, back-shields, paper flowers, and glass beads as prayers for health, talking, as usual, to the five points of the world. They also ask the hi'kuli, which in former days were people, not to make them crazy. This ceremony completed, the signal is given to return, in order to pull up the hi'kuli shot at on the march, and the arrows left with them. They find their arrows covered with drops of dew. Each man carefully takes up his five hi'kuli, and they ascend again to the first altar, where they had left their offerings. They then partake of hi'kuli, eating it with great delight as a kind of fruit; and when they have eaten, the same deer which was seen by the captain, and afterwards by them, appears again. This time they all see him, because they now feel the effects of the plant, or, as my informant told me, "they are all drunk." According to another report, the deer is seen descending from heaven;

and where he alights, there they find the plants, and shoot their arrows at them in the same way as their forefathers did ; but nowadays all the hi'kuli are small.

There are several kinds of hi'kuli. According to some, there are five, — red, yellow, black, white, and spotted, the same colors that the corn has. According to others, there are three kinds, — yellow (Tate'vali), white (Tāte' Otegana'ka), and green (Tāte' Kyewimo'ka). The same name, hi'kuli, is applied to all of them, and all kinds are used at the feast.

Further information on the hi'kuli cult will be found on several of the following pages (see especially end of Chap. IX and Chap. X).

Most of the gods are thought to be on the outskirts of the country, and to grudge the Indians the clouds ; but when the shaman sings, they are pleased, and let them loose to fall down as rain. In that way the shamans, and indirectly the people, control the rainfall, and are able to produce rain at will. There is another way in which the people contribute directly towards the bringing of rain, viz., by burning their fields. All the smoke that rises is clouds, and there are many kinds, — black clouds (hai yo'wi or yu'wimě), blue clouds (hai yoawi'mě), white clouds (hai tora'mi), yellow clouds (hai tāru'yě), red clouds (hai rulě'mě). These smoke-clouds travel to where the rain Mothers live, and all become rain-clouds ; for every Mother, as well as Grandfather Fire, who is in the middle, and Father Sun, has a spring or pool (kutsa'la) where the smoke-clouds remain until the rainy weather commences, when they start out as rain-serpents. There are, in the Indian conception, a great many serpents, most of them rain or fire serpents. When a heavy storm is coming up, the dark clouds and the distant downpour look to the Indians like so many raining serpents of various colors. They are plumed or flying serpents ; but there are several kinds, at least ten, all able to fly. "Don't you see how the rain travels yonder without coming here?" a shaman friend said to me by way of explanation. The rain-water as it flows over the ground is a serpent, and the rivers that hasten down to the sea are also serpents. The sea itself and the ripples on the surface of water are serpents. The lightning is a powerful serpent, and the shaman sees that the fire is also a serpent, namely, a rattlesnake ; and when the Huichols burn the fields, they see in the moving crest of the fire the plumes of the fire-serpent. The sky and the wind are serpents. The serpentine movements of the latter are visible when it sweeps through the grass and the trees, and it helps to bring the clouds to the country of the Huichols.

All the principal gods possess each a certain species of eagle or hawk, besides other birds ; and when the Huichols make ceremonial objects for any god, they use plumes of the special kind belonging to that god. According to tradition, the various eagles and hawks sprang forth from a cloud of smoke (Sp. *fumadero*) ; therefore their plumes are black and brown from the fire. The royal eagle is supposed to have been originally a single plume, which ascended, and became Vêlika, that sees everything.

There are several species of hawk in the country, the most common being the red-tailed hawk (*Buteo borealis* Calurus, called in Huichol Kwir or Kwiš, in Spanish *Aguililla*), whose feathers are very generally used; but the feathers of the white-tailed hawk (*Buteo albicaudatus* Sennette, called in Huichol Tu'ra) and of the Mexican black hawk (*Urubitinga anthracina* Licht.), as well as those of Piwa'mi (*Asturina plagiata* Schlegel), are also in general use. Eagles, although exceedingly coveted, are very rarely procured, on account of the lack of fire-arms.

Wi'tsē is the name of a certain hawk which in former times arose from the west (so'tega); and from the east (hira'ta) came the hawk Piwa'mi as well as the deer. From the north (ota'ta) came the white-tailed hawk. All these originated from fire and smoke, as did also, according to one tradition, Grandfather Fire and Great-grandfather Deer-Tail.

The birds, especially eagles and hawks, move about in the wind and hear everything; and the same is the case with their plumes: they also hear, the Indians say, and have mystic powers. Plumes or mōye'li are to the Huichol health, life, and luck-giving symbols. By their help the shamans are capable of hearing everything that is said to them from below the earth and from all the points of the world, and perform magic feats. The feathers of the vulture and of the raven are not considered as plumes. All plumes are desirable as attachments to ceremonial objects: therefore a Huichol never has too many of them. There is, however, one plume of special merit, and that is, strange to say, the deer. Every one who kills a deer comes into possession of a precious plume, that insures him health and luck; but those who are much in love cannot acquire it, for, in order to catch deer, one must be abstinent. We have already seen (p. 12) how Grandfather Fire, in true shaman fashion, applied his plumes to Elder Brother's head, and produced antlers or plumes, one on each side. Not only the antler, but the whole body of the deer, is, in the Huichol mind, a plume, just as a bird is called a plume; and I have met with instances where the hair from the tail of a deer actually served as plume attachments on ceremonial arrows (cf. Fig. 97). Plumes, according to one account, started from the head of the deer in order that the shaman might be able to sing.

The deer appeared, according to tradition, on five different occasions, and each time they had a new name. The Huichols count five kinds of male deer and five kinds of roes; and even the roes appear to the shamans to possess antlers or plumes. The shamans are also the only ones who can tell the difference between a male and a female deer. These ten kinds of deer have all special names, the male ones being named according to the growth of the antlers. The male deer are all tama'ts ('our elder brothers'), and are the following:—

1. Tama'ts Wawatsa'li, the principal and the oldest one, with very large antlers. He lives in the south, *i. e.*, is the deer god in the south.
2. Tama'ts O'to Ta'wi, a large deer, but with smaller antlers. He lives in the north, *i. e.*, is the deer god in the north.
3. Vêlika Mōye'li Tama'ts, a deer that is a little bluer than the other deer. His antlers are the plumes of the royal eagle.

4. Kwir Mōye'li Tama'ts, a deer with antlers much ramified and very thin, which are the plumes of the red-tailed hawk (Kwir).

5. Teola'li Mōye'li Tama'ts, a deer whose antlers have small protuberances which resemble a red flower called teola'li. Being red, this flower is dedicated to Grandfather Fire ; and wreaths worn at certain feasts are made from it.

The female deer are all tâte' ('our mother') and tako'tsi ('our grandmother'), and their names are the following :—

1. Piwa'mi Mōye'li Tâte Tako'tsi, a roe whose plumes are those of the hawk Piwa'mi.

2. Šūli'kwai Mōye'li Tâte' Tako'tsi, a roe whose plumes are those of a large hawk called Šūli'kwai.

3. Tu'ra Mōye'li Tâte' Tako'tsi, a roe with plumes of the white-tailed hawk (Tu'ra).

4. Hapo'li Mōye'li Tâte' Tako'tsi, a roe whose plumes are those of the eagle Hapo'li, which is black with a striped white tail. This eagle is often seen in the willow-trees, and is found in the country of the hi'kuli.

5. Totowi' Mōye'li Tâte' Tako'tsi, a roe whose plumes are those of a small yellowish parrot which lives on the coast.

The moving principle in the religion of the Huichols is the desire of producing rain, and thus of successfully raising corn, their principal food. I take this to be common to most of the agricultural tribes of this continent. Water first, and water last, is the consideration in all their ceremonies, the centre of their thoughts.

According to the Huichol myths, corn was once deer, the deer having been the chief source of food in earliest times. Therefore the people, now that they, through contact with the whites, have become possessed of cattle and sheep, look upon these too as corn.

Since the deer represents sustenance, it may easily be perceived why, in their myths, the hi'kuli, as well as hau'tsima ('water'), sprang from the forehead of a deer. It was a deer (a deer god) that left the hi'kuli-plants in his track the first time he appeared in the country where the plants grow, and he afterwards became a big hi'kuli ; and when the gods for the first time felt the exhilarating effect that hi'kuli produces, it came from the magic drink that had been made by grinding, not the hi'kuli, but a deer-antler, on the metate, and mixing it with water.

In former days corn was also hi'kuli, and therefore to-day the latter still retains all the colors of corn. Sometimes the Indians profess to discover real grains of corn on the plant when they gather it ; and when they leave hi'kuli as a sacrifice to the gods, they usually mix with it grains of corn. Hi'kuli, therefore, is to them the original ear of corn, just as the deer-antler is the original hi'kuli.

Thus it will be seen that corn, deer, and hi'kuli are, in a way, one and the same thing to the Huichol. Corn is deer (food substance), and hi'kuli is deer (food substance), and corn is hi'kuli ; all these three being considered identical in so far as they are food substances.

When, at the feast preparatory to clearing the corn-fields, the Huichols drink the broth of deer-meat, they speak of it as "making corn." The deer is the sacrifice most valued by the gods. To the Huichols it is the symbol of sustenance and fertility; and its blood is therefore sprinkled on the grains of corn before they are sown, that they may become equally sustaining. The hi'kuli, on the other hand, is to them the plant of life, — the life of the deer and of the corn. Hi'kuli is also the special drinking-bowl of the god of fire; and the Huichols have to bring it to him every year, or they would be unable to catch deer: consequently it would not rain, and they would have no corn.

The philosophy of life of these people may be best summed up in the sentence to which my Huichol servant once gave utterance: "To pray for luck to Tate'-vali [the god of fire], and to put up snares for the deer, — that is to lead a perfect life."

II. — GODS AND THEIR PARAPHERNALIA ; FETISHES.

In the temples of the Huichols no idols are to be seen, as they are kept in secret places, often in some remote cave. In the temple of Santa Catarina, according to the Indians, there is an excavation underneath the fireplace, in which an idol of the god of fire stands, surrounded by numerous ceremonial objects. The Indians state that such a cavity is a feature of every temple, and its special god or some sacred object may be placed in it. I saw, however, that in two diminutive temples erected for the god of fire for a special purpose, there were idols standing above ground, besides the ones in the cavities below. Images of gods are still made among the Huichols according to the orders of the shaman ; and their purpose is to prevent a drought, or to drive off some serious disease or other tribal misfortune. The images are carved out of solidified volcanic ash (Sp. *cantera*), or sometimes out of wood, and in rare instances they are moulded from clay.

The most important gods stand on disks (tê'pali) made from solidified volcanic ash, which vary in size according to the maker's fancy. Such a disk represents the domain of the god or goddess, and is painted or carved with various designs symbolic of his or her attributes and relations to the world. These objects are thus exceedingly instructive as showing the religious thought of the Indian. They are frequently found in the god-houses without images, but nevertheless possessing the god's power. They are then seen either lying flat on the altar, to which they are often fastened by mud, or placed in a slanting position. They are also met with in the temples (p. 9) and on top of them. All ceremonial disks are smeared with blood of the deer before being deposited for religious use.

Images of animals belonging to particular gods are also made in various ways (pp. 66-68). They are deposited in the particular place of worship of the god, together with ceremonial chairs and other symbolic objects to be described later.

The images, as well as other ceremonial objects, but especially the disks mentioned above, are often painted with various colors, all native. These colors are either mineral or vegetable, the mineral colors being supposed to be in the possession of Grandmother Growth. Objects made of solidified volcanic ash, that are to be painted, are first washed with water to make the colors adhere well. As the colors employed by the Huichol Indians have much significance in certain symbolic objects, it seems advisable, for convenience, to mention them here, and the materials from which they are derived.

1. MINERAL COLORS. — *Red* (rulê'mě), from a ferruginous clay called rata'lika. This is the color most commonly used by the Indians. For painting arrows it is ground on the metate and mixed with copal. *White*, from a calcite called tata'mi or Kyewimo'ka. *Dark green* (yoawi'mě), from a green clay called tēyoa'wi, found near San Sebastian. It is probably a result of the decomposition

of volcanic rock. The inside of drinking and votive bowls is painted with it. *Light green*, from a similar clay from San Sebastian, but of a better kind. *Light red*, from a ferruginous clay mixed with calcite. The minerals are powdered, and mixed with the juice of the maguey plant (*agua de maguey*) or sometimes simply with water.

2. VEGETABLE COLORS.—*Dark red* (rulê'mě), from Brazil-wood, which is rubbed to a powder on the metate, and then mixed with a weak solution of lime and water. *Dark blue* (yoawi'mě), from a plant called in Spanish *añil* (indigo), and in Huichol tapa'li. The dye-stuff is mixed with the juice of the maguey. *Yellow* (tarawi'mě), from the root (ta'rai) of a bush called toy, which the hi'kuli-seekers gather in the country where that plant grows. *Black* (yu'wimě), from charred corncobs mixed with the juice of the maguey.

GRANDFATHER FIRE AND HIS DISKS. — Images of the god of fire are more frequent than those of any other god. His birthplace is shown near Santa Catarina, in a cave which gives evidence of previous volcanic action. He is thought to have first appeared there as a spark, or, according to another tradition, carrying two arrows and flint. The cave itself is called Haino'tega, hai'no being the name of a little yellow bird which was kept there by the god. Still another tradition has it that he started from the coast, and remained first in Sakaimo'ta, afterwards in Têaka'ta. Then he went to Toapu'li (Santa Catarina), and from there travelled out to Wizê'rkatch, near Zacatecas. From here again he travelled on to Maraya'pa, which is situated this side of the mining town Catorce. Finally he arrived in Hai O'nali, which is a spring in the country of the hi'kuli. He returned again to Toapu'li with his family, accompanied by much wind, and to-day still lives in Têaka'ta. In this connection it is significant to note that the mythical ancestors of the Huichols arrived from Aukwê'mêka, the mountain in front of Toapu'li; and when they arrived, they brought much wind with them.

In the district of Santa Catarina, where he is the ruling god, I know of six of his images, which accordingly must be considered as so many impersonations or incarnations of the same god of fire. There may be even more. While it is supposed that he is incarnate in or abides in all these images, yet his principal body and habitation is the principal image, which stands in the little temple at Têaka'ta, the holy place described on p. 17.

It is significant that sometimes he is represented, not by one, but by two images. One stands above ground, and the other in a cavity underneath it. The latter is invariably the smaller and the older of the two, and is regarded as closely associated with the sun after it has set, or the sun of the underworld, while the upper image is supposed to be associated with the sun of the daytime, or of the upper world. In both of his manifestations he is thought to have great power over the Sun, to whom he is supposed to talk. It is evident, therefore, that he is identified with the fire of the world, moreover with that of the underworld, and that we may regard volcanic fire as more directly representing him than any other

kind of fire. He is held to be more ancient even than the Sun, who is his child,—the young Huichol who in ancient times issued forth Phoenix-like from the fire, revived as the flaming Sun (p. 11). The Sun, then, is in reality a new impersonation of the god of fire; and it naturally follows that mythically the latter is closely associated, in his powers and functions, with the former.

The idol of the god of fire here pictured (Fig. 3) is said to be an exact copy of the one standing under the fireplace of the temple of Santa Catarina, in a cavity about a metre deep down in the ground.

Fig. 3 ($\frac{65}{118}$). Grandfather Fire standing on his Disk. (Height, excluding disk, 27.5 cm.)

A few years ago, when the officers of the temple removed the disk that covers the cavity, to renew the ceremonial objects placed with the idol, as is their custom every fifth year, they found that the heat from the fire above had not only burned all the ceremonial objects, but had also injured the old idol. Therefore a new image was made by one of the chief men of the place, Felipe, who, being a friend of mine, consented to make a similar one for me. The material is solidified volcanic ash. The legs are apart, and there are indications of arms hanging down. Nose, eyes, and mouth are very distinct, but the ears are awkwardly placed, being too far forward. There are indications of toes in the form of slight incisions. Felipe carved this rather clumsy figure with his *machete*, and there is a curious vague likeness between the maker and his work.

The specimen figured in Figs. 4 and 5 is the disk on which the god of fire stands (Tate'vali tē'pali). It was obtained from the same place and from the

Fig. 4.

Figs. 4, 5 ($\frac{65}{222}$). Disk of Grandfather Fire, Upper and Lower Sides. (Diameter, 21 cm.; thickness, 5.5 cm.)

Fig. 5.

same maker as the idol. On the upper surface (Fig. 4) is a carving of the royal eagle (Tate'vali Vê'lika), — the eagle that belongs to Grandfather Fire. Wings

and tail are spread, but the head has been omitted, and the body consists of a circle divided into eight radial sections of nearly equal size. Wings, legs, and talons are plainly visible, and the feathers of wings and tail are represented by parallel lines. All the lines in the carving have been painted black. Above the eagle, between the wings, is the carving of a deer without antlers, painted black in the same way.

The under surface (Fig. 5) is taken up by a picture of the sun. It consists of a circular space in the middle, from which rays emanate to the edge of the disk. These rays and the central circular space are painted red with ferruginous clay.

The edges of both surfaces of the disk are notched all round at regular intervals. On the eagle side of the disk, between the notches along the edge of the lower half, are dots of black,—eighteen in all. There is also a similar spot over the left wing of the eagle. The rim is ornamented all round with a carved zigzag line, painted with ferruginous clay,—a design symbolic of the hills and valleys projected on the horizon, while the notches represent the nearer hills and valleys.

The disk on which the god stands thus shows the animals most closely associated with him, and symbolizes his powers over the whole world, that is illumined and warmed by the sun.

I have mentioned above that the god of fire is represented by two idols,—one above ground, and one underneath. The latter stands in a cavity the opening to which is entirely covered by a disk, on which the upper idol stands, as will be observed in Fig. 3. This disk, however, is much larger than the one pictured. The arrangement recalls the form of house of the Pueblos of the Southwest at the period when the wandering tribes of the desert still lived underground or half underground. The doors to their houses were made of slabs of stone, and were round like the stone lids of jars, as is evident from the researches of Cushing and others. It might possibly be inferred that the disk placed under the god of fire symbolizes that he alone, of all gods, has the power of opening and closing the door that separates the upper from the under world. This interpretation is to a certain extent supported by the myth of Great-grandfather Deer-Tail (Chap. IV), who once took refuge in a hole which he made in the ground and covered over with a stone. Possibly the conclusion may also be drawn from the myth that the idol in the cavity underneath represents Great-grandfather Deer-Tail, while the one on top represents Grandfather Fire; in other words, that the former is the volcanic fire, and the latter the fire of this world. This would agree with the conception of these two gods in the minds of the Huichols, who frequently call them brothers.

Another disk of the god of fire is shown in Figs. 6 and 7. It was not used as a stand for an idol. It was painted at my request by a very intelligent shaman, and it should be stated here that a number of objects treated in this chapter were also made at my request by different shamans and friends of mine in the district of Santa Catarina. Most of them were painted by a very prominent shaman, at one time 'alcalde' in Santa Catarina. His father, one of the great

shamans of the country, had instructed him in the mysteries of life from childhood up. They lived in Pochotita, and the father died only recently. The specimens obtained in this way are reproductions of objects used by the Huichols, although more elaborate in workmanship, design, and color. Two or three of the painted disks were intended by the maker to represent similar ones made of split bamboo interwoven with cotton cord and variously colored crewel. These will be noted at their proper places.

Fig. 6 ($\frac{65}{103}$). Disk of Grandfather Fire, Upper Side. (Diameter, 40 cm.; thickness, 6 cm.)

In the centre of the upper surface of the disk in question (Fig. 6) there is a cavity 2.5 cm. deep by 6.5 cm. in diameter, which is called Tate'vali aiku'tsi, meaning the drinking-gourd of Grandfather Fire. A disk with a central cup of this kind is called tano'ra. The name aiku'tsi refers specially to a votive bowl filled with a mixture of water and ground hi'kuli,—the form in which hi'kuli is consumed at the feasts. The Huichols, according to their conception, are only continuing the practice which Grandfather Kauyuma'li initiated, who was the first to procure aiku'tsi. While putting the world into shape he seized from his opponents their votive bowl filled with this liquid. On disks of other gods, that have been placed in a horizontal position on the altar of the god-house, I have seen similar hollows; and, according to the etymology of the name, they are to be considered as drinking-gourds of the gods for whom they were deposited. In some of these cups, especially in those belonging to Grandmother Growth, native

beer and chocolate are sacrificed. In this specimen the cavity is painted dark brown inside; and along its edge runs a band of green, on which, at regular intervals, are brown spots, symbolic of grains of corn. The rays that emanate from it are painted alternately red and blue, and symbolize ears of corn. The paintings are easily understood, in the light of the relations between hi'kuli and corn, as explained on p. 22 and at other places. The designs on the rest of this surface are the following:—(a) The royal eagle, in ferruginous clay and black. It is represented with wings and tail spread; and on the body is a cross enclosed in an irregular circle, significant of the heart. The eagle looks somewhat like the double-headed eagle of European origin, but it actually represents the front view of the bird. An eagle, when shown in front view, is always represented as double-headed, because the Indian is unable to make a perspective drawing of this view. It is shown with skin split, and it becomes a perfect eagle to him because both sides are represented. The eagle is sometimes represented with head turned to one side, in which case only one head is shown. (b) A bluejay, called by the Mexicans *urraca*. This bird, like others dedicated to gods, is viewed, in accordance with what has been said before, as a plume; therefore the native name of the figure on the disk is wa [bluejay] mōye'li [plume or plumes]. (c, d) Two macaws standing opposite each other, both painted green, with longitudinal stripes of reddish color on wing and tail, as well as some of the same color on top of the head and upper part of the legs. (e) The red-tailed hawk, painted in red and black. From its beak depends a serpent called Hairaku'. The real serpent lives in the water, and is from 80 cm. to 90 cm. long. There is another serpent of the same kind in front of the bird, which the royal eagle is trying to catch. Behind the hawk is seen (f) a man with uplifted arms, painted in dark blue, almost black. Only the upper part of the body is visible on the surface, while the rest of the man is painted on the rim of the disk. He is looking at the hawk swallowing the serpent. (g) A chaparral-cock, painted in dark blue and some red. This bird protects Grandfather Fire, and the hi'kuli-seekers need it for their journey. (h) A maize-plant which has dried up for want of water. All the birds represented above are males.

On the reverse side of the disk (Fig. 7) are seen:—(a) A male tiger, painted in red, with yellow and green spots. (b) A female tiger, painted in dark blue and red, with white and yellow spots. Behind its tail stands (c) a deer in light green color,—the deer god in the south. (d) A deer, painted in dark blue, with a longitudinal red stripe,—the deer god in the north. (e) A roe, dark reddish in color. (f) A snake called Aitala'ma, with alternate red, black, and yellow transverse bands. It is said to be about 30 cm. long and non-venomous (see p. 49). (g) A water-serpent called Hai'ku, represented in black edged with red. It is said to be from 40 cm. to 50 cm. long. (h) A serpent called Takayoyūo', painted in dark blue edged with red. It has two heads, and on its back are seen scales. (i) A symbolic figure called neali'ka,—one of a group of objects that will be fully treated in Chap. IV. According to my informant, it is a si'kuli (Chap. VI)

neali'ka ('eye face') of the god, and is painted in black, green, dark blue, and red. The dots indicate grains of corn; and the whole figure is symbolic of corn, representing no doubt a transverse section of an ear of corn. Compare the design on Grandmother Growth's right cheek (p. 45), also the designs on the cheeks of the Corn Mother (p. 53) and the central design on the left cheek in the facial painting, Fig. 277, *b*. The five bird-like figures represent swallows. There is an indication of a sixth, and probably there would have been a seventh

Fig. 7 (1883). Disk of Grandfather Fire, Lower Side.

if there had been room for it. (*j*) Grandfather Fire himself as a deer-hunter, carrying his bow, and with arrows in his girdle. He is painted in dark blue, and there is some red round the fingers, legs, and bow, as well as on the 'winged' part of the arrows. Note that the bow is here viewed by the Indian as a serpent. On each cheek are two longitudinal whitish (most likely meant for yellow) stripes, expressive of the face painting (Chap. X) of the hi'kuli-seekers, and symbolic of rain. (*k*) The male Gila monster. (*l*) The female Gila monster.

The disk described expresses a prayer for health, luck in killing deer, and long life.

I have seen disks similar to this, with a cavity in the centre, and with incised linear designs filled in with black and red, lying in a horizontal position on the altars of several god-houses, to which they had been fastened with mud. When-

ever the temple of Santa Catarina is to be renovated, a disk like the one described, but of different material, is left there, in front of the niche of Grandfather Fire, and is afterwards taken to Mesa del Nayarit. It is made of pieces of split bamboo interwoven with crewel of various colors, and every year one is taken out by the hi'kuli-seekers from Santa Catarina to the country where the hi'kuli grows.

I also reproduce a disk of Grandfather Fire of a somewhat different pattern (Figs. 8, 9), made for me during my first expedition to the Huichols by the

Fig. 8 ($\frac{6.5}{6.25}$). Disk of Grandfather Fire, Upper Side. (Diameter, 22 cm.; thickness, 3.5 cm.)

same man who made the preceding specimen. According to the maker, it is an exact reproduction of the one on which the god of fire stands in the temple of Pochotita. As will be seen, it has some adornments obtained from Mexican stores, but it presents many points of interest.

The upper surface (Fig. 8) is adorned with modern applications. Right in the middle a small mirror, about 5 cm. in diameter, is fastened by means of beeswax, in a hollow made purposely for it, so that the surface of the mirror is on a level with that of the disk. The mirror is in this case called si'kuli or 'eye' (of the god). At regular intervals, near the edge of the disk, four round objects called 'faces' or neali'ka (Chap. IV), each about 6 cm. in diameter, are attached. Each consists of a circular network about 4 cm. in diameter, made from strings of white and blue beads, surrounded by coils of colored worsted, all fastened to the disk by means of beeswax. The beadwork, which resembles that done by the blind in this country, is in reality the same ornament as is worn by the women for

ear-pendants, and by the men and women as pendants to their necklaces, but it here serves as part of the symbolic object. The color of the worsted on one pair of 'faces' diametrically opposite each other is blue, and of that on the other pair red. There are also two paintings in black and red, supposed to be serpents with red mouths. Between one 'face' and the next, all round this upper surface, are two diamond-shaped figures, an inner and an outer, formed by the arrangement of layers of worsted on beeswax. The outer ones are yellow, and the inner ones

Fig. 9 ($\frac{5}{23}$). Disk of Grandfather Fire, Lower Side.

alternately red and blue. Over these diamond-shaped ornaments, which represent 'eyes' (si'kuli) of the god, two double strings of glass beads have been placed, intersecting each other at right angles in the middle of the disk, the ends only being fastened to the edge with beeswax. Each double string consists of one string of blue and one of red beads. Large spots of red and black paint have been daubed here and there.

According to the maker of the disk, the four points of the compass do not follow the direction of the arms of the cross of bead-strings, but run between them. Thus the two blue 'faces' are in the north and south, the two red ones in the east and west, and the two snakes in the southeast.

Looking at the reverse side of the disk (Fig. 9) with the cardinal points the same as on the first side, we find in the middle a linear carving of a deer with antlers (*a*). The lines of the carving are colored black, and there are a few red and black-and-red spots on body and tail. Above the deer (north of it) is a

painting, in red and black, of a front view of the royal eagle (*b*). It is, as always when seen from the front, represented as double-headed, and even the heart (*c*) is in this case pictured as two. In front of the deer as well as below its hind-legs is a figure (*d*) representing plumes of the royal eagle (*Vê'lika môye'li*), the parallel lines within each signifying wing-feathers. Such a figure, which is found on several ceremonial objects (see, for instance, Figs. 262, 276 *b*, 277 *e, f*, 278 *d*), always signifies a back-shield 'bed' (*ita'li*) of the god in question, with plumes of some eagle or hawk of the god (represented by the curved lines) attached. Sometimes there are lines crossing the parallel lines, as in Figs. 276, *b* (left cheek), 277, *f*. In the latter case one is reminded of the appearance of *hawimita'li* (see p. 138), which they are undoubtedly intended to represent. When the 'bed' is represented by longitudinal lines alone, these lines represent sometimes wing-feathers, as here and in Fig. 277, *e*; sometimes tail-feathers, as in Fig. 276, *a*; and in one instance they probably stand for candles, as in Fig. 278, *d*. Behind the deer is a figure symbolic of the world (*e*), — a picture of the earth, showing the hills and valleys, and in the middle the four cardinal points. Below it is a figure of the hawk *Piwa'mi* (*f*). The round dots on the sides of the wing-feathers as well as on the eagle and the hawk, are part of the plumage, indicating the natural marks on the feathers. Above the tail is a figure (*g*) which represents the fruit of a certain kind of cactus (Mex. Sp. *huishnaga*), said to be without spines. It is called in Huichol *hûwi'li*. It is brought by *hi'kuli*-seekers from the country of the *hi'kuli*, and, although not used at the feast, is considered as 'medicine.'

The rim of the disk is adorned with a zigzag design made of yellow, blue, and red worsted, fastened by means of beeswax, as well as with daubs of red and black paint. The meaning of the zigzag is the same as that in Figs. 4 and 5.

Fig. 10 shows a disk taken from the little temple at *Têaka'ta*. It used to stand at the feet of the ancient idol, and children when sick were seated on it while being bathed with holy water from the pool of Grandmother Growth, which is situated in a cave near by. On one surface it is painted blue with indigo, and two figures of deer, feet to feet, are pecked into it, one of them having antlers. The one with antlers represents the deer god in the south; and the roe is called *Piwa'mi*, because its 'plumes' are those of the hawk *Piwa'mi* (pp. 21, 22).

The next one (Fig. 11) is also from *Têaka'ta*, where it was lying on the ground inside of the little temple. It is very similar to the preceding one, and dedicated to the same god. On one surface are seen two roughly made carvings of deer, both with antlers, and feet to feet. A diametrical line separates them, signifying the earth on which they walk. One of the figures has at one place some blue beads attached by means of wax, and the other has white ones attached in the same way. The first one is the deer god in the south, and the second the deer god in the north. The first one represents Grandfather Fire, and the second Great-grandfather Deer-Tail. On this disk, so the Indians assured me, is represented primarily Grandfather Fire and Great-grandfather Deer-Tail; but, to use

their expression, it "becomes the same as" if the deer god in the south and the deer god in the north had been carved. This shows that the deer god in the south is one of the impersonations of Grandfather Fire, and the deer god in the north one of the impersonations of Great-grandfather Deer-Tail. The disk expresses a prayer for luck in killing deer.

Fig. 10.

Fig. 11.

Fig. 12.

Figs. 10 ($\frac{65}{658}$), 11 ($\frac{65}{1873}$), 12 ($\frac{65}{634}$). Disks of Grandfather Fire, Upper Sides. (Diameter, 8.5 cm., 15 cm., 11.5 cm., respectively; thickness, 2-2.5 cm., 3.4 cm., 2-3 cm.)

The next disk (Fig. 12), also from the same locality, is very similar and dedicated to the same god, the carvings being the same, but bearing traces of a blue color. The meaning of the deer is the same as in the preceding specimens. Round the edge of this surface are notches at regular distances apart. Food-offerings were put on this disk, which I found placed close to the upper idol.

Fig. 13 ($\frac{67}{1679}$). Disk of Grandfather Fire, Upper Side. (Diameter, 4.5 cm.; thickness, 2 cm.)

Finally should be mentioned a diminutive disk (Fig. 13) of the same god, which I also found lying on the floor of the same little temple, among the arrows. To one surface is fastened, by means of beeswax, a coil made from a string of red beads. It signifies the heart of a child, and the whole disk embodies a prayer to Grandfather Fire that the child may not be sick.

GREAT-GRANDFATHER DEER-TAIL AND HIS DISK.—Next in order is Great-grandfather Deer-Tail, whose image is shown in Figs. 14 and 15. It was painted by the same man who painted Figs. 6 and 7. It is carved out of solidified volcanic ash, and differs very little from the image of Grandfather Fire (Fig. 3), the arms in this one being, however, mere stumps.

Front and back are decorated with paintings in yellow and red, yellow being the predominant color. It will be remembered that the yellow color is brought from the country of the hi'kuli, therefore this color might have been expected on this figure, because the god whom it represents is a master of hi'kuli.

On the face are seen paintings in yellow of the same kind as those used by the hi'kuli-seekers (Chap. X). That over the nose represents a small serpent called Rai'no. From above each eye descends the figure of a rattlesnake, the tails ending underneath the chin. The vertical lines on each cheek represent falling rain.

The chest is decorated with a large round figure in yellow and red, — a front-shield or neali'ka of the god (Tato'tsi nealikai'ya). The circular figure in the middle, with an inscribed cross, represents his heart, and the five red dots painted on it are symbols of grains of corn. The short lines which project from the

Fig. 14.

Fig. 15.

Figs. 14, 15 (15537). Great-grandfather Deer-Tail, Front and Back Views. (Height, 29 cm.)

outer edge of the circular figure, as well as those emanating from the succeeding circle, are symbols of hi'kuli. The flower-like figures outside of the second circle represent the leaves of a bush called toy, the root of which is gathered for painting the faces of the hi'kuli-seekers. The yellow tongue-like figures on the edge represent a short grass that is used by the hi'kuli-seekers when on the road in kindling fires from ignited tinder. It is called yēmokwa'li. The same grass is burnt for use in coloring the glue employed in manufacturing chairs. On the inner edge of the border of tongues are some dots and small leaf designs which represent fallen leaves of the same bush, toy. The spaces between the yellow tongues have been painted with red in order to finish off the shield.

Over the right arm, from the neck down, hangs a serpent called Ha'tsi, painted red with yellow spots. This serpent is said to be about 60 cm. long. It lives on the ground, and is believed to be efficacious in bringing luck to the women in their textile work: therefore the design of this snake is very appro-

priate for the god, who is frequently implored for luck in handiwork. Whenever such a snake is accidentally met with, it is caught for this purpose by the husband, father, or mother of a woman, and held up to her that she may make five strokes along its back from head to tail. The arrow-maker and the painter implore this god in the same manner.

On the left side, from the neck over the shoulder backwards, hangs another serpent called *Kopi'rka*. It is painted in red. This snake, which is said to be about 30 cm. long, is venomous, and lives in the cañons. It is implored for luck by men who want to make snares for catching deer. It is not, however, like the other one, caught for the purpose, but the men pray directly to its master, Great-grandfather Deer-Tail.

Under each arm a tobacco-gourd, a necessary part of the *hi'kuli*-seekers' outfit, is carved, and painted with red and yellow spots.

On the back (Fig. 15) is a figure of the red-tailed hawk in profile, painted in yellow. The design representing the heart of the bird is very similar to that representing the front-shield on the front of the image; the beak, eye, and four spots on the 'heart,' are red. It may be of interest to note that the picture of the hawk is called in Huichol *kwi'ram ta'rai*, the latter word meaning the yellow root from which the color is obtained. The name means, to give a free translation, 'hawk painted yellow.' It is dedicated to Great-grandfather Deer-Tail and to other gods. It is, to speak with the Indians, 'Great-grandfather Deer-Tail's plumes' (*Tato'tsi Ma'ra Kwa'ri mōye'li*), the meaning of which has been explained on pp. 20, 21.

On the head is represented a circlet of macaw-feathers fastened to a string, which is worn at the feast, attached to the straw hats of the *hi'kuli*-seekers. The four in the middle in the form of a cross are supposed to have been blown over by the wind.

Fig. 16. ($\frac{95}{1874}$). Disk of Great-grandfather Deer-Tail, Upper Side. (Diameter, 27.5 cm. thickness, 5.5 cm.)

This image is like those that are left in the god-house of Great-grandfather Deer-Tail at *Téaka'ta*, where this god, another master of *hi'kuli*, is implored for luck on the journey to fetch the plants. He is supposed to have in his possession all the *hi'kuli* that the Huichols use in their country; and when he wants more, he sends to Elder Brother for them. The Indians also say that the *hi'kuli* of Great-grandfather Deer-Tail is considered the best.

The image stands on a disk (Fig. 16) very much like that of the god of fire (Figs. 3-5), only both sides bear the carving of the white-tailed hawk.

FATHER SUN (TAYAU') AND HIS DISK.—According to the description of the Indians, the Sun is represented as a small reddish ball of stone in his god-house at Têaka'ta (p. 17). A disk of the god (Tayau' tē'pali) is shown in Fig. 17, also in Plate II, Figs. 1 and 2. It was made at my request, and it was considered by another Indian who was making disks for me as a true representation.

The greater part of the main surface (Plate II, Fig. 1) is taken up with a picture of the sun, which is represented as a central circular space (called the 'face [neali'ka] of Father Sun') in yellow and green, with rays of red, brown, yellow, and blue emanating from it, called his 'arrows' (Tayau' ūlu'). The many dotted lines scattered among the rays form a peculiar feature of this design: these are symbolic of grains of corn (Tayau' iku').

The red cross to one side of the rays is a symbol of money belonging to the Sun (Tayau' tomi'ni, tomi'n being the word for 'money' in a Mexican-Spanish dialect), and also symbolizes the rising sun. The triangular figures attached to the inner side of the circular band surrounding the rays represent clouds (Tayau' hai). They are red or yellow in color. Outside of this band are seen a number of beehive-shaped figures in black, surrounded by red and yellow dots. Within each a Greek cross is painted, and there are four dots of green or red surrounding each cross. These beehive-shaped figures represent hills (kwiê', the same word as that used for 'earth') planted with corn. Accordingly the red and yellow dots that surround the hills represent corn-fields (wa'ra). The crosses are signs of money, and the dots around each cross are grains of corn.

Along the edge of the disk runs a broad reddish-colored band representing the sky in the daytime (tahêi'ma), 'another sea.'¹ On it are painted large white circular spots representing stars (rula'vë). Along the inner edge of this band are triangular figures in red or blue, representing clouds. There may also be seen the outlines in red of similar figures, with a single dot of red on each: these represent mountains and the springs within them.

The upper surface of the disk is thus expressive of the following thought and prayer: Father Sun, with his front-shield (or 'face') and his arrows, rises in the east, bringing money, that is to say wealth, to his people. His heat and the light from his rays make the corn grow; but he is asked, on the other hand, not to interfere with the clouds that are gathering, that the hills may become resplendent with corn-fields. Even inside of the hills are found treasures of money and corn, for all mountains are rich; to the farthest limits of the world appear clouds; and the mountains contain a spring, every one. In the heavens above, that rise from the sea, sparkle the stars, which also help the Huichol.

On the reverse side (Fig. 17, also Plate II, Fig. 2) is an illustration of the Sun's progress in the daytime, and of the animals belonging to him. Most of the figures here are cut into the disk, besides being painted. The apparent journey of the sun is symbolized by a large cross-like figure, which forms the most conspicuous feature of the designs. It consists of a central circle, to which four

¹ The sky at night is tūpa'kêta. Night is yū'wekêta.

rounded figures are attached. These five variously colored figures are all different 'aspects' or 'faces' of Father Sun (Tayau' nealikai'ya). *a*, the central one, is the sun as it appears in the middle of the day (to'ka). It is painted yellow, with a broad circular band of blue near the middle. To the edge, which is also painted blue, are attached short radial stripes in red, blue, and yellow, representing the Sun's rays, symbolic of his arrows. *b*, *c*, *d*, and *e*, the remaining four 'aspects' of the sun, have each a special name. It should be noted that these have an incomplete circumference, their outlines running into the outlines of the cross. *b* is the 'face' of the Sun in the east or at sunrise (šime'li). The central part is a circular yellow space, and is surrounded by a blue section followed by a red one. A narrow blue band, with

Fig. 17 ($\frac{65}{1876}$). Disk of Father Sun (Tayau'). (Diameter, 39.5 cm.; thickness, 4.5 cm.)

short radial blue lines emanating from it, forms the edge of the 'face.' The short radial lines symbolize the plumes of the east, which are taken from a hawk called Kwir yo'wi. *c* is the 'face' of the Sun in the south (sêlia'ta). It is similar in its coloring to the preceding one, with the exception that there is red instead of yellow in the central part. The short radial lines in this figure signify plumes of the south, of the hawk Šūli'kwai. *d* is the 'face' of the Sun in the north (ota'ta). The coloring is similar to that of the preceding one, with the exception of the central part, which is blue, and the surrounding section, which is yellow. The short blue radial stripes signify the plumes of the north, namely, of the white-tailed hawk. *e* is the 'face' of the Sun in the west (so'tega). This figure differs from the others in that the inner painting is star-shaped instead

of circular. The edge of the star is red, and the rest blue with the exception of a yellow spot in the centre. The blue radial stripes in this figure signify plumes of the west, that is, of a hawk called Ra'tu. The names of the cardinal points indicated above are taken from a bas-relief of Grandfather Fire in his niche in the temple of Santa Catarina. Here he is seen as a man with arms uplifted, the palms of the hands turned forward, and the face toward sunrise. In front of him is east (hi'rata); at his right elbow, south (sêlia'ta); at his left, north (ota'ta); above him is the sky (tahêi'ma); the staircase below him is west (so'tega). His navel is hirū'apa, which is the dancing-place of the temple, the middle of the world. It is also called saulia'pa, that is, 'belonging to the shaman.' It should be added, that the cardinal points are indicated by the sun in still another way than that given on the disk: namely, the middle of the day as well as the east is rū'li ('heat'); the south is Tayau', also tata'ta ('our father'); the north is Tavê'rik^a; and the west is Sakaimo'ka. Ta'ta is a word generally used by Mexicans to designate the father of an Indian, and has been adopted by the Indians themselves. The same is the case with na'na, the word for mother. Whether ta'ta is of Huichol origin or not, I could not tell, possibly not. If it is, it would indicate the same as 'Tayau' ('our father') (cf. p. 14, on the six regions). *f* is the male red-tailed hawk, painted blue. *g* is the female red-tailed hawk, painted, body red, and the rest blue. *h* is the morning star Tonoa'mi, painted in red and yellow (cf. pp. 15, 58). *i* is the male scorpion, Têalu'ka uki', painted red. *j* is the female scorpion, Têalu'ka ū'ka, painted yellow with red outlines. These two scorpions symbolize the arrows of the Sun. *k* shows the tail-feathers of the red-tailed hawk,—the plumes of Father Sun (Tayau' mōye'li),—and are painted red. *l* shows the breast-feathers of the same hawk, and they represent the wristlet of Father Sun (Tayau' matzu'wa). *m* shows two crosses which represent money. The Sun is supposed to have five such crosses, which the principal men gave him in the beginning of time. *n* is a swallow (ista'mě). *o* is a small red-breasted bird called Tauku'koy. *p* is a tree or pole on which the bird just mentioned will alight. *q* is the cardinal bird. The three birds, *n*, *o*, *q*, became much frightened when the Sun first rose, and flew toward the west, singing; but their fear was unwarranted, for everything turned out well. Since then they have belonged to the Sun; and up to this day these three birds may be seen in the sunshine, that is to say, in the Sun's company. *r*, *s*, are linear designs, in red and blue, representing respectively lightning and rain. *t* is a serpent called Tâte' Īpou. It is painted red, blue, and yellow. According to the description of the Indians, it is a very beautiful, non-venomous serpent. When the Sun first appeared, the world became intensely hot (marūli'r), which caused a serpent of this kind to spring forth. Then it began to rain (*s*). That is what is represented in this section of the disk. *u* shows two coiled serpents. *v* shows two serpents in a creeping position. These last four serpents are all of the same kind as the one above (*t*); and their 'pictures' are meant to show how, when the Sun first rose, some of the serpents followed him,

and others remained behind. The ones that followed him are represented by the three in motion ; and those that remained behind, by the two coiled ones. Close to each serpent is a round spot of red, and in one case an oblong and yellow spot. These are front-shields, for each serpent has its own shield. Along the edge is a broad band of reddish color similar to the one on the other surface of the disk, only that in this the spots are white and yellow. Like the other, it represents the sky.

A disk of the kind described above is placed on the altar of the god-house of Father Sun at Têaka'ta, as a prayer that people and cattle may not be overcome with heat and die. Generally the material is split bamboo interwoven with cotton cord and crewel. Hi'kuli-seekers, in the wet season, before they start out on their journey, take such a disk to Mesa del Nayarit, and leave it, in order that it may continue to rain. On their journey to fetch the hi'kuli-plant they take similar disks with them, depositing them in the country where the plant grows, as prayers for life.

DISK OF THE SETTING SUN, SAKAIMO'KA. — I shall next describe a disk of the Setting Sun, or Sakaimo'ka té'pali (Figs. 18–20, also Plate II, Figs. 3 and 4). It was made and painted at my request by the same man who made that pictured in Figs. 6 and 7.

Fig. 18.

Fig. 19.

Figs. 18, 19 ($\frac{6}{1877}$). Disk of the Setting Sun. (Diameter, 26 cm. ; thickness, 7 cm.)

The designs on the upper surface (Fig. 18) are :—(a) The front-shield of Sakaimo'ka (Sakaimo'ka neali'ka), painted in green, with some red spots. (b) Four plumes attached to the outer edge of a. These are the plumes of a large bird called Hala'mali, which, according to the description of the Indians, must be a cormorant : its habit is to sit on the rocks and wait for the sun to rise ; then it turns toward the sun and dives underneath the water. The plumes are arranged

in opposite pairs. Those of the male bird are dark blue ; and those of the female, green. (c) Tail-feathers of a large wader from the west coast of Mexico, called *Wálimu'kali*, represented by four figures looking somewhat like palm-trees, and colored green and red. (d) Four gigantic water-bugs of the family *Belostomidae*, called in Huichol *Towali'r* (Mex. Sp. *nixtiguil*), represented by four diamond-shaped figures edged with short lines, all in blue. Their habitat, according to the Indians, is in the creeks, especially on the coast. They ascend frequently to the surface of the water, and go down again, which movement the Indians take to mean that they lift up the water, thus helping to produce rain. (e) Votive bowls, — small star-like figures painted in yellow (cf. Fig. 20, d'). Yellow votive bowls are brought to *Sakaimo'ka* (Mesa del Nayarit) as offerings. (f) The earth (the band near the edge) and its corn-plants (the green and yellow stripes attached to the band).

Fig. 20 ($\frac{1}{1877}$). Rim of Disk of the Setting Sun.

On the reverse side (Fig. 19) are seen :— (a) A parrot called *Totowi'*, found at Mesa del Nayarit, painted in yellow and red. (b) An irregular figure, painted in blue, intended to represent the caves at Mesa del Nayarit, where disks of this kind are left. The caves are called *Tealū'ta*. (c) A large land-serpent called *Hulia'kami*, painted in red and yellow. A peculiar ring over the head is meant to represent a snare for catching deer. The Huichols, when they want to catch deer, pray to this serpent before they put out the snares, because, as will be remembered, deer must be entrapped to insure the growth of corn. The short lines which radiate from the outer edge of the snare signify corn-plants. (d) A serpent in blue, the sky, which in this case is synonymous with the wind. When clouds gather from the west, this is one of the serpents, or winds, that bring them along. (e) A water-serpent found in the sea, and called *Koyu'wimē*. It is one of the Mothers of the sea (*Tāte' Alama'la*), and lives on islands. The body is colored red, with some dark red spots. It has, as will be noted, two heads, one at each end. The lines along the back of the serpent, colored green, blue, and red, are symbolic of raindrops. This is another serpent which comes along with clouds from the sea to the country of the Huichols. (f) Round dots signifying grains of corn. (g) The root of the squash-plant, painted in green. (h) The root of a young bean-plant.

On the rim of the disk (Fig. 20) are represented :— (a) The serpent god, *Sakaimo'ka* himself, — the blue zigzag line. The head of the serpent is plainly distinguishable. He was in former times the Sun's arrow. On the head are seen (b) plumes (*a'na*) in blue or red. (c) A butterfly, painted blue. (d) Votive bowls, — the circular figures between each turn of the serpent, most of them blue, and a few of them yellow. This god "owns," to speak with the Indians, "black [expressed by blue on the drawing, but meant to be black] or yellow votive bowls" (cf. designs of votive bowls in Figs. 39, 277, $\frac{1}{1877}$ b).

When the hi'kuli-seekers return from their long journey, they deposit at Skaimo'ka (Mesa del Nayarit) a disk similar to this in its ornamentations, but made from pieces of split bamboo interwoven with cotton cord or crewel, bringing at the same time a disk from the country of the hi'kuli. As is evident, all the designs on this disk, with the exception of those expressive of corn, squashes, and beans, are from the region west of the Huichol country, the Setting Sun's domain, and therefore very appropriate for the god of that region. The prayer expressed is that there may be no sickness among cattle, sheep, and hens.

ELDER BROTHER. — Figs. 21 and 22 represent an image of Elder Brother, the god of wind or air and hi'kuli, — a reproduction of one that stands in the neighborhood of Pochotita, near Santa Catarina. It is made from solidified volcanic ash. The legs are apart, and there are distinct indications of arms.

Fig. 21.
Figs. 21, 22 ($\frac{6.5}{8.9}$). Elder Brother, Front and Back Views. (Height, about 24 cm.)

The face is fairly well carved, and the ears are placed almost in their right place. The nose and eyes are distinct. Under each arm is a prominence representing the hi'kuli-seeker's tobacco-gourd. The whole figure, although clumsy, is fairly well executed, and resembles the ancient style of art of more advanced Indian tribes.

The ground color is black. The right side below the arms is smeared with red, and the left with yellow paint. On the face on both sides are longitudinal stripes, alternately red and yellow (in one place on the right cheek white has been substituted for yellow). These signify rain, which, in the mind of the

Indian, has many colors (see p. 20). The row of stripes, some red and some yellow, painted over the arms, shoulders, and upper part of the back, and running longitudinally to the body, has the same significance. On the right arm they are alternately red and yellow, and on the left arm only red. Of those on the back and shoulders, four are red, and one (the middle one) yellow. The hi'kuli-seekers of to-day, however, so far as I am aware, no longer wear any such ornamentation on the body. On each side of the face, outside of the stripes, is the picture of a deer-antler in yellow, referring to the god's first appearance as a deer in the country of the hi'kuli. The mouth, nose, and ears are painted red, as are also lines indicative of fingers. On the breast is painted, in yellow, red, and white stripes, the hawk Piwa'mi; on the left shoulder, in red lines, an owl; on the back, in red, white, and yellow, the front view of the hawk Šūli'kwai,—all birds belonging to the god. The top of the head is painted with four red daubs; and the tobacco-gourds under each arm, with yellow and red dots. The latter, as already stated, are necessary in the equipment of every hi'kuli-seeker, and imply that the god carries sacred tobacco (ya'kwai), which is always associated with the cult of hi'kuli, thus representing him as the god of hi'kuli. The facial paintings, which are those of the hi'kuli-seeker, have the same significance as the gourds.

GRANDMOTHER GROWTH AND HER ATTRIBUTES.—In Fig. 23 is seen a representation of Grandmother Growth, the mother of the gods. She is in full attire, and surrounded by a complete ceremonial outfit. Having once seen an image of this Mother in her cave (Nākawē' ki^a or iki'^a [house]) near Santa Catarina, I persuaded one of my shaman friends to make a similar one, which is here reproduced. The original was deposited on a natural shelf in the large cave, and was inaccessible to me. It was brought down to me, however, for inspection, and I found it to have been made quite recently, by a friend of mine, Felipe, one of the chief men of Santa Catarina.

The image here shown is rather clumsily carved out of the wood of a fig-tree called pīni'. The legs are apart, the knees bent, and the figure rests on a disk carved out of the same block of wood. A wedge-like piece has been cut out from the front part of the disk, thus producing two rude representations of feet (*cf.* Fig. 47, where legs and feet have been similarly carved). Toes are indicated by slight notches on the outer edges. Projections at either side suggest arms. The head is profusely covered with hair made from the fine wool of *pithaya* (katsima'la), which has been fastened on by means of a glue called kwē'tsaka.

The body is covered with black, red, and yellow spots, symbolic of corn of all colors, and there are similar spots on the face. Besides these, will be noticed various symbolic designs. On the left cheek (Fig. 24) is a picture, in black and red, of a back-shield suspended by a string (Tako'tsi namai'ya), signifying that luck in making ceremonial back-shields is desired. In front of the left ear is the painting of a deer-antler in red. It is called ma'ra awai'ya. On the right cheek

(Fig. 25) a star-like ornament called 'eye' (Nākawe' si'kuli) is painted in red, yellow, and black, symbolic of corn, representing no doubt a transverse section of an ear of corn. In the centre is a representation of a white flower, toto', which grows in the wet season. This nomenclature is not in conformity with that applied to similar designs, which are usually called neali'ka ('front-shields,' 'faces,' or 'pictures'). In this case the name si'kuli was given to me by the Indians, which goes to show that a neali'ka can also be a si'kuli. In this opinion

Fig. 23 ($\frac{11}{15} \frac{11}{14}$). Grandmother Growth and her Attributes. (Height, nearly 38 cm.)

I have been confirmed by another similar instance (p. 29). The black line with irregular short side lines represents a bean-plant.

The image is dressed in a skirt and no less than two tunics, in accordance with the present custom of the Huichol women, who wear as many tunics as they can afford, one over the other. The skirt consists of a piece of textile of ixtle (ma-i'ra) sparsely interwoven in transverse stripes with red and black yarn. This covers the body, having been tied round the waist so that the stripes run longitudinally. Both tunics are of the shape of the tunic of to-day, but

made of material of ancient pattern. The tunic is always worn with the corners falling over the front and back. In the present specimen the tunic next to the body is a piece torn from an old garment, and is made from black and white wool, with a border of red on one side. It is woven in an ancient design, consisting of diamond-shaped figures with a single spot in the centre of each. This peculiar pattern is called *rai'mali*, which means 'tripe.' It is intended to represent the honeycomb tripe of the deer. Three small wads of a material called in Mexican Spanish *pochote* are fastened to it, — two on the left, and one on the right side. *Pochote* is the wool of the seed-pods of a tree of the same name, — a kind of silk-cotton tree of the genus *Bombax*. The wads, which resemble those of cotton-wool, are symbolic of clouds. The upper tunic is made from *ixtle* (*ma-i'ra šikūliai'ya*). Wads of black and white wool (*pochote*), and ravellings of red flannel, are interwoven in parallel rows with the textile. The black wool is symbolic of black clouds, the white of white clouds, and the red of red clouds of the evening sky.

Fig. 24.

Fig. 25.

Figs. 24, 25 ($\frac{6\frac{1}{2}}{1\frac{1}{2} \times \frac{3}{4}}$). Side Views of Head of Grandmother Growth (Fig. 23), showing Designs on Cheeks.

It is of interest to note the use of *pochote* on this image and on the ceremonial apparel presently to be described. Among the Huichols three kinds of *pochote* wool, all whitish, are used in making certain ceremonial objects. According to tradition, Grandmother Growth, to whom this plant specially belongs, in the beginning possessed *pochote* only, but now she has cotton besides; in other words, on her ceremonial outfit *pochote* was used in former times, but now cotton may also be used. It also implies that the cultivation of cotton is of recent introduction. The symbolic significance of *pochote* is the same as that of cotton-wool, namely, that of clouds and of health. The Huichols call *pochote* *kapo'ri* and also *kūpu'ri*, which latter name is also given to cotton-wool. This is the name of the water Mother in the north; and cotton-wool and *pochote* are identified with her, because she appears as fog resting on the mountains of the north. In this connection it may not be out of place to mention that even hairs from the tail of a deer may be called *kūpu'ri*. To one ceremonial arrow that I collected, some hair from a deer-tail had been tied, serving the purpose of a wad of cotton-wool, and called by the same name, *kūpu'ri*.

There are several springs in which every Huichol child has to be bathed. Most important among these is the spring in the cave of Grandmother Growth near Santa Catarina, in which adults also must once a year bathe or wash. The image which I have just described was intended to pray for the health of children, and especially that the water of Grandmother Growth's spring, so beneficial to mankind, should never dry up.

With the image are connected the following ceremonial objects: a disk on which it stands, a votive bowl in front of it, a bed at either side (north and south), a serpent stick in each hand, one serpent placed in the tunic in front, and another stuck into that at the back. All these symbolic paraphernalia are prayers for material benefits, as will be shown under the description of each.

Fig. 26.

Fig. 27.

Figs. 26, 27 ($\frac{65}{1875}$). Disk of Grandmother Growth, Upper and Lower Sides. (Diameter of upper surface, 13 cm.; of lower surface, 12 cm. thickness, 3 cm.)

1. The disk (Figs. 26–28) on which the image stands (Nakawe' tē'pali) is not quite regularly made, the thickness being uneven, and the under surface slightly smaller than the upper one. It is painted on both sides, and all round the rim. The upper surface (Fig. 26) represents the following figures, painted in red:—(a) An 'eye' surrounded by (b) a corn-field. (c) A squash-vine (generally this design signifies 'plumes'). (d) A macaw. (e) A singing shaman with his plumes. (f) Three front-shields or 'faces' of the singing shaman. (g) A full-grown deer, but still young (Wa'tsi kyu'kami). (h) A cow. (i) A turkey. (j) A bean-plant, represented by an irregular line with short side-lines. It is in fruit, as indicated by scattered spots.

Fig. 28 ($\frac{65}{1875}$). Rim of Disk of Grandmother Growth.

On the under surface (Fig. 27) is painted a serpent of Grandmother Growth, called *Kopi'rka*, the same as that of the Corn Mother. It is painted yellow and partly blue, and is represented with a number of red and yellow plumes, the Indian conception being that the scales are plumes; and the plumes mean that the serpent has wings and can fly, thus symbolizing rain (*cf.* p. 20). The remaining figure in blue is intended to represent a flying serpent, but there was no room for the artist to paint the plumes.

The red design on the rim (Fig. 28) is a zigzag line that represents the bean-plant, and the flowers of the same plant will be noticed between the zigzags.

The disk (the under side) symbolizes prayers for rain, and the result of it (shown on the upper side) will be a good crop of beans, corn, and squashes. The shaman, by means of his plumes, which he takes from the macaw and the turkey, and by making front-shields adorned with plumes from the same birds, helps to produce this beneficent result, sacrificing at the same time a deer and a cow. In the centre of all is seen the eye of the goddess, aiding by its watchfulness the shaman and the growth of the cereals.

2. The votive bowl (*Nākawe' rukuliai'ya*) in front of the image has the usual significance of that ceremonial object (Chap. VII). It was cut out from a rather thin-skinned gourd, and has serrated edges. Both the inside and the outside are painted with various stripes, dots, and symbolic figures.

In the inside (Fig. 29), which is the more richly adorned, are several sections formed by red radial stripes emanating from a central circular one of the same color. The serrated edge is here red. On a background of very light green may be distinguished the following figures, all in red with the exception of the dots and the smaller figures, which are in yellow:—(*a*) A water-bird from the coast catching a serpent. The feet are at the end of the dotted line (*a*), and the serpent is the S-shaped figure in light color next to it. (*b*) A large deer. The very large antlers show that it is an old animal (*ma'ra ukila'tsi*). It is surrounded by grains and ears of corn. (*c*) A cow, above which are grains of corn, while underneath it are ears of corn; but the designs are rather indistinct, as the colors, which the artist put on with the end of a straw, have run together. (*d*) Two singing shamans guarding the corn from crows. In the centre is the front-shield or 'face' of Grandmother Growth. The wad of cotton-wool fastened to it hides most of it from view. It appears simply as a ring, to the outer edge of which short red lines are attached. The dots represent grains of corn, and the stripes ears of corn. A wad of cotton-wool is also attached to the inner edge of the bowl.

On the outside (Fig. 30) are radial stripes in red, blue, and yellow, representing a creeper called *ha'pani*, whose leaves are of the various colors indicated. This creeper grows on the mountain-sides, and produces an edible fruit like the *tuna*, the fruit of the *nopal*. One cross and one ear of corn may also be distinguished.

The votive bowl embodies a prayer for corn, for which a deer and a cow have been sacrificed. The rain necessary for the growth of corn is symbolized by a bird swallowing a serpent, and by the two wads of cotton-wool. The vine with the edible fruit denotes adoration of Grandmother Growth, to whom it belongs, expressing at the same time a prayer for a bountiful supply of that fruit.

Fig. 29.

Fig. 30.

Figs. 29, 30 ($\frac{9}{16}$ in.). Votive Bowl of Grandmother Growth, Inside and Outside Views. (Diameter, 9.5 cm.)

3. The northern bed of Grandmother Growth (ota'ta [north] italia'ya), which lies on the ground at her left (Fig. 23), is an irregular square matting formed by weaving together pieces of split bamboo reeds. A twine of ixtle fastened round the edge of the matting, and in places wound over the ends of the reeds, keeps it from falling to pieces. Both sides are painted with ferruginous clay, but to the upper one are also attached many wads of *pithaya* wool, which suggest a comfortable bed. The upper part of the bed is indicated by the position of the reeds, which are placed uniformly with their outer sides up. It expresses a prayer for luck in making chairs.

4. Her southern bed (sêlia'ta [south] ita'li [bed] hai'mě [moisture]), on her right, is supposed to be her favorite resting-place. It consists of a double layer of thin split bamboo sticks, tied together so as to form a rectangular matting in a way to be fully described hereafter (Chap. V). On the under side it is painted red, while on the top are a few dots in yellow. To each corner is fastened a wad of *pochote* wool, symbolic of clouds; and to the middle, by means of beeswax, a bunch of ixtle fibre evenly cut off, and surrounded by small pieces of the petals of a red flower, which are stuck on the wax. It represents the blossom of the Brazil-tree (U'tsa rutu'li), and is a rather ingenious reproduction of the real flower. The Brazil-tree, which is red, is sacred; and the conventionalized arrow

of Grandmother Growth and that of Grandfather Fire are made from its wood. On each side of the flower are two oval pieces (probably meant to be round) cut from the paper-like cocoons (toto'roy) that are found on the Madroña-tree (totoroy'). These are called neali'ka. They are full of diamond-shaped holes cut with scissors, and their edges are serrated. One end of each is fastened under the beeswax that holds the flower. It is supposed that the wind makes its escape through the holes, as otherwise it would interfere with the rains, prayers for which are expressed in the matting itself, its colors, and its attachments.

5. The south stick of Grandmother Growth (séliata'na [south] Nākawe kwalele'), leaning against the image on the right side, is cut from bamboo, which is the oldest plant on earth, having been created by Grandmother Growth herself. It is made from the lower part of a reed, the root having been left on, and is cut off to a length of about 31 cm. The root forms a handle, and is carved into the shape of an animal head, three prongs being left on. Two of the prongs represent the ears (na'ka), and the third is purely ornamental. The stick is a representation of a snake called Aitala'ma. It is of nearly the same length as the animal itself, and is supposed to represent its coloring. The head and the prongs are painted with alternate red and blue stripes, while what is meant to represent the body has the decoration of the foreshaft of an arrow. The coloring is divided into three fields, separated by the natural nodes of the bamboo. The uppermost is the natural color of the reed, with a few longitudinal blue stripes. The next one is painted exactly like the 'winged' part of some arrow, in this case red with longitudinal zigzag lines alternating with two parallel lines. Similar zigzags and parallel lines are almost invariably seen on the 'winged' parts of arrows (p. 83). The lowest one is colored blue. All this confirms the fact that the serpent is an arrow of the goddess, symbolic of her strength. It is at the same time her baton, in which her powers are manifest. In fact, her serpent baton, as will be seen on the next page, becomes symbolic of Grandmother Growth herself.

6. The north stick of Grandmother Growth (ota'ta [north] Nākawe' kwalele'), leaning against the left side of the image, is similar to the one just described, the main difference being in the painting. The head and neck are colored in the same way as those on the south stick; but the decoration of the body, which also covers three fields, is different. The uppermost field is painted with four color-bands, the upper and lower being blue, and the two middle ones red. On the next field below is first a red band, then two blue ones, and then a red and a blue one. The lower field is entirely blue. This stick represents another, very harmless snake called Ha'tsi, and, like the former, is supposed to be of the same length and coloring as the animal itself; and it also signifies an arrow as well as a baton of the goddess. The handles of the present specimen look like serpent ears; but, according to the statement of the Indians, they have no such significance. The serpent Ha'tsi is believed to have no ears, the prongs of the stick serving as handles. Probably the prongs are considered as plumes, whether they be called 'ears' or not.

7. The stick placed in the middle of the dress in front represents a large fresh-water serpent called Hai'ku. It is 29 cm. long, is slightly bowed, and has been smoothed with a knife. Both ends are pointed, and somewhat flattened on the outer (the convex) side. It is painted blue with the exception of the ends, which are red. The smaller point is supposed to be the head.

Fig. 31 (⁵⁵/₁₈₈₂).
Serpent Stick of
Grandmother
Growth. (Length,
about 25 cm.)

8. The stick stuck into the upper part of the dress at the back (Fig. 31, also Fig. 23) represents another serpent, called Kopi'rka. It has been cut so as to show clear indications of a head that is pointed, and, besides, flattened on one side, while the body tapers from here down to the tail. The head is painted red, the belly and tail blue, while the back is spotted in red and blue (*cf.* pp. 36, 47).

These last two serpents are the goddess's bows of the east and of the west (or possibly of the region above) in accordance with their arrangement, while her arrows and her beds belong to the north and south.

Sticks similar to the batons of Grandmother Growth just described, only much larger, and called by the same name, Nākawe' kwalele' or Nākawe' i'tsu, are in common use among the Huichols, and symbolize the power and old age of Grandmother Growth. They are deposited in the cave of the goddess as prayers for health and long life, and generally a large pile of them may be seen there.

The roots of the bamboo sticks, having frequently three prongs, assume, with very slight exercise of the imagination, the shape of some animal with snout and ears or horns (or plumes), the cane accordingly forming the body. The prongs have natural transverse markings suggestive of snake-scales, and excrescences which might be taken for eyes or teeth; but the suggestive appearance of the sticks is, besides, often improved upon by cutting, painting, and adorning.

The sticks, which vary in length from 66 cm. to 102 cm., are cut off even at the ends. Some are deposited in the natural state, as that seen in Fig. 32, which presents double ears or horns.

In Fig. 33, the whole head and body have been smoothed off with a knife and painted red, with two black bands on the body, in imitation of a serpent.

On the next specimen (Fig. 34), which has been smoothed in the same way, the designs of a serpent are still more clearly indicated by blue daubs and stripes on the body. On the upper part of the body are painted five blue spots on each side, separated at the back by a longitudinal blue stripe, bordered at its lower end by a transverse band of blue. There are also three longitudinal blue stripes lower down on the body, edged below with a similar transverse blue band. Eyes have also been indicated by blue spots, to each of which a red bead is fastened with wax. Beads are always attached to wooden objects, either singly or in strings, by means of beeswax.

The last specimen of this kind presented (Fig. 35) is adorned in an extraordinary way. It is first smoothed off like the others, and a string of black glass beads is attached to represent eyes. The middle of the 'snout' is wound with strings of black and bluish glass beads; and several single beads, mostly white, are stuck to it. A hawk-feather is tied to the left 'ear' or 'horn' by a string of ixtle,

Figs. 32 ($\frac{65}{659}$), 33 ($\frac{65}{657}$), 34 ($\frac{65}{656}$), 35 ($\frac{65}{650}$). Sticks or Batons of Grandmother Growth.

which is carried round under the 'throat,' and also tied to the right 'ear' or 'horn.' About 22 cm. below the 'head,' strings of glass beads are wound round the cane, and fastened with wax. Above these is tied a bunch of eight hollow reeds of different lengths, from about 12 cm. to 16.5 cm.,—in a general way, two long and six short ones. The longest two are almost of the same length, 16.5 cm.; one is 13.8 cm. long; two are 13.2 cm., two 12.5 cm., and one about 12 cm. About

2 cm. from one end of each reed are two holes diametrically opposite each other. Through these holes the attaching cords pass, and, being of different lengths, cause the reeds to hang at unequal distances. With the exception of one, the upper ends of all the reeds are closed, the node of the cane having been left intact. The lower ends of five have been filled for a short distance up with clay (in two cases colored with ferruginous clay). The whole attachment, which when moved makes a sound of different tones, is the necklace of Grandmother Growth. The reeds, which look something like flutes, signify sounds of the wind.

Small bamboo sticks of the same kind and the same name are left in behalf of children as prayers to another Mother whose cave is near Santa Catarina. Her name is Tāte' Tūliriki'ta. Tū'li means 'small,' and iki'ta, 'house.' Thus her name means 'mother of the house of the little ones.' She is the goddess of conception and birth. A woman desirous of having children deposits in this cave a doll made of cotton-cloth, representing the baby wanted. After a while she goes back to the cave, puts the doll under her girdle, and shortly afterwards is supposed to be pregnant. While the baby is still very young, she deposits small bamboo sticks (Tāte' Tūliriki'ta kwalele') in the same cave, in order that the child may begin to walk early, and that it may 'walk' a long life. The sticks also protect the child from the itch and from pimples. It should be added, that the health of children is also implored by placing such small sticks in the god-house of Ka'tsi, an impersonation of the god of fire, at Tēaka'ta.

I found a very different-looking image of Grandmother Growth (Fig. 36) in the little temple of Grandfather Fire at Tēaka'ta, where it had been placed in a sitting position on the ground, behind the image of that god. It is of burnt clay, painted with black and some ferruginous clay. The face has three parallel longitudinal stripes on each side, signifying rain. There is a covering of beeswax on the head and neck, showing that hair had been attached to it, which must have been either of the same material as that on the preceding idol or else of ixtle fibre. The greater part of the legs and arms had been broken off, and taken away as amulets. This figure was made, according to the Indians, about thirteen or fourteen years ago, during a long drought. Oxen were killed at the feast, and the image of the goddess, smeared with blood, was afterward placed in the god-house of her son, to bring rain.

Fig. 36 ($\frac{5}{16}$). Grandmother Growth. (Height, 23.5 cm.)

THE CORN MOTHER AND HER DISK. — One of the impersonations in which Grandmother Growth is represented is seen in Figs. 37 and 38. Here is shown an image of the Corn Mother, Tāte' Otegana'ka, or, more completely, Tate' İku'

[corn] Otegana'ka [nā'ka, 'to grow']. It is made of solidified volcanic ash, and the Mother is presented in a petticoat, the feet being visible below. The upper part of the body, which is not covered, shows well-cut breasts. There are indications of arms, and the nose, mouth, eyes, and ears are very distinct, and tolerably well executed. Two transverse lines carved round the skirt divide it into three almost equal parts, and longitudinal lines cross these at short intervals all round the body.

Fig. 37.

Fig. 38.

Figs. 37, 38 ($\frac{6}{11}$). The Corn Mother, Front and Back Views. (Height, about 30 cm.)

The hair on the head is represented by black paint, and the feet are also colored black; ears, mouth, eyes, and eyebrows are painted with black and red, as are all the rest of the designs. On each cheek is a starlike ornament (neali'ka), representing no doubt a section of an ear of corn (*cf.* p. 30). Fingers as well as nipples on the breast, are represented; and there is a line on the outside of each arm, from the fingers to the shoulder. Round the waist is another line, from which short, tongue-like figures depend; this represents her girdle. Across the petticoat in front (Fig. 37) is the figure of a cow with horns (*a*), indicating that cattle are under her protection. The border of the skirt is painted with short longitudinal stripes (*b*), symbolizing ears of corn. On each shoulder is a painting of a serpent (*c*). On each side of the breasts is a sign of a plume (*d*) of the red-tailed hawk, which belongs to her and to other gods. The three round spots on it are, as usual, a part of the plume, and represent its markings. On the upper part of the chest is the figure of a kind of butterfly (*e*) called Auwa'lika. Over the lower

part of the chest and over the stomach is the figure of a small animal (*f*) called Wato'ra, probably a grasshopper. Both animals belong to the summer, the season when the corn-plant and vegetation in general are most luxuriant. In her hand she holds a baton (*g*) or kwalele', and a similar one is seen across the upper part of her back. The two are the same symbol, namely, that of the power of Grandmother Growth. In the Deluge legend (Chap. VIII) Grandmother Growth, coming up from the earth as an old woman, causes the trees that the Huichol cuts down in preparation of his corn-fields, to grow up again by means of her baton, thus frustrating his work. Her baton, which is a serpent and a symbol of herself, possesses the power of making corn, and therefore it has been painted on the Corn Mother, one of her impersonations. Her skirt is the fields or gardens of the world, and the three dots seen on it are symbolic of the corn planted in them.

A most remarkable symbol is found on her back (Fig. 38). It is a coiled serpent with wings, or a plumed serpent. What might at first glance be taken for two legs are not legs, for the serpent of the Corn Mother has only wings, and 'flies in rain.' As we have seen before, the rain that comes from the different 'corners' of the world belongs to as many different serpents or Mothers that fly. The one in question is the serpent of the Corn Mother, or the Corn Mother herself, the rain from the east. The Corn Mother and Grandmother Growth are the same kind of rain or flying serpents (*cf.* p. 47). This is one of the most primitive designs of the plumed serpent.

Fig. 39 (¹⁸⁷⁵₁₈₇₆). Painted Disk of the Corn Mother, Upper Side. (Diameter, 33 cm.; thickness, 7 cm.)

The disk on which the Corn Mother stands is outlined in Figs. 39 and 40. The designs on the upper surface (Fig. 39) are:—
 (a) Two swastika-like yellow figures, each representing an 'eye' of the Mother. (b) A dark field of green, on which have been painted snakes in black and red, the whole representing an approaching storm, with its dark rain-laden clouds, and appearing to the Indian like serpents. Such rain serpents have a special collective name, Nuna'lita or Witu-li'r. The picture thus conveys simply the idea, 'It is raining.'
 (c) A star-like figure in the centre, painted red, expressive of a spring or pool. (d) Small

figures resembling arrow-heads that have been placed round in a circle, painted black, intended to represent serpents that are starting out to fall down as rain.

When the rain is over, the clouds (that is, the serpents) come back again to the spring. In the section surrounding *c* are (*e*) a number of serpents still in their water-pools, where some remain whenever it rains. Some are painted yellow, and others blue. (*f*) A large serpent called Hakwi'aka, represented by a long zigzag line in dark blue, which follows the circumference of the central section just described. Within the inner bends of the serpent are (*g*) tongue-shaped figures in red, representing lightning. The lines protruding from the outer bends of the serpent are (*h*) small serpents called Hai'ku No'itsi. Between the coils of the serpent are (*i*) altars (niwa'tali) in yellow. Niwa'tali is the altar of the god-house, but the mountains and hills are also considered as altars on which the clouds or Mothers rest, which latter is the meaning here intended. Above and encircling most of the pictures described is (*j*) a black serpent, which is the Mother herself resting on top of the altars. (*k*) Votive bowls running along the outer edge of the disk. The cross painted on most of them signifies the four cardinal points.

On the reverse side (Fig. 40) are the following figures:—(*a*) A fish (mū'ri), painted in black, with white stripes and spots. It is an expression for green corn, because to the Indian green corn (iku'ri) is fish (mū'ri iku'ri). Although on the drawing the fish is represented with white spots, the green corn is called 'black fish' (mū'ri yū'wi). (*b*) A scorpion. I cannot give a definite explanation of it, but it may be the arrow of the goddess. The shaman is in the habit of offering cornmeal to scorpions to appease their wrath, and this custom may have something to do with the appearance of this animal on the disk of the Corn Mother. (*c*) A large black water-serpent called Hakwi'aka yū'wimě ('black'), which lives in a water-hole in the country of the hi'kuli. This serpent symbolizes full-grown corn, or, to speak with the Indian, it is corn. On its back, however, is seen a lot of green corn, expressed by black and white lines emanating from it. These lines represent also scales, and are called kupai'ra. They belong to Tāte' Kūpu'ri, their complete name being iku'li [green corn] kupairara'.

(*d*) The wing-like figures were explained by my informant as six corn-stalks with ears of corn. They are called Sauli'rika Wêê'mě (Sp. *mayor*, 'old,' or 'princi-

Fig. 40 ($\frac{65}{18 \frac{2}{3}}$). Painted Disk of the Corn Mother, Lower Side.

pal'), literally 'the principal curing shaman.' The leaves of the plants are called 'the curing-shaman leaves' (sauli'rika ramoya'li). The design resembles the corn-fields in the facial painting, Fig. 276, *c*.

One side of this disk, as I have shown, is taken up entirely with symbols of rain. The rain-serpents start from the holy springs, bringing rain to the Huichols; and on the mountains rests fog, the home of other water-serpents. The designs thus express a prayer for rain; and the result is seen on the other side of the disk, in the shape of corn, expressed in the silent language of primitive symbolism. The Corn Mother herself is here pictured as a large serpent whose scales are green corn, and the green corn is further expressed by the picture of the fish; putting it more precisely, the serpent is full-grown corn, and the fish green corn, but both are manifestations of the one Mother, as is also the corn-plant itself, which should be viewed as a serpent.

Fig. 41 ($1\frac{5}{8}$). Disk of Young Mother Eagle, Upper Side. (Diameter, 30 cm.; thickness, 7 cm.)

DISK OF YOUNG MOTHER EAGLE, AND ITS BEARING ON HUICHOL ASTRONOMY.
— The next disk to be described (Figs. 41, 42) is one dedicated to Young Mother Eagle (Tāte' Vē'lika Uima'li tē'pali). On the upper surface (Fig. 41) are the following designs:—(*a*) Front view of the eagle herself. The irregular oblong figure in the middle is her heart; but all the dots represent, as usual, markings on the plumage. (*b*) Grains of corn, painted green. (*c*) A water-serpent called Hai'ku tarū'yě, painted in yellow and red. The short parallel

lines in yellow and dark red attached to the back are plumes, and the whole serpent is symbolic of rain. (*d'*) Mountains, represented by the zigzag line in red, which runs all round the edge. (*e*) Corn-fields on the sides of the mountains, painted yellow, dark red, and green. The green dots inside of the design represent weeds in the corn-fields. (*f*) Corn-fields (eleven), all painted green, found in the deep cañons.

The under surface of the disk (Fig. 42) is interesting, as it represents in a general way the astronomical knowledge of the tribe. Here are seen the constellations and single stars (painted in dark red), as well as a number of stars (represented by small green and red dots) not known by any special name to the Huichols. These, as well as all visible stars, are called *rula'vč*. All stars are considered as the dress of Young Mother Eagle, and, according to another belief, they

Fig. 42 ($\frac{1}{2}$ of $\frac{1}{2}$). Disk of Young Mother Eagle, Lower Side. The dotted lines do not belong to the original, but have been added for the sake of clearness.

Fig. 43. Star-Chart, drawn by an Indian.

once lived on the earth. The following are here represented:—(*a*), the Scorpion (Sp. *Alacran*), called in Huichol Tama'ts Tèalu'ka ('Elder Brother Scorpion'). The scorpion is the arrow of the Mother. (*g*) The heart (*iya'li*) of the Scorpion, represented by a large red dot. (*b*) The Pleiades (Mex. Sp. *Cavrellos*), called in Huichol Semani'r. (*c*) A constellation called Nī'vēli U'rtě, representing a woman bearing a child, and the people gathered together to see. There is a larger dot (*s*) in the midst of the group, representing the morning star, Elder Brother

Tonoa'mi, who, according to the myth, is watching the woman; and all the rest of the stars round them are women spectators. As soon as the woman had given birth to her child, the cock (*e*), that was standing close by, began to crow. The constellation called the 'Cock' (Wa'kana) is the one called in Mexican Spanish *Caro*. (*d*) A constellation called Irurui'stē (Sp. *Arado*). Irūi signifies 'a brush broom,' thus the name means 'a place where there are brush brooms.' There are five of these. These stars are people, both men and women, who started to go to see the woman who was about to have a child, but did not arrive in time. (*f*) The Deer. (*g*) The Dog (*Çuk*) which is running the deer. (*h*) The Beehive (Sp. *Colmena*), of the kind that hangs on the rocks, called Šiētē'ri, a single star. (*l*) The Humming-bird, Elder Brother [Tama'ts] Tupi'na, which is gathering sweets from the beehive. It rises in the east to eat from it. (*m*) The fresh-water crab, Ai'na, pursued by an animal (*n*) called Mea'ta (Mex. Sp. *Mepach*). (*o*) The morning star, Elder Brother Tonoa'mi, represented by a large red dot. It is a man who rises in the east, beginning his course in October. It travels to a place where Young Mother Eagle is, viz., the zenith, and disappears with the daylight. (*p*) A large star in the east called Rawa' or Rawa'mi, represented also as a red dot. It is Great-grandfather Deer-Tail, and is as large a star as the morning star. The two are apart, but Rawa' travels all the time, and at last, in October, joins Elder Brother Tonoa'mi. From then on, they rise together.

There are two other large stars seen on the disk in what would be the south and north. These are simply called rula'vë, and are stars that "sometimes fall down and get broken against the rocks when trying to kill a serpent (Sp. *culebra*);" in other words, meteors. According to another informant, these two stand immovable, guarding the world. The one in the south is called Te'vali [Grandfather] Selia'kami, and the one in the north Grandfather Yoa'wi [blue]. These two stars receive further assistance in their office as guardians from Elder Brother Rurui' (Sp. *Grillo*), a cricket which chirps in the ground.

At my request, this informant drew a picture of the three constellations *b*, *c*, and *d*, which I append for the sake of comparison (Fig. 43). The same man also told me of two more constellations and one more single star not represented on the disk. "There is one constellation," he said, "called 'Shrimp' (Sp. *Camaron*, Huichol Hā'ku). It is large, and has three stars on each side, rising after sunset in the east, and travelling towards the west." 'The Big Lizard' (Sp. *Iguana*, Huichol Kētse') is the name of another constellation, which rises, according to my informant, in the northeast, and travels southward. A large constellation called 'Helgramite' (Ta'toy) rises "in the southeast, and travels towards the north."

This comprises, so far as I am aware, the astronomical knowledge of the Huichol. The reader may infer Moorish or Spanish influence in some of the groups. The star Antares is thus called 'the Scorpion's heart,' which is the generally accepted Arabic meaning of Antares; but the animal plays too impor-

tant a part in the religion of the Huichols to be lightly passed over, it being considered an 'elder brother' whose wrath is appeased. Besides, the unique figure of the Scorpion is so conspicuously marked by the stars, that it seems quite likely that the group is of native origin. A large star in the middle of the constellation would be expected to be the heart of the animal, judging from the interpretation of the symbolism in the ceremonial objects of the Huichols. Thus the diamond-shaped, round, or square marking on the middle of a human figure, or on a bird or some animal, is constantly called by the Huichols 'the heart.' The Scorpion is an important deity, whether he be on the earth or on the sky. It should also be noted that this constellation, while known to the ancient Egyptians and Assyrians, as well as to the Greeks and the Romans, was associated, according to Mr. Stansbury Hagar, with the same animal by the ancient Peruvians, and probably by their more northern relatives the Chibchas.

There are other groups as to the originality of which there can be no doubt. At any rate, in judging of this "star map" of the Huichols, it should be remembered that while both my informants spoke Spanish, they were consulted at different times, independently of each other. One of them, who pointed out to me the constellations on the heavens, grew quite enthusiastic about his knowledge and that of the Huichols, compared with that of the 'neighbors,' the Mexicans. "People think that we Indians don't know anything, but we know far more than the whites," he said.

Mr. Stansbury Hagar, who has devoted much time to the subject of native American astronomy, tells me that, in his studies among our Eastern Indians, he has never met with an instance where the Indians failed to distinguish correctly between their native constellations and the very few which they have learned from the English and French.

A disk like the one described above is made for the feast of green squashes and green corn, and is afterwards placed in the god-house of the Mother. Here again we see (on the upper surface) that a Mother—'the Mother above'—is connected with the rain-serpents, in fact is one herself. The result of the rain for which she is asked is shown in the corn-fields of the mountains and deep valleys in midsummer, ready to be cleared of the numerous weeds that spring up on account of the rain and the heat. On the reverse side we are shown the stars of the sky.

DISKS FOUND ON TOP OF TEMPLES.—
Lastly we shall mention a kind of disk found on the top of every temple. I met with one in a god-house of the temple of

Fig. 44 ($\frac{65}{100}$). Disk found on Top of a Temple, Upper Side. (Diameter, 24 cm.; greatest thickness, 5 cm.)

San José, in the neighborhood of San Andrés, and easily succeeded in buying it, as it had been discarded from actual use. The upper surface (Fig. 44) is carved with a circle running at an average of from one to two centimetres from the edge. The extremities of its two carved diameters, which bisect each other at right angles, symbolize the four corners of the earth. Within the circle is an inscribed square, carved rather irregularly. The disk is supposed to protect the temple against lightning; and, from the meaning of disks in general, we may infer that this one on top of the temple symbolizes the presence of the gods. It is renewed every five years, together with that part of the temple which is subject to renovation.

THE MOON. — Figs. 45 and 46 are representations of the moon. In former days, according to tradition, the moon was under water, and was called Ha Liana'ka; but it started out of the water, and placed itself where we see it to-day, when it is called Mêt'sa or Mêt'sa'ka. The moon in these two stages is shown in

Fig. 45 ($\frac{65}{1088}$). The Moon under Water. (Height, 17 cm.)

Fig. 46 ($\frac{65}{1088}$). The Moon in the Sky. (Height, 12.5 cm.)

the figures, which represent two wooden images respectively 17 cm. and 12.5 cm. high, taken from the temple of Ocota. The larger one, which represents Ha Liana'ka, has the arms outstretched. The other, which represents Mêt'sa'ka, is very similar, only the arms are carved close to the body, probably unintentionally.

THE GOD OF DEATH. — The god of death of the Huichols is called Toka'kami. He walks about everywhere in the night, on the lookout for some Huichol to eat.

Man is his only food, and he never drinks water. In size, he is as large as a Huichol, but he is very black and dirty because he never bathes. He starts on his rounds just after sunset, smeared all over with blood, and he has nothing for dress but the bones of his victims. The large arm and leg bones hang all round him, making a noise, when he walks, like that of rattles. Grandfather Selia'kami and Grandfather Yoa'wi try to prevent him from coming out of the earth to eat people.

In order to get, if possible, the Huichol idea of the god of death, I persuaded one of my shaman friends in Santa Catarina to make a wooden figure of the god,

Fig. 47 ($1\frac{9}{16}$ ft.). The God of Death.
(Height, 44.5 cm.)

which is here reproduced in Figs.

47 and 48. The hands are provided with roughly carved fingers, and the legs are apart. The figure, and the disk on which it stands, are carved out of the same block of wood. The figure has long erect ears, which were made separately, and very solidly glued into a hole made for the purpose on each side of the head. They have serrated edges, and each ear represents the

notched bone on which the shaman rubs an accompaniment to his song for the deer-hunt (Figs. 108, 286, 287). Thus one of his attributes is the mystic power of incantation, so effective with a good shaman, so dreadful in the hands of sorcerers and of the god of death. The nose is long and prominent, and nostrils are carved in the upper part of the end, as in some animal. A tongue cut from two pieces of palm-leaf, laid one over the other, is glued into the mouth, from which it protrudes. The occiput is flat, slants downward, and has on each side two horizontal incisions, forming terrace-like shelves (Fig. 48). On these shelves the god is supposed to carry the dead. The figure is painted black, but is covered all over with stripes and dots of ferruginous clay, indicative of the blood with which he is smutched. Round the waist and over the back, shoulders, and chest, are white lines representing human bones attached to strings; other white stripes, lines, and dots on the face and ears are meant to show his uncouth appearance.

The Huichols are very much afraid of the god of death. Even the most powerful shamans fear him. As long as the Indians are in good health, however, they never see him; but he appears to those who are dangerously sick, and the sight of him forebodes an early death.

Fig. 48. Head of God of Death (Fig. 47), Side View.

STAIRCASE OF THE GODS.—An ancient object connected with the gods should here be mentioned. It is a diminutive stone staircase now and then found in the country of the Huichols, and called *imu'mai*. One of the steps is called

Fig. 49 ($\frac{1}{3}\frac{5}{8}$). Staircase of the Gods. (Length, 34.5 cm.; greatest breadth, 15 cm.; thickness, 6 cm.)

imu'. The specimen here figured (Fig. 49) was found on the ground in the deep valley that separates San Sebastian from Santa Catarina. It is a small block of sandstone 34.5 cm. long by 15 cm. at the broadest part, and 6 cm. thick at the thickest part, into one surface of which six steps have been carved. According to the Indians, there is a pile of these objects below Acaponeta, — one for each god. The staircase signifies travel, — each step (*imu'*) one stage of the journey. It signifies especially the travels of Grandfather Fire and Great-grandfather Deer-Tail from the coast to the country of the *hi'kuli*. When such a staircase is found, it is kept as a

remembrance of that journey, and helps to produce rain.

GODS IN THE FORM OF SMALL STONES.—Frequently gods are represented by small pebbles of some curious shape or color, which are kept in the god-houses carefully wrapped up in rags. Thus, at *Têaka'ta* the Sun may be seen in his god-house as a round red stone, once produced by the magic of the shaman's plumes. At the god-house of Elder Brother, near Guayavas, the god himself is a small green stone hidden in some rags; which stone, the Indians say, belongs to the sea, its color being, in their conception, the same as that of the sea. In one of the god-houses round the temple of Ratontita, I secured one of these gods, which is here reproduced (Fig. 50). It is a small quartz pebble with dendritic markings, about 1.5 cm. long and 1.1 cm. broad, which represents a water Mother (*tâte'*) called *Kakauya'li*, who is the mother of Mother West-Water. It was, as usual, carefully wrapped up in rags; and in the same bundle were found three more objects, — two very small quartz pebbles which are her arrows, and a

Fig. 50 ($\frac{2}{3}\frac{5}{8}$).
Quartz Pebble, Symbol of Mother *Kakauya'li*. (Length, 1.5 cm.; breadth, 1.1 cm.)

Fig. 51 ($\frac{9}{10}$). 'Winged' Part of an Arrow. (Length, 8.2 cm.)

piece of reed representing the 'winged' part of an arrow (Fig. 51). This last is 8.2 cm. long, and nocked at both ends, but not plugged. The nocks are painted blue, and so is the broad band round the middle of the reed, while the rest is painted light brown. Longitudinal zigzag markings are seen along the whole extent of the reed, and round the blue band a short twine of yellow and red crewel is tied. The 'winged' part, as is at once evident, has reference to the two 'arrows,' and, as being the vital part or heart of an arrow, gives potentiality to both. The colors of the twine signify health and strength (yellow, the color of fire), and life (red), thus emphasizing the vital strength of the arrows.

TEVALI'R. — Rock crystals are objects about which the Indians have singular beliefs. Two large specimens, secured in Santa Catarina, each about two centimetres long, are supposed to be hailstones belonging to the Corn Mother, the clouds of this deity having been changed into this form. 'They are,' to speak with the Indian, 'the Corn Mother,' and there are other rock crystals which in the same way are Mother East-Water.

Small rock crystals, supposed to be produced by the shamans, are thought to be dead or even living people, — a kind of astral bodies of the Theosophists. Such a rock crystal is called *te'vali* (plural, *tevali'r*), or 'grandfather,' — the same name as is given to the majority of the gods. But it may, however, represent any person or relative, in accordance with the directions of the shaman. In the collection I have a father and a mother, a grandfather and a grandmother, of the Indian who sold them to me. The distinction between the sexes seems to depend upon the size of the crystals, the smaller ones being females. Figs. 52 and 53 show a male and a female respectively. In the collection is a crystal which represents the uncle of an Indian who is still alive.

Fig. 52. Fig. 53.
Figs. 52 ($\frac{65}{710}$), 53 ($\frac{85}{711}$).
Rock Crystals representing,
respectively a Male and a
Female Te'vali.

The crystal, *te'vali*, like the small stones which represent gods, is kept carefully wrapped in rags, and is put away in a secluded part of the house, often inside of a basket. A stranger would not be likely to discover one except by accident. Sometimes it is tied in its wrapping to the 'winged' part of an arrow, which may be stuck into the roof of the house or that of the god-house or temple (Fig. 54).

Such rock crystals are thought to bring special luck in hunting deer, and therefore a Huichol's ambition is to have many of them. He generally keeps from five to six, but some have even as many as ten. They also insure the hunter against stumbling or any other accident while on the run. It is, however, a duty incumbent on the owner to make ceremonial arrows for his *te'vali*, hence the latter is also called by the name *ūlu'ūka'mi*, meaning 'one for whom it is necessary to make arrow' (*ūlu'*). Every time, therefore, when he starts out to run deer, he makes arrows for each one of his fetishes in order to further insure his luck, and he wraps the *te'vali* in a piece of loose textile of *ixtle*, thus putting

him on the ancient matting or 'bed' (ita'li), which symbolizes his presence or powers in helping to kill deer.

Sometimes, when a man is sick, the shaman will say to him, "Your father [he may have died a year previous] wants to come back, therefore you are sick. You will have to hunt deer. Make your arrows for the different gods." If the sick man be unable to rise and take part in the hunt, others can run in his behalf; for instance, his brother. Arrows are then made, and Grandfather Fire is asked for good luck. The shaman next produces at night, by means of his plumes and much ceremony, a "small white stone, like rock crystal, which comes flying through the air, and at first seems soft to the touch, but soon becomes hardened." This is the te'vali which was expected. Often the te'vali is produced at the hi'kuli feast, in the middle of the day, after the dance of the first night. As soon as the deer is killed, the sick man recovers; and the te'vali, and the arrow made for it, as well as all the other arrows of the man, are bathed with its blood. Thereafter, every time this Indian goes to hunt deer, he makes an arrow for his te'vali and asks it for luck, and afterwards the te'vali and the arrows are smeared with blood. It remains in his possession as long as he lives, and is then inherited by his sons.

Both men and women may become tevali'r while still alive, the condition being that they have been true husbands and wives. Besides, a man must not eat meat from the first five deer which have been killed after he has become te'vali.

A dead man may return to this world as a te'vali more than once, but it is only the first time that his return causes his son or other relative to get sick. When two or three years pass without a deer being killed, and nobody knows the reason, the shaman may explain that the father of an Indian wants to return a second time. In this way a man may return five times; and every time he is given a new name, according to information furnished by the shaman. Following are some of the names:—

1. Ruku'li [votive bowl] Yoa'wi [blue] Te'vali, which means 'Te'vali with blue votive bowl.'
2. Mōye'li [plumes] Toto'nī [toto', a white flower of the wet season] Te'vali; that is, 'Te'vali with plumes and toto'.'
3. Wēn [owē'n, 'chair'] Yoa'wi [blue] Te'vali; that is, 'Te'vali is seated on a blue chair.'
4. U'ra [spark, also facial painting] Tonoa'mi [name of the morning star] Te'vali, which means 'Te'vali with the facial painting of the morning star.'
5. Neali'ka [face] Tawe' [drunk] Te'vali, which signifies that Te'vali is drunk in the face, *i. e.*, the intoxication from hi'kuli shows itself in his face.

Deer-hunters after death become tevali'r, and accompany the Sun on his travels. They live where the Sun rises, which place is called Hai [clouds] Tono'-lipa [rising, liberating themselves]. In that region are believed to be many clouds, which, like plumes, are liberating themselves. Clouds are thought to be plumes.

Fig. 54, *a*, shows a *te'vali* in its wrapping attached to an arrow. It was found in the house of an Indian near Santa Catarina, who had stuck it into the roof inside of the house. It has three 'winged' parts, one over the other, which form three sections. The upper section is painted in the most usual way, — a broad colored band with longitudinal zig-zags and lines. The band is red, and surrounded on its upper and lower ends by narrow blue bands: this is a 'face' or picture of the Sun (*Tayau' neali'ka*). The lower section is in arrangement identical with this, only the color of the broad band is blue, and that of the narrow ones black; this is the 'face' or picture of the god of fire (*Tate'vali neali'ka*). Between these two sections is the third and smallest one, painted with longitudinal rows of round spots. The rows are alternately blue and red. This is the 'face' or picture of the *te'vali* (*te'vali neali'ka*).

The wrapping containing the *te'vali* has been tied by a red and black twisted yarn to the last-named section of the 'winged' part, extending also partly over the lowest one. To this last a hawk-feather has been attached. The idea of tying the *te'vali* to the 'winged' part specially designed for it on the arrow is to summon him to come. This same meaning applies to all cases where the fetish is attached to an arrow.

If we unroll the wrapping, we find it to be a small piece of cotton-cloth (*b*) made specially for the purpose. It has a narrow hem all round, and is embroidered in red with figures that represent a certain flower called *toto'*. The complete name for the embroidery is *toto' sikuta'mi*. The latter word means that the flower is reproduced in textile, embroidery, or painting (*cf.* Fig. 277, *f*). This embroidered piece represents the blanket (*u'kali*) of the fetish (*d*), which, besides, has been carefully wrapped in cotton-wool (*te'vali kūpuriai'ya*), symbolic of health and clouds. Within the wrapping is also a short piece of bamboo reed

Fig. 54 ($\frac{62}{1544}$). *a*, Arrow, with *Te'vali* in its Wrapping; *b*, Wrapping unrolled; *c*, *d*, Contents of Wrapping,—'Winged' Part of an Arrow, and a *Te'vali*.

(c), 6.5 cm. long, with both ends cut off even; and it is painted like the 'winged' part of an arrow, which it is really intended to represent. Its complete name is *te'vali ūlu'ya iyaliai'ya neali'ka* ('te'vali's arrow-heart picture'), and, as it is the vital part of the arrow, it represents the whole arrow of the fetish (*cf.* p. 83).

The man who kept this arrow was not a hunter, but the prayers that he expressed through it were that it might give him life (*toki'la*), and keep him from being bitten by the scorpions. Life, which is a constant object of prayer with the Huichols, is, in their conception, hanging somewhere above them, and must be reached out for.

Fig. 55 ($\frac{5\frac{5}{8}}{5\frac{5}{8}}$). A Wooden Macaw. (Height, about 23 cm.)

ANIMALS BELONGING TO THE GODS. — In the various god-houses images of animals belonging to the gods, such as deer, turkeys, tigers, rabbits, etc., may frequently be met with. Most of them are offered as silent prayers, but some merely express adoration of the god. Generally they are carved from wood, and shaped in an extremely rude way. Sometimes they are painted, and nearly always adorned with beads fastened by beeswax.

In Fig. 55 is seen a rude wooden image of a macaw, taken from the little temple of Grandfather Fire at *Têaka'ta*. It was standing on its feet in an erect position. It is painted red, with the exception of five spots on its body,—one on each side of the breast, one below the throat, one on the crest of the breast, and one on the stomach. These spots were evidently once covered with beads, as there are a few remaining on the three uppermost ones. Round its neck is a groove to which a few beads have been attached. Evidently this was intended for a necklace. There are traces of blood on the figure.

Fig. 56 ($\frac{6\frac{5}{8}}{5\frac{5}{8}}$). A Wooden Deer decorated with Beads. (Length, 27 cm.)

Fig. 56 represents a wooden image of a deer dedicated to the Sun (*Tayau'*). It was obtained in San Andrés, where Juan Antonio Minjares, a native of the

place, made it for me. It is rather artistically decorated with variously colored beads, fastened with beeswax. Blue is the predominant color, but red is also extensively used, the designs being mainly ornamental.

In the country round Ratontita, in the southeast, the Indians make small ceremonial animals of a kind of braid-work, using for the purpose strips of the century-plant called in Mexican Spanish *sotol*.

Fig. 57.

Fig. 58.

Fig. 59.

Fig. 60.

Fig. 61.

Figs. 57 ($\frac{6.5}{7.22}$), 58 ($\frac{6.5}{7.13}$). Straw Figures representing Rabbits. (Length, 13 cm. and 8.5 cm.)

Fig. 59 ($\frac{6.5}{7.25}$). Straw Figure representing a Turkey. (Length, 16 cm.)

Fig. 60 ($\frac{6.5}{7.25}$). Part of a Straw Figure showing Tail of a Rattlesnake.

Fig. 61 ($\frac{6.5}{7.25}$). Straw Figure representing a Serpent. (Length, 43.5 cm.)

Figs. 57 and 58 represent the rabbit, dedicated to the Sun (Tavé'rik^a). Ears and tail are prominent features. Some rabbit figures have four legs, but that shown in Fig. 57 has but three. Others have a handle instead of legs (Fig. 58), for convenience in depositing them. In another specimen of rabbit there is a thin handle across the back, no doubt for hanging it up in some god-house.

Fig. 59 represents the wild turkey, also dedicated to the Sun (Tayau'). It is characterized by the appendage to the throat of the bird. In two of the three specimens secured there are three legs to enable them to stand. Fig. 60 shows a rattlesnake, which was dedicated to Mother West-Water; and Fig. 61, a serpent, Hai'ku (Sp. *culebra*), dedicated to the same Mother. The mouth of the serpent is distinct, as is also the rattle on the rattlesnake.

Deer-heads are more frequently met with in the god-houses than figures of animals. In the accumulations of discarded ceremonial objects found near the god-houses, large piles of bleached deer-skulls, as well as antlers, may generally be seen. The temples too are very often adorned with deer-antlers. The deer-heads are deposited as votive offerings, or as prayers for luck in hunting deer. They are either left without any preparation at all, or are skinned and stuffed with grass, part of the frontal bone and the antlers being left with the skin. The heads of roes are also deposited, because they too have antlers,

Fig. 62 ($\frac{55}{37\frac{1}{2}}$). Deer-head entangled in a Snare. (Length, 37 cm.)

Fig. 63 ($\frac{55}{1\frac{5}{16}}$). Antlers of a Young Deer. (Height, 10 cm.)

although no one but the shaman sees them. On two heads in the collection, which are from the temple of Guayavas, the skinning was done by cutting a slit along the throat from the point where the head was severed. They were then carefully stuffed with dry grass, and the slits sewed up again. The lips, as well as the eyelids, are stitched together, and in one case a piece of red flannel is sewed in between the lids. The specimen illustrated (Fig. 62) is entangled in a snare. It is symbolic of a prayer for success in catching deer. Deer-antlers which have five branches belong to the Sun (Tayau'); when they have three, they belong to the god of fire; and when two, to Elder Brother. In the cave of Grandmother Growth I once found a pair of sheep-horns which had been left there by some one from San Andrés as a mark of adoration.

In the ranches around Santa Catarina, when deer are killed, one pair of antlers is placed in the temple, another pair in Têaka'ta, and the rest are kept in the house. At the feast, when the shaman sits singing in front of the god-house

of the ranch, the new antlers may be found with the ceremonial objects placed in front of him before he begins to sing. After the festival is over, they are placed in the god-house.

It will be remembered (pp. 21-23) how important a part the deer plays in the religion of the Huichol. We saw that the antlers are considered as plumes, further that they are *hi'kuli*. It will now be seen from Fig. 63 that the antlers are also arrows. The illustration shows the antlers of a very young deer. I found them deposited in the god-house of Elder Brother in *Têaka'ta*. They are called *Kwatemo'kami Sipora'wi*. *Kwatemo'kami* means a small deer up to one year old; *Sipora'wi*, that the deer is old enough to have antlers. These antlers signify to the Indian, who deposited them for luck, the plumes of the hawk *Piwa'mi*, which belongs to Elder Brother; further, the *hi'kuli* of Elder Brother; and finally the arrows of the same god. The idea of the antlers being arrows readily occurred to the Huichol, since they are the animal's weapon of attack and defence.

We shall presently see, in treating of the ceremonial chairs, that these are also considered as antlers.

CHAIRS AND STOOLS. — One of the strangest sights in the sacred caves and god-houses is the number of chairs and stools of varying sizes deposited there for the gods. These are conventionalized, toy-like objects; but the original underlying idea was, of course, that the gods should take their seats in them, — an idea still predominant with many. This is shown by the custom of placing idols in the small chairs described below. The purpose of depositing them is either to express adoration of some god, or, more generally, to embody prayers for various things. Plumes are often attached to them, generally to the back; frequently the chairs are filled with ceremonial arrows stuck upright into the seat; 'beds' are also placed on the seat, namely, those classed as 'flower-beds' (p. 148); in one instance (Fig. 187) there is a curious feather 'bed' on the seat. Finally symbolic objects are hung to the back or deposited on the seat, expressive of the suppliant's wants. On beholding a chair of this latter kind, one instinctively calls to mind the easy-chair of a grandfather, whom the little children have asked for presents; and as they cannot read or write, they have hung objects indicative of their desires on the back of his chair or deposited them on its seat. He will understand their meaning when he comes to rest in the chair.

The chairs and the stools are small copies of those in use among the Huichols of to-day, but often somewhat modified. They have the same names. The chair is called *owê'n* (Sp. *silla*); and the stool, *u'pali* (Sp. *banco*). The stool (Fig. 64) is simply the chair without back and arms. It is made of split bamboo sticks, joined above and below to a hoop of strong wood, the lower hoop being slightly smaller than the upper one. Strips of strong bark taken from a tree called *ha'tala u'ra*, that grows in the cañons, have been tied across the latter in all directions, forming a seat. On top of this bark seat a coarsely plaited matting of

thin strips of bamboo is securely fastened. The seat is called *i'tsi*, and round its edge is bound a layer of strips of leaves of the century-plant, *sotol*, placed longitudinally, and tied with a rope of fibre from the above-mentioned tree.

Fig. 64 ($\frac{85}{1286}$). Bamboo Stool. (Height, 29.5 cm.; diam. of seat, 40 cm.)

The appliance of leaves of *sotol*, which at first seems purely ornamental, is significant, and in accordance with the traditions regarding the chair. As seen in the myth on p. 71, the stool, and accordingly the chair, is to be considered as the flower of *sotol*. There are many houses in which stools or chairs are found, though seldom more than one of a kind.

Fig. 65 ($\frac{85}{1286}$). Bamboo Chair. (Height, 47 cm.; diam. of seat, 24 cm.)

The chairs are made by attaching a back and arms to the stool, as seen in Fig. 65. The main framework of the back consists of two natural forked sticks, attached with prongs downward. One prong has been tied to the chair, while the other stands out as a leg or support to the back. In order to make the outstanding legs firm, two sticks have been tied crossways between them. The framework of the back is completed by three strong pieces of split bamboo reed tied to it horizontally and at equal distances from each other. This solid back is further strengthened by the addition of thin pieces of a kind of bamboo tied on in the form of large fancy scrolls (*toni'kuli*).

The framework of the arms consists of a strong upright stick tied to each side of the front, and three horizontal sticks connecting it with the back; each side being furnished, in the same way as the back, with scrolls of bamboo.

The different parts of the stool and the chair are all put together and firmly secured at the joints by heavy twine of ixtle and glue. The latter is taken from the root of a certain plant called kwé'tsaka (Mex. Sp. *chautle*), and adheres admirably. When prepared for use, it is moistened with water and rubbed on the metate, being at the same time mixed with burnt grass, which gives it a dark hue. The grass must be of the kind called yēmokwa'li, referred to on p. 35. The glue thus prepared is put on in thick daubs, which are rounded off with the fingers, and gradually become as hard as wood.

There are very few chair-makers. They live on the eastern side of the river, near Santa Catarina, and easily supply the wants of the Huichols.

In all temples on festive occasions one may meet with such chairs, the shaman and the officers of the temple being seated in them. They thus have a religious importance which is wanting in the stools; and the shaman always sings sitting in a chair. When the festival is over, each one carries his chair home.

At first sight one may doubt whether these chairs and stools, particularly the former, which in their general aspect resemble the easy-chairs of civilized life, are aboriginal work or not. While I do not remember ever having met with chairs in Mexican houses, it is quite frequent to see stools there. It might be inferred that the Huichols, who are great travellers, obtained their ideas from white men, but this is quite improbable. In the whole neighborhood of the Huichol country there are no chair manufacturers as far southwest as Tepic, or as far east as Zacatecas. I made the acquaintance of one in the suburbs of Guadalajara, who, however, was far from being so skilled in his art as the best Huichol makers.

But what is decisive in this question is that I found the Huichols to have myths and traditions on the subject, which I here give.

"Elder Brother made chairs for all the gods. 'The chair is the flower of the *sotol*' (rutu'li tsai), said he. He cut the two forked sticks that form the main framework at the back of the chair from a tree called re'tata kwakwa'ri, which is very strong, and lasts for a long time. He also went to Grandmother Growth to ask her for the glue, and for the grass to mix with it. He asked Grandfather Fire for a spark, in order to burn the grass and make it fit to be mixed with the glue. The fancy scrolls he made from a large vine called neoli', asking permission of Great-grandfather Deer-Tail to cut it. The seat he made by the favor of Grandfather Kauyuma'li, and he got the strips of *sotol* leaves from Great-grandfather Deer-Tail. All the bamboo and the ixtle he furnished himself.

"In former times, when the corn was a deer, the antlers became a chair, that Grandfather Fire might sit down: therefore to-day the antlers of the deer are considered as the chair of Grandfather Fire, and all the principal gods have similar chairs."

The stool was originally made from the branches of a bush called ōpali'ra. This was before the mythical ancestors had learned to use bamboo.¹

¹ I collected specimens of this bush, but have not been able to have them identified.

Grandfather Fire (Tate'vali Ku'mkē Wêc'mě) was the first who sat down in a chair before he and the mythical ancestors started out running deer. "But they killed only a rabbit; and the arrow remained ugly, smeared with the blood of this animal."

I shall first consider some specimens of ceremonial chairs. In the collection is one dedicated to the god of fire (Tate'vali owē'n) which was found in the god-house at Tēaka'ta. It is not worth while picturing it, as it is an exact copy of the ordinary chair described, only of a diminutive size (33.5 cm. high at the back). It was deposited as a mark of adoration of the god. Ceremonial arrows are stuck upright into such chairs, as previously alluded to. In the god-houses a great number of chairs fitted out in that way may generally be observed.

In the god-house of Grandfather Fire may be seen double or triple chairs, each consisting of two, sometimes three, stools joined together side by side, having

a common back, and being generally about double the size of the single one just mentioned.

Fig. 66 shows a chair of Grandfather Fire. It has two attachments on the back. One is a real tobacco-gourd, smaller than the usual size, and without any stopper (*cf.* Figs. 260-264). It is a prayer for luck in raising the small squashes from which tobacco-gourds are made. The other object represents a hi'kuli-seeker's tobacco-gourd. Its main part is made from a wad of cotton-wool, which is tied around and over one end of the narrow neck of a gourd. Pieces of red crewel are wound round the wool longitudinally to keep it in place and by way of adornment. It has a stopper, which is cut from a small gourd

Fig. 66 ($\frac{66}{1883}$). Chair of Grandfather Fire. (Height, 30 cm.)

and adorned with transverse layers of blue crewel fastened with beeswax. This symbol of a gourd expresses a prayer for luck in killing deer.

Fig. 67 shows a chair dedicated to Mother East-Water, from the temple of San José near San Andrés, where it was exhibited at the feast of *tamales de maíz crudo*. The fancy scrolls, as will be seen, are missing. Hawk-feathers have been stuck into the seat.

Fig. 68 represents a chair which was dedicated to Grandfather Fire, from whose god-house at Tēaka'ta it was taken. It is modified somewhat, in that the usual back and sides are wanting. Instead of these, four connecting arches—two long and high, and two short and low—have been placed on the edge of the

seat. They consist of split bamboo, wound with cotton cord and crewel or wool. The two largest arches are covered with white cotton cord, over which red crewel is wound, the white appearing between the windings. The extreme third of one of these arches is wound with blue. The little arch which connects this blue end with the other large arch is covered with brown yarn, and the one opposite to it with white and red.

Fig. 67 ($\frac{95}{449}$). Chair of Mother East-Water. (Height, about 32 cm.)

Fig. 68 ($\frac{95}{450}$). Chair of Grandfather Fire (Height, 21 cm.)

The seat consists of a network of white and black yarn. A 'bed' of the god is placed on the seat, and secured on one side by thin strips of palm-leaf. It is much like a thick rug, and is woven from white yarn, wads of white wool, and red yarn, the last forming red parallel stripes on the white background. It is a 'flower-bed,' which is a form of back-shield. The chair was deposited to express a prayer for health and life.

There are several chairs of this description in the collection. In two of them there are two arches of equal length, intersecting each other at their middle points. They belong respectively to the Corn Mother and to Mother West-Water. The prayer expressed by the chair of the latter is interesting. Its object is success in raising corn and cotton, the latter expressed by wads of cotton-wool attached to the seat. The chair is but 6 cm. in height.

In Fig. 69 is shown a chair dedicated to Mother West-Water (Tâte' Kye-wimo'ka owē'n). It has two arches or arms parallel to each other; but the most striking peculiarity about it is that an 'eye' or si'kuli has been substituted for the seat. The colors of the cord and crewel tied over the hoops that form the arms are white, dark blue, and red. The large 'eye' which is tied to the chair, and serves as a seat, is white in its central part; then follow sections of dark blue, red, white, and red. It is an 'eye' of the goddess in question, and has the usual meaning, namely, that of a prayer that she may keep an eye on the supplicant. A

parrot-feather, and an artificial flower made from white and yellow paper, are attached to one of the arms, and a parrot-feather to the other, all symbolizing prayers for life. On the seat are two small votive bowls of the Mother (Tâte' Kyewimo'ka ruku'li), one on top of the other, each embodying a different prayer.

The lower one (Fig. 70) is not painted, but has been adorned with kernels of white corn, called niwe'saka, many of which are now lost. According to tradition, these sprang in ancient times from white clouds of Mother North-Water. Kernels of corn placed in such a way in a votive bowl are put there as a sacrifice and as a prayer for more corn. In the centre is a coil made from a string of red beads. A

free end of the coil has been carried to one side, and arranged in festoons surrounding the coil. The coil represents a heap of beans, and the long string signifies the root of the bean-plant. Prayers for beans and corn are thus expressed.

The other bowl (Fig. 71) is painted red; and in the centre are a number of white and blue beads on a daub of beeswax, significant of corn. The bowl thus expresses a prayer for corn.

Through the large 'eye' that forms the seat of the chair a small 'eye' of the same goddess (Tâte' Kyewimo'ka si'kuli) is stuck. The centre is dark blue, and the border white. It is a prayer for the health of a child. The main purpose of the chair is to express a prayer for corn and beans, emphasized further by the two votive bowls; also long life is asked for through the parrot-feathers and artificial flower; and the maker added a prayer that his child might continue in good health.

A chair carved out of wood is shown in Fig. 72. It is dedicated to Tâte' Tūliriki'ta (in regard to this goddess see p. 52), and was taken from her cave in Santa Catarina. It is painted blue with indigo; and both to the seat and to the lower part of the back beads are attached on layers of beeswax. The ornament on the seat, which has been somewhat damaged through handling, consists of a coil made from a string of white beads, surrounded by a row of blue beads. This circular figure symbolizes corn. From it extend ray-like rows of beads, emblematic of beans. The zigzag line of white beads at the back represents the squash-vine. This chair thus expresses a prayer for corn, beans, and squashes in plenty.

I would add that one chair of the usual type, with back and arms, is profusely

Fig. 69 ($\frac{1}{16}$ in.). Chair of Mother West-Water. (Height, 16 cm.)

adorned with blue, red, and yellow paper, obtained from the Mexicans. The paper is wound round the framework, and paper flowers are attached to it everywhere. The chair is dedicated to Mother East-Water, and expresses a prayer for luck in raising cattle, which are all supposed to belong to her.

Fig. 70.

Fig. 70 ($\frac{1}{18} \frac{6}{8} \frac{5}{8} c$). Lower Bowl on Chair, Fig. 69, Inside View. (Diam., 7 cm.)

Fig. 71.

Fig. 71 ($\frac{1}{18} \frac{6}{8} \frac{5}{8} d$). Upper Bowl on Chair, Fig. 69, Inside View. (Diam. 6 cm.)

Fig. 72.

Fig. 72 ($\frac{1}{18} \frac{6}{8} \frac{5}{8} e$). Chair of Täte' Tūliriki'ta. (Height, 9 cm.)

Fig. 73.

Fig. 73 ($\frac{1}{18} \frac{6}{8} \frac{5}{8} f$). Stool of Mother East-Water. (Height, 10 cm.)

Some of the stools are exactly like the one figured in Fig. 64, but of a smaller size. Generally, however, they are modified in their make, cotton cord and crewel forming part of the material employed. The seat is made of cotton cord or variously colored crewel, which is stretched across the upper hoop in all directions or with the threads perpendicular to each other, or it may be closely interwoven

over the hoop. Glue is rarely applied to the joints, these being fastened almost without exception by ixtle or cotton cord alone.

Fig. 73 shows a ceremonial stool of the latter type, belonging to Mother East-Water, the material of the seat being red crewel and white cotton cord. It was taken from her god-house in Têaka'ta, and is a request for success in raising corn.

In other specimens an 'eye' is substituted for the usual seat. See, for instance, Fig. 205.

FETISHES. — Stones, generally chalcedony, having a peculiar shape or color, become fetishes of the Indians, and are plentiful, especially in the neighborhood of San Andrés. Sometimes there is a whole heap of such stones, in which case every one is thought to be related to every other stone within the same heap ;

Fig. 74 ($\frac{6.6}{3.49}$). Stone Fetish representing a Female. (Length, 19.5 cm.)

the whole heap being one family, so to speak, and called by the same collective name, after the principal member. All are instrumental in producing rain and bringing good luck ; and ceremonial arrows and votive bowls are placed near them.

Outside of the pueblo of San Andrés is a quarry of chalcedony called Ši'kima or Ri'kima. All the pieces strewn on the ground here

are sacred and mystic to the Huichols, being mysterious people or gods, or rather fetishes. In the course of time the shamans gathered some of them into a heap, and the relation of all the pieces, one to another, is known to them. I was allowed to take some stones from the heap, the largest of which is shown in Fig. 74. It is about 19.5 cm. long, is covered with peculiar white nodules, and represents a female. Another, which presents about the same appearance but is smaller, is also a female. Others, which are still smaller, are young people.

A chalcedony nodule with a drusy quartz incrustation was taken from another group of stones only twenty-five yards from the preceding one, and of the same name. Conspicuous in this group were two large stones of curious shape, suggestive of long necks, limbs, etc. Two priests, who some years ago were staying for a short while in San Andrés, and who were shown several of these heaps of stones that the Huichols worship, broke them ; but this has not changed in any way the opinion of the Indians about the stones. That could only have been brought about if the priests had been able to carry off not only every

piece of chalcedony in the country, but also every other stone that may have some curious shape.

In another group of such natural fetishes I noticed a flat piece of chalcedony (amorphous quartz) about 8.5 cm. long, which is supposed to be the 'bed' of the divine being which resides there, To'la Kwa'ri, the whole heap having consequently the same name.

Another sacred spot of this kind is called Kaš'i'wali. Here was found a sort of chalcedony closely resembling a chert, and it is supposed to attract rain from the south.

At another place, called Tē'ka Tetē', a chalcedony crust was obtained, supposed to be the 'Mother of the Scorpions' (Fig. 75). There are in it impressions of calcite crystals which have been removed by solution. In it is enclosed a small piece of the same material, which some shaman had put there, and which now

Fig. 75 ($\frac{6.5}{3.29}$). Chalcedony Crust representing the 'Mother of the Scorpions.' (Length, 11 cm.)

Fig. 76 ($\frac{6.5}{3.10}$). Clay Figure representing a Dog for running Deer. (Length, 7 cm.)

cannot be taken out without considerable effort. It is to the Indian mind suggestive of a child in the womb, and the crust is called 'Mother of the Scorpions,' and worshipped accordingly.

Two pieces of chalcedony were taken from a small heap of stones supposed to be hens or roosters. The larger piece which I took is believed to be a hen, which, by a stretch of the imagination, it may be said to resemble. A small round stone is considered as an egg. These fetishes are thought to bring luck to the hens, causing them to multiply rapidly. There are many more stone fetishes near San Andrés than those above mentioned.

Near stones of this kind, or on top of them, is frequently found a heap of small earthenware objects rudely made, and representing mostly animals, but also household utensils. I visited several places in the neighborhood of San Andrés where these peculiar heaps may be seen in lonely spots in the forest. I secured specimens from them, and in my collection are found deer, a dog for running deer (Fig. 76), two coiled serpents, and a gray fox. There also two cows and two mules. One of the cows and one of the mules have each a

head in place of the tail, thus having two heads. Each cow (Fig. 77) carries on its back a sort of cup. One of the mules (Fig. 78) is furnished with a kind of double cup; the other one, with a three-pronged figure of the same size as a cup (Fig. 79). I believe these appendages to the back, in regard to which I have no information from the Indians, represent the milk and cheese which the cow yields, and the burdens the mules carry. Further, there is a pair of diminutive horns (Fig. 80). They represent a pair of horns taken from an ox that has been

Fig. 77.

Fig. 78.

Fig. 79.

Fig. 80.

Fig. 77 ($\frac{3\frac{1}{2}}{3\frac{1}{2}}$). Clay Figure representing a Cow. (Length, 14 cm.)

Fig. 78 ($\frac{6\frac{1}{2}}{3\frac{1}{2}}$). Clay Figure representing a Mule. (Length, 9 cm.)

Fig. 79 ($\frac{6\frac{1}{2}}{3\frac{1}{2}}$). Clay Figure representing a Mule. (Length, 8.5 cm.)

Fig. 80 ($\frac{6\frac{1}{2}}{3\frac{1}{2}}$). Clay Figure representing a Pair of Horns. (Length, 10 cm.)

sacrificed. At the rain-making feasts, when oxen are sacrificed, the horns are always taken off from the head, together with part of the frontal bone, and adorned with flowers. No doubt their significance is similar to that attached to deer-antlers. The figures representing household utensils, which are also of very diminutive size, are a *comal* (the plate of burnt clay on which *tortillas* or corn-cakes are baked), and a small jar representing the one in which the corn is kept, for use by the woman who is engaged in grinding on the metate. Then there are a jar and a plate of very small size, representing the ordinary household utensils of the Huichols, for instance, those in which food is offered. Finally there is a

bowl 8 cm. in diameter, in which food is offered to the fetish at the pile of stones. The edge is scalloped, which is quite unusual. This I have seen only on votive bowls made from gourds. Maybe it was meant to represent such a one.

I have noticed, besides, in such piles, pipes and gray squirrels made of the same material. Double vessels called *ipa'*^x (Fig. 81) are always found at such places. Generally there are more than one present, and they may be placed on top of the pile or alongside of it. Such a vessel might be described as two cups communicating by a narrow passage; but this form undergoes material changes, so that it is often difficult to recognize the original idea. In one of the

Fig. 81 ($\frac{65}{325}$). Double Vessel of Burnt Clay. (Length, 19 cm.)

specimens obtained there is no passage, and the connecting link between the two vessels is quite narrow. Among the household utensils of the Huichols there is none corresponding to this ceremonial object, which is also found in the sacred caves and in the god-houses, where it is occasionally filled with atole, or grains of corn, as offerings to the various deities. I have seen such vessels filled with water alone, both at the votive heaps and standing underneath a god-house. When the Huichol has finished planting corn, he places this symbolic object on some mountain, or rather in the mountains (*sierra*) from which winds come, in order that the wind shall not blow so much as to destroy the young corn-plants. It is also deposited for other purposes, according to the decision of the shaman. It may, for instance, be offered in order to allay pain in the stomach; or by a woman who desires to have a child, the underlying idea being that the sacrifice will stop menstruation.

Ceremonial arrows are stuck into the heaps, and votive bowls are also occasionally left there. The heaps are not always found on or near these stone fetishes. This seems to be the case only when the fetish is an isolated and probably important one. Such a fetish is said to be beneficial in producing rain and springs, and guards animals, fields, and utensils. The objects deposited are votive offerings to the fetish who protects the animals, fields, and utensils. They are prayers for good luck, in killing deer, in hunting, raising cattle and mules, and making household utensils. The coiled serpents, gray squirrels, and gray foxes are animals connected with the fetish, expressing devotion and in directly prayers; and the pipes with their mystic powers are given him because he is a shaman. The accumulation of objects on top of the natural stone fetish may be termed a 'votive heap,' and expresses prayers and adoration, in the same way as do symbolic figures painted on the disks of gods or woven in fabrics.

They recall somewhat similar small objects found at different localities in Mexico. Professor Frederick Starr in 1897 described some from the lake of

Chapala, from which place I myself brought a large collection the same year. Others have been mentioned by Mrs. Nuttall. Possibly some inference as to their significance may be drawn from the votive heaps of the Huichols.

A peculiar object is shown in Fig. 82. It is the reproduction of a white rock which is in the sea near San Blas, a port in the territory of Tepic frequently visited by the Huichol for depositing offerings in the sea. It is called Waš'evi, and was taken from the god-house of Mother West-Water in Têaka'ta. It consists of a piece of solidified volcanic ash carved in the shape of a truncated pyramid 10 cm. high. On each side three lines running in a longitudinal direction, and on each corner a row of transverse notches, have been carved. The object is painted black between the notches; and the two longitudinal fields formed by the three incised lines are painted, one black, and the other with black spots. There is no doubt that these markings represent certain natural markings seen on the rock, which to the Indians have a symbolic meaning. The spots are symbols of corn, and the carved notches are staircases (for the clouds to travel on). The carved longitudinal lines, and the longitudinal black fields, are symbolic of rain. There are traces of blood on it.

Fig. 82 ($\frac{65}{1676}$). Figure representing a White Rock near San Blas. (Height, 12.5 cm.; diam. of base, 7 cm.)

On top of it is a corncob of wood thickly covered with dark blue beads, and adorned on top with a paper flower bought from the Mexicans. The corncob is fastened to the pyramid by means of beeswax, and three rows of strings of blue beads are attached round the joint. The top symbolizes a serpent called Yoa'wimeka,—a serpent of the sea, which, according to the Indians, looks like a small ear of corn, the blue beads signifying the sea in which the serpent lives. It is corn, because in former days the corn was a serpent.

The white appearance of the rock of San Blas suggested at once to the Huichol its connection with clouds, and it became a fetish instrumental in bringing rain. Thus its image expresses a prayer for clouds that shall come from the sea and bring serpents of the sea, *i. e.*, corn.

THE TWO-HEADED SERPENT. — The idea of a serpent surrounding the world, conceived of in different ways, but of general occurrence among the races of man, is also found in the Huichol tribe. In Fig. 83 is shown a representation of the serpent Tâte' Īpou, that, in the belief of the Huichols, surrounds the world. It has two heads, between which the Sun must pass when setting, having daily to pay a Huichol to each of them. I found the symbolic object representing the serpent stored in one of the niches in the temple of Santa Catarina. It is a rudely made cylinder of burnt clay, reddish in color, and 17 cm. long, the heads being indicated by an open mouth at each end, as well as by small ornamental circular indentations

along the edges of the upper and lower jaws, and around one of the necks. Two indentations of the same kind serve as eyes. Round the middle of the body are arranged, at equal distances, four longitudinal rows of small circular holes. It was intended to be afterwards taken to Mesa del Nayarit (Sakaimo'ka), to be left as a prayer for rain, in which case it would have first been filled with wa've, and the side-holes stopped up with beeswax. Wa've (Sp. *chia* or *choal*) is the name of the seeds of *Amarantus leucocarpus* Watson (and also of the plant itself), which grows wild, but is sometimes cultivated. The seeds are eaten, being ground on the metate and made into cakes. However, they are mainly for religious use, and are an important factor in various ceremonies. Wa've, which according to tradition is older than corn, is the food of the ancestral gods, and there are five kinds, — black for Grandfather Fire, white for Mother West-Water, yellow for the Corn Mother, and two other kinds which show their differences in the color of the leaves of the plant. The Wa've put into the clay serpent is therefore to be considered as its food, — a votive food-offering.

Fig. 83 ($\frac{855}{1852}$). Clay Figure representing the Two-headed Serpent. (Length, 17 cm.)

The same serpent is at times represented with a single head. On the lower surface of the disk of Father Sun (Fig. 17) five serpents of the same name are pictured, each with one head. The artist has there given a fair representation of a serpent which I once killed, — the beautifully colored *Pituophis pleurostictus* Dum. and Bibr., whose main color is red. The Indians then at once exclaimed that I had killed Sakaimo'ka, and besides called it Tāte' Īpou. It is the same serpent with one head that gave San Andrés its native name, Tāte' I'ki^a ('the house of the Mother'), which was, according to tradition, born there, and afterwards travelled down to the coast. Having the same name, it is evident that these serpents are the same to the Indian mind. There is no more contradiction in this than in the fact that there are various serpents representing one and the same god, or that the same name is given to a river as to the serpent living in it. Even Grandmother Growth and the Corn Mother are called Tāte' Īpou.

The sea, which to the Indian mind surrounds the entire world, is, with its serpent-like motion, the largest of all serpents. It is the great all-devouring one. The sun has to plunge past its open jaws as day sinks into night and all becomes darkness; and with it human beings disappear, caught by the serpent. But the serpent, being all water and the greatest of all waters, is also the greatest cloud-maker, and thus also beneficial to the Huichol. Its rain-making powers have to be appealed to, and therefore its image is carried to the west as a powerful embodiment of prayers for rain.

We shall now enter upon the description of certain other characteristic symbolic objects which occupy a most prominent place in the religious cult of the

Huichol. They may be classed in the following groups :—

1. ŪLU'. — Ceremonial arrow.
2. NEALI'KA. — Front-shield or 'face' (appearance) of the god. It is round in shape, but with some deviations. It is made by interweaving pieces of split bamboo with cotton cord or variously colored crewels, symbolic and mythological figures being represented in the weaving.
3. NA'MA. — Back-shield or mat of the god. It is rectangular in shape, and made in the same way as the front-shield.
4. ITA'LI. — 'Bed' of the god. It is square, rectangular, or round in shape, and made either of pieces of split bamboo and twine of ixtle or of cotton with wads of wool interwoven, or wholly from leaves, grass, and ixtle.
5. SI'KULI. — 'Eye' of the god. It is a cross interwoven with crewel or yarn.
6. RUKU'LI. — Votive bowl. It is the ordinary drinking-vessel adorned in various ways to express prayer and devotion.

The Mexicans, who have but a faint knowledge of these offerings, include under the general name *chimal* all woven ceremonial objects, especially the si'kuli.

The material from which these objects are made, excepting the arrow, is at present seldom wholly indigenous. Cotton-wool spun by the women into thread, and native dye, may be used by the Huichols in the manufacture of their symbolic offerings; but generally crewels of various colors, cotton cord, glass beads, etc., are bought from the Mexicans for the purpose.

All these symbolic objects express prayers to the god to whom they are sacrificed, for rain, health, luck, or other material benefits. At all festivals, especially those for making rain, these peculiar offerings play a most important part, and for one or two days before the festival, people may be seen busily engaged preparing them, looking like so many hands at a children's toy-factory.

If the festival is to be a tribal one, the objects are made in the temple by one or two shamans and the officers of the temple. If it is to be a private one, some shaman, assisted by another person who may have the required knowledge, is intrusted with their making. They are then placed in the temple or on an altar, together with the sacrificial meat and the shaman's plumes, and are afterwards deposited in the god-houses or in sacred caves, or in other places devoted to the worship of the gods from whom favors have been asked. They are first smeared with a little blood of an ox or a deer.

Such symbolic objects are also made on other occasions during the year, according to the shaman's directions, the favorite ones being arrows and votive bowls.

III.—CEREMONIAL ARROWS (ŪLU').

Ceremonial arrows have the same name as the bow-arrows, namely, ūlu', and they present in general the same characteristics, but are modified in regard to the 'winged' part, the nock, the shoulder, the thickness of the rearshaft, etc. The many attachments symbolic of the needs and wishes of the Indian form a prominent feature of these arrows, which is entirely missing in the bow-arrow.

Fig. 84. Nomenclature of the Arrow.

The same mystic power which is attributed to the birds, whose locomotion is incomprehensible to the Indian, is believed to be possessed by both the bow-arrow and the ceremonial arrow, which are consequently considered as flying birds. The 'winged' part, which is the vital part or the 'heart,' is adorned very much in the same way in both kinds of arrows, being in most cases practically identical, only the feathered¹ part of the ceremonial arrow is conventionalized, and its paintings are more elaborate. A never-failing feature on the 'winged' part of the bow-arrow is the painting of a broad colored transverse band decorated with longitudinal zigzag lines alternating with longitudinal parallel lines. This characteristic decoration, which is called a 'face' or 'picture' (neali'ka), is seldom missing in the ceremonial arrow. On the contrary, sometimes there are two and even three of them on the same arrow. The zigzags (šuliki'a), which represent lightning, are symbolic of the speed and force of the arrow, and the longitudinal parallel lines are its path (hâ'ye).

The bow-arrow, as one would expect, plays a most important part in the life of the Huichol, and accordingly also in his myths and religious ideas. The potentiality of the gods is manifest in their arrows, which perform miraculous deeds. Indeed, the arrow is a synonyme of the peculiar powers of each god. Thus the scorpion, Tama'ts [elder brother] Têalu'ka, is said to have very sharp arrows; the rattlesnake is considered as the arrow of the Sun and of Elder Brother; the meteorites that fall are the arrows of some god that kills a serpent; etc. But there was a time when the arrow was not so powerful, *i. e.*, in the beginning of the world, when the gods had to content themselves with very poor arrows, until taught by Elder Brother how to make better ones. The following is the myth concerning the arrow:—

"In the beginning there was a blue serpent called Hulia'kami. The wolf was blue also, and was called Sâmula've. The tiger was called Tata'tali; the

¹ The 'winged' part is not always feathered.

lion, Ma'ya yoawi'mě. The rattlesnake was called Ra'yě Ta'mai; the vulture (Sp. *sopilote*), Ko'ka Ta'mai.

"All the animal gods had only Kauyuma'li arrows, which were not made from bamboo, but from an inferior material somewhat resembling it; namely, the stems of a coarse grass called halio'ki. The ancestors of the Huichols also made arrows from another kind of material before they obtained what is used to-day, the stems of a plant called wau'la u'ka ('bird-leg').¹

"They could not kill any deer with these arrows, and so Elder Brother made some of bamboo reed for Grandfather Fire and for all the gods and goddesses. He gave some to every one of them. They ran deer, but they killed nothing but a rabbit. They smeared its blood on their arrows, which, however, remained ugly and ineffective with that kind of blood. Then they killed a roe, and nothing else, and with the blood of this they painted their arrows, which became strong and good. Then they killed a large deer in Palia'tsia; and even to-day the Huichols, when they kill a deer, paint their ceremonial arrows, but not their bow-arrows, with its blood."

Ceremonial arrows, a kind of messengers to the gods, are inseparably connected with the life of the Huichol. For any event of importance for which he prepares, or that may happen, he makes an arrow, asking protection or favor from some god. His wife places an arrow for the goddess of child-birth for safe delivery when she is about to have a baby; and when the child is born, the father makes an arrow for it. If the child be a boy, he continues to make one every five years until the son is old enough to make one for himself. If the child be a girl, the father makes arrows for her until she gets a husband, who then assumes this duty. When the Indian wants to hunt deer, till the soil, build a house, marry, he has to make an arrow to insure success in his undertaking. In case of sickness it is imperative, for regaining health, to have an arrow made; and when the Indian dies, an arrow is placed in the house where he died, that he may not come back and disturb the surviving members of the family. When the shamans wish to practise witchcraft and make an enemy sick, the arrow is just as indispensable for them as it is for those shamans who attempt to throw off the spell of witchcraft and cure their subjects. Therefore one or more arrows are sacrificed for each individual at least once a year throughout his life.

We find thus that the arrow as an expression of prayer answers to all the wants of the Indian from the cradle to the grave. There is no symbolic object in more common use, either by the private individual and the family or by the community as represented by the officers of the temple. No feast can be imagined without the presence of arrows.

Whenever an Indian wants to pray, his first impulse is to make an arrow.

¹ Wau'la is the name of a certain wader with long, thin reddish legs. U'ka is, strictly speaking, the part of the 'leg' from the heel to the toe. The stems of the plant have a certain resemblance to the legs of this wader, and, besides, are of the same reddish color. The flowers, when crushed between the hands, leave on them a yellow coloring-matter, which is sometimes smeared on the face for adornment.

The sacrifice of one or more arrows expresses his desires in a language intelligible to him and to the gods. The gods themselves once wandered upon the earth with bows, and quivers full of arrows, and found them very useful. Therefore arrows retain to-day their value as ceremonials, and through them the Huichols talk to their gods, who are considered the real owners and masters of the arrows that are sacrificed to them. A man, in making arrows, is also thought to gain knowledge of all sacred matters.

With few exceptions, such arrows have one or more plumes or feathers (mōye'li) attached to the 'winged' part, taken from the wing or tail of the particular birds of the god implored. Several kinds of plumes may thus be found on the same arrow. Besides adding to the mystic powers of the arrow, these express adoration of the god. In addition, the Indians very often attach one or more symbolic objects, which convey their prayers in a more concise form, in a language intelligible not only to the god, but also to all their countrymen.

The most common way of sacrificing arrows is to place them upright in the ground. They are also stuck into the seats of the ceremonial chairs in the god-houses, and very frequently into the straw roofs of these houses, inside of which they may be seen in great numbers. They are deposited in all sacred caves and all sacred spots, springs, and waters; in deep crevices of rocks, on mountains, in the sea; in short, everywhere where some god lives whom the imaginative Huichol may implore and appease; for the arrow stands for him personally, or for the tribe, praying its silent prayers. "It talks alone," to use the Indian expression, without the aid of the shaman.

Every year a Huichol carries different ceremonial arrows to various places in the country, as well as outside of it, as prayers for life and material benefits. He carries them to the country of the hi'kuli in the east and to Mesa del Nayarit in the west, and even deposits them in the sea. He carries them south to Laguna de Magdalena in the territory of Tepic as a sacrifice to Mother South-Water; and he also takes them up to Acaponeta in the northwest, because he believes that Grandfather Fire and Great-grandfather Deer-Tail started on their journey there. Elder Brother, who taught the gods how to make the right kind of arrows, is implored for success in arrow-making, and a short arrow without any 'winged' part, but painted, is sacrificed for the purpose.

In order to ascertain the meaning of the ceremonial arrow, and if possible find the typical arrow of each god, I set to work examining carefully those collected on my first visit to the Huichols. Each arrow was measured in all its details, and every one of its characteristics minutely noticed. In this way eighty-five ceremonial arrows were examined; and the results, which are instructive as having a bearing on all ceremonial arrows, are given below.

Most of them are from the neighborhood of San Andrés, and were taken from the various small god-houses. Some are also from sacred caves dedicated

to some special god. Others are from the neighborhood of Santa Catarina, having been taken from similar localities.

They had been sacrificed to nine different gods, distributed as follows : —

1. To Grandfather Fire, 9.	6. To the deer god in the south, 1.
2. To Great-grandfather Deer-Tail, 6.	7. To the Corn Mother, 3.
3. To Father Sun (Tayau'), 9.	8. To Mother East-Water, 7.
4. To Elder Brother, 44.	9. To Mother West-Water, 5.
5. To the deer god in the north, 1.	

The rearshaft is generally of the same thickness as that of the bow-arrow, but sometimes thicker and sometimes thinner.

The foreshaft has generally been made from a hard, light-colored wood, but sometimes from red Brazil-wood ; and, like the bow-arrow, it is always pointed at the end, and has no head or insertion nock.

The arrows are all of different lengths, none of them quite as long as the bow-arrow, generally 5 or 6 cm. shorter, sometimes much shorter. The rearshaft is generally longer than the foreshaft, but sometimes the reverse is the case.

Rarely is the upper part evenly cut off. This occurs in just three of the 85 arrows; namely, in one of the god of fire, in one of Great-grandfather Deer-Tail, and in one of Mother East-Water. The general rule is, that the upper end is nocked, but not plugged.¹ A few cases of plugging, however, occur : viz., in an arrow of Grandfather Fire, where the plug is 8.5 cm. long ; in one of Father Sun ; and in three of Elder Brother.

The 'winged' part is differently arranged in different arrows. It is always painted with bands of color ; but the number of arrows that have feathers on this part is about the same as that which have none. When there are feathers, there are either two or three, but all sorts of variations are found as to the cutting of the vanes and binding with sinew. The most common case is the following (Fig. 85) : The quills of two feathers, placed opposite each other, at about the same place where the 'winged' part of the bow-arrow is, are bound round with sinew. The rest of the feathers have been left free, and the vanes have not been cut in any way. Each feather is placed with its upper side next the rearshaft, thus

Fig. 85.

Fig. 86.

Fig. 87.

Figs. 85 ($\frac{85}{462}$), 86 ($\frac{86}{465}$), 87 ($\frac{87}{688}$). Methods of winging Ceremonial Arrows.

¹ In all English nomenclature, 'footed,' as used by Mr. Cushing in his paper 'The Arrow.'

falling in a graceful curve to each side of it. This is the case with nearly all the arrows of Grandfather Fire, with most of those of Elder Brother, with half of those of Great-grandfather Deer-Tail, with most of those of the Corn Mother, with most of those of Mother West-Water, and also with a few of those of Mother East-Water. This way of attaching the feathers to the 'winged' part may therefore be considered as the rule in ceremonial arrows. It may be a question, however, what may be considered the standard, — this, or the entire absence of feathers on the 'winged' part. The cases in which there are no feathers on the 'winged' part are more frequent in the arrows of Father Sun and of Elder Brother.

As to the variations, there is one case where the feathers are placed as just described, except that the under side is put next to the rearshaft. There is another case where the upper ends are tied to the rearshaft; and still another where the ends are left free, but the tips have been nipped off.

Turning now to the cases where three feathers are attached to the 'winged' part, we find that they are generally bound with sinews to the 'winged' part by their quills, as in the bow-arrow; that is, at both the upper and lower ends. The vanes are cut, however, in a different way from those of the ordinary 'wing' of the bow-arrow. They are left intact for the first half of their length, while the second half is cut down in the ordinary way of the 'wing' of the bow-arrow. On each 'wing,' besides, a small breadth of the vanes is left towards the end, around which the sinew is also tied, leaving the vanes protruding beyond the end of the arrow (Fig. 86). In one case three feathers are bound to the arrow by their quills at the same place where the 'winged' part of the bow-arrow would be. They are placed in the same way as on the bow-arrow, but the ends are free, and the vanes have not been cut in any way. There are also cases of three feathers being attached as on the bow-arrow, only the vanes have been cut to a less extent (Fig. 87).

Grandfather Fire has three variations in the 'winged' part of his arrows; Great-grandfather Deer-Tail, three; Father Sun, three; Elder Brother, three; in the arrows of the Corn Mother there are also three variations; in those of Mother East-Water, four; and in those of Mother West-Water, two.

The feathers are generally taken from the wing-cover. In no case is more than one kind of feather bound to the 'winged' part. The feathers that have been bound to this part are —

For Grandfather Fire, mostly macaw, but also hawk.

For Great-grandfather Deer-Tail, mostly hawk, but also parrot.

For Father Sun, hawk.

For Elder Brother, parrot.

For the deer god in the north, hawk.

For the deer god in the south, hawk.

For the Corn Mother, parrot and hawk.

For Mother East-Water, hawk and parrot.

For Mother West-Water, hawk.

In regard to the color-bands and their arrangement, no definite rule can be established. In the arrows of Grandfather Fire, however, the prevailing color seems to be red ; and in those of Elder Brother and Mother East-Water, blue. Still in the arrows of both Grandfather Fire and Mother East-Water the colors are interchanged. Generally we find on the 'winged' part a broad red or a broad blue band with longitudinal zigzag markings, often intermixed with longitudinal parallel lines, signifying, as already stated, the flight of the arrow. Above and below this are one or more bands. In a general way, the same arrangement is found about the middle of the rearshaft. In two cases (in the arrows of the Corn Mother and Elder Brother) the colors are arranged in a spiral of red and blue, that runs from the top towards the middle of the rearshaft.

The colors employed were bought from Mexican stores. They are red, or blue, or black (maybe black is intended to represent blue). A brown color has also sometimes been used as a substitute for red.

In most cases there is no sinew at the shoulder. In a few instances where there is sinew, three or four longitudinal stripes are painted underneath it.

The eighty-five ceremonial arrows are quite generally furnished with appendages of plumes or feathers. Many, no matter to what god they may belong, have no other attachment than simply a plume, and there are a few that have not even that. Still, as a rule, the arrows have some kind of attachment tied by a cord to the rearshaft, generally to the colored part of it. Plumes are attached in the following way (Fig. 88) : More than half of the quill is cut off slantingly, from the feathers down, so as to form a long point somewhat resembling a toothpick. This long point is doubled over at about the middle, its end being inserted in the hollow quill so as to form a sort of loop, and through this loop a cord is tied by a simple but ingenious knot.

Fig. 88.
Method of attaching Plumes to Arrows.

The most important appendages, outside of the plume, are front-shields or 'faces' (neali'ka), back-shields (na'ma), some of which are also considered as 'beds' (ita'li), and 'eyes' (si'kuli). When front-shields are attached to the arrows of a god, blood is almost always smeared on them. Blood is also often seen on the arrows themselves, as well as on the plumes, especially on those of the god of fire.

The following is a summary, in a general way, of the attachments to the eighty-five arrows :—

For Grandfather Fire, one or more feathers from the macaw or hawk, also one or more front or back shields.

For Great-grandfather Deer-Tail there are as many with attachments as without. The at-

tachments consist of sandals, hawk-feathers, shields, bows, and paper flowers.

For Father Sun, generally shields, also hawk-feathers, and in one case sandals (Mex. Sp. *guaraches*).

For Elder Brother, shields, diminutive bows, tobacco-gourds, diminutive snares (Sp. <i>lazo</i>), wristlets, hawk-feathers, diminutive drums, bits of textile (generally of ixtle, but also of wool), and 'eyes.'	For the Corn Mother, hawk-feathers, diminutive bows, 'eyes,' shields, and turkey-buzzard feathers.
For the deer god in the north, and the deer god in the south, a hawk-feather.	For Mother East-Water, shields, ceremonial <i>tamales</i> , 'beds.'
	For Mother West-Water, shields, hawk-feathers, macaw-feathers.

It will thus be seen that hawk-feathers and front or back shields have been attached to nearly all of them, the hawk-feathers predominating on the arrows of Grandfather Fire, and the shields on those of Mother East-Water.

Attachments of diminutive sandals sometimes represent the god, sometimes the person. 'Eyes' represent the god. The diminutive bow represents the supplicant. The diminutive tobacco-pouch, wristlet, and snare stand especially for the hunter and the hi'kuli-seeker.

The foregoing, then, is a summary review of the eighty-five arrows. There is not much more to add about the general characteristics of those collected on the second visit to the tribe. The material and make are the same. The variability in features is also the same in regard to the length of the arrow and the proportionate length of the rearshaft and foreshaft, as to the thickness of either, as to whether the arrow is nocked and plugged or not, the arrangement of the feathers on the 'winged' part and its paintings, the sinew at the shoulder or the absence of any, and so on. Additional variations observed are as follows: In a few specimens are two 'winged' parts, both feathered, with two ceremonial objects attached to each; in one specimen the 'winged' part consists of four feathers (two parrot and two hawk) arranged in two diametrically opposite pairs, and surrounded with hair from the tail of a deer, all tied by the same sinew, like a bouquet of flowers; on one of the ceremonial arrows sacrificed to Grandfather Fire, as a prayer for the health of a boy, instead of the usual zigzag lines, a human figure intended to represent the god himself has been painted. It should be taken into consideration that the singing shaman, who often directs the making of ceremonial arrows and the arrangement of the attachments, may make exceptions to the general rules according to dreams that he has had. He may, for instance, order parrot-feathers to be used, instead of hawk-feathers, on the arrows of the god of fire, and may make many unexpected changes from the general rule, not only in regard to arrows, but in regard to all ceremonial objects. A few ceremonial arrows are so conventionalized as to consist of one stick only without any division between foreshaft and rearshaft.

All these variations of the arrow, and the impossibility of finding a typical ceremonial arrow, make it clear that the ceremonial arrow is personal, and confirm the conclusion reached by Cushing, than whom there is no greater authority on this topic. I understand that a paper by him on the ceremonial arrow — a sequel to that on the bow-arrow — is shortly to appear, which will fully explain

the meaning of this ceremonial as he observed it among the Zuñi and other tribes. Meanwhile he has kindly furnished me with the following passages:—

“The ceremonial arrows, war-clubs, and other weapons of a purely ceremonial nature, must with these people always be adapted to the size of one or another of the members of the body of the one who makes and uses or sacrifices them. For example, the arrow of a short man, since its shaft corresponds to the length of his right or left arm, and its shaftment [‘winged’ part] to the spread or span of his fingers, will be shorter than the arrow of the same god, made by a taller or longer-armed man. Also a ceremonial tablet or war-club, especially, will correspond always in length, if for use in striking sideways instead of endwise, to the femur of the man who makes it.

“All ceremonial arrows are personal, except the tribal arrows, which are made for the tribe (and even these are vicariously personal, so to say) by the chief shaman of the god for whom they are designed.”

In regard to the colors applied to the arrows, and their meaning, I am able to reproduce specimens that will throw considerable light on this little-known subject. It is exceedingly difficult to gain any knowledge from the Indians on this point, as they have an almost inexplicable aversion to giving information about their arrows. The specimens shown in Plate III, Figs. 1–8, were made by one man, a young shaman in Santa Catarina, who had just finished them for his own use. They were probably intended to be feathered. The decorations peculiar to each god are plainly shown, and may be accepted as typical patterns, all ceremonial arrows agreeing essentially with these. They belong respectively to (1) Grandfather Fire, (2) Father Sun (Tayau'), (3) the Setting Sun (Sakai-mo'ka), (4) Elder Brother, (5) the Corn Mother, (6) Mother East-Water, (7) Mother West-Water, and (8) Haita'neka. The last word means a high pine-tree, but which god is meant I do not know for certain, although probably it is Kauyuma'li. It is an interesting fact that some of the gods are pine-trees. There are three ‘brother pine-trees.’ The oldest is Tama'ts Pa'likē Tamoye'kē, the next is Tama'ts Kauyuma'li, and the youngest is Tama'ts Palisi'ke. Tama'ts Kauyuma'li is Ho'ko Uima'li (‘female pine,’ literally ‘young girl pine’). Further, the hawk Piwa'mi, mentioned on several occasions, is also a pine-tree.

I would ask the reader to compare these arrows with the five arrows pictured in Plate IV, Figs. 1–5. These were made for me on another occasion by other Indians, to serve the purpose of holding the strings of curious ceremonial cakes which are seen attached to them. The cakes, which have different colors according to the god to whom they are dedicated, were first procured by me, and afterwards I succeeded in getting from different makers the proper arrows for the god and his cakes. The strings of cakes are to be considered as the necklaces of the respective gods, and the name of such an arrow is ūlu' kokai'ya. The cakes will be described in detail at their proper place (p. 179). By comparing now the decorations on the former arrows with those here presented, it will

be seen that they agree in all essential points. Fig. 1, the arrow of Grandfather Fire, is feathered with parrot-feathers; Fig. 2, an arrow of Father Sun (Tayau'), with hawk-feathers; Fig. 3, an arrow of Elder Brother, with parrot-feathers; Fig. 4, an arrow of the Corn Mother, with macaw-feathers; Fig. 5, an arrow of Mother East-Water, with hawk-feathers.

Further light is thrown on the subject by five arrows which I bought from another shaman friend of mine who lives near Santa Catarina. They are arrows made by the Coras, which he had brought from Mesa del Nayarit in exchange for some that he had made himself. It is a custom among the Huichols every year in the month of October to make an exchange of ceremonial arrows in the sacred cave of Mesa del Nayarit. The Huichols bring arrows of various gods and deposit them in the sacred cave of the Setting Sun, helping themselves at the same time to arrows that have been placed there by the Coras. These arrows are afterwards kept in the private god-houses, and are supposed to bring special luck in killing deer. When needed, they are taken out into the field where the hunt is to be. In Plate III, Figs. 9-13, are reproduced the five arrows, without further comment than that furnished by the shaman, which I give below. As will be noticed, the 'winged' part on all of them is unusually elaborate, consisting of three decorative sections (neali'ka) which cover nearly the whole rearshaft. It is in reality a triple 'winged' part, but only the top one is feathered.

1. *Arrow of Grandfather Fire (Tate'vali ūlu')*, Plate III, Fig. 9. — The upper and the lower sections, which are dark blue, represent the sparks of Grandfather Fire (Tate'vali urai'ya). The middle one, of the same color, represents his wristlet (Tate'vali matzu'wa).

2. *Arrow of Father Sun (Tayau' ūlu')*, Plate III, Fig. 10. — The upper and lower sections, which are red, are called rūriki'a, and represent prayers for life. The middle one is green, and probably represents hi'kuli.

3. *Arrow of the Setting Sun (Sakaimo'ka ūlu')*, Plate III, Fig. 11. — All the sections here are west (so'tega). The middle one, which consists of four longitudinal stripes, — two green and two red, in alternate succession, — represents a wristlet. The upper section is blue, and the lower green.

4. *Arrow of Elder Brother (Tama'ts Pa'likē Tamoye'kē ūlu')*, Plate III, Fig. 12. — The upper section is red, and signifies blood of the deer (rūli'a). The two lower sections, which are green, signify hi'kuli.

5. *Arrow of Mother West-Water (Tāte' Kyewimo'ka ūlu')*, Plate III, Fig. 13. — The upper section, which is red, is east (ira'ta). The next, which is green, is the middle region (hirū'apa). The lower, which is red, is west (so'tega).

The significance of the colors given above speaks for itself. I consider rūriki'a in the second arrow, and rūli'a in the fourth, practically identical.

Following are some examples of ceremonial arrows. They might be greatly multiplied, but this would add nothing new as to general features. Nearly

all symbolic objects may be attached, and in the way most convenient, as evidenced by the illustrations, but generally they are tied on by a twine of fibre, cotton cord, or crewel. As regards woven ceremonials, in most cases a free end of the material used in the weaving is employed for the purpose. It is evident that no importance is attached by the Indian to the way in which the figures, human or animal, so often appearing in the woven ceremonials, hang, whether upside down or not. Diminutive bows and snares are often slipped over the arrow. The attachments are all fastened to the 'winged' part, so far as this is possible, and both the arrow and the attachments are smeared with the blood of an ox or a deer before being deposited. In all cases where no detailed description of the symbolic object is given, the reader is referred to the special section treating of it.

Figs. 89 ($\frac{58}{100}$), 90 ($\frac{52}{100}$), 91 ($\frac{35}{100}$ a), 92 ($\frac{61}{100}$). Arrows of Grandfather Fire. (Length, 58, 52, 35, and 61 cm. respectively.)

ARROWS OF GRANDFATHER FIRE (TATE'VALI ŪLU'). — There are five of these, all from the little temple of this deity in Têaka'ta : —

1. One (Fig. 89) has five plumes attached to it, — two macaw and three hawk feathers, — each tied on separately. It is a prayer for health and luck.

2. Another (Fig. 90) has two attachments. One is a small gourd, which is too diminutive for actual use, but represents the hi'kuli-seeker's tobacco-gourd. An opening has been cut in the top, but there is no stopper. Twine strings are attached to the gourd in the same way as those of tobacco-gourds in use. The other attachment is a back-shield (Tate'vali na'ma), which has been strung on in an exceptional way, being attached to the two strings that attach the gourd. The figures on the back-shield, which are red, green, and blue, represent hi'kuli. The arrow is a prayer for luck in raising squash-plants to furnish tobacco-gourds, symbolized by the gourd, and for luck in planting corn, symbolized by the hi'kuli figured on the back-shield.

3. A third (Fig. 91) is unusually small, its size bearing some relation, perhaps, to the size of the supplicant, who was a little boy. A macaw-feather is attached to it, as well as a back-shield-'bed' (na'ma-ita'li). The latter is a rectangular piece of woollen textile woven for the purpose; and a human figure, supposed to be a picture of the boy (nono'tsi [baby] neali'ka), is embroidered on it in red crewel. The arrow is a prayer for the health of the boy, who was sick.

4. On another (Fig. 92) is an interesting attachment in the form of a piece of woollen textile, which again is attached to a stick called kwitevo' (see p. 151). The arrow is stuck through the attachment, on which is embroidered in blue the figure of a woman, the cross on the body being, according to my Indian informant, the heart. The prayer expressed is, that the supplicant, the human figure on the textile, may have a child.

5. The fifth (Fig. 93) was deposited by a sorcerer in order to cause the death of a man. It has two 'winged' parts, both feathered; but its most striking feature is the way in which the feathers are arranged. Two vanes are attached to each 'winged' part, all of the same kind of feather. At either place they are tied to the arrow by sinew over their quills, as in the bow-arrow;

but the vane has been left free, and not cut in any way, the vanes of the upper 'winged' part pointing towards those of the lower 'winged' part. The plane of the upper pair of vanes intersects at right angles with that of the lower vanes. A back-shield of the god (Tate'vali na'ma) is hung to the lower 'winged' part. On it is a picture of two deer-horns in red. To the same 'winged' part is also hung a diminutive

Fig. 93 (1885a). Arrow and 'Eye' of Grandfather Fire. (Length of arrow, 57.5 cm.; of 'eye,' 18 cm.)

bow. The supplicant implores Grandfather Fire for aid in injuring his victim, whom in his mind he wishes to hit with the arrow, which is symbolically hurled at him by the bow attached.

To the arrow belongs an 'eye' (Tate'vali si'kuli), which had been placed upright in the ground alongside of it. The central part of the 'eye' is open. The colors are, beginning with the inner section, blue, white, and black, which succession of colors is once repeated. A unique feature of the 'eye' is that five pieces of vanes are stitched to one side of it, adding to its mystic powers. They are the basal portions of five feathers, from which one vane has been removed by dividing the feathers along the middle of the shaft. Three of them are from the macaw, and two from a hawk. The 'eye' emphasizes the supplicant's prayers, asking that Grandfather Fire may keep close watch of the man's adversary, that he may not escape destruction, or, as the Indian expresses it, that his 'heart may become pinched,' and his death soon follow.

ARROWS OF GREAT-GRANDFATHER DEER-TAIL (TATO'TSI MA'RA KWA'RI ŪLU').
—There are two of these, both taken from his god-house in Tēaka'ta.

Fig. 94.

Fig. 95.

Figs. 94 ($\frac{95}{100}$), 95 ($\frac{95}{100}$). Arrows of Great-grandfather Deer-Tail. (Length of arrows, 63 and 49 cm.; diameter of netted shields, 9.5 and 8 cm.)

1. One (Fig. 94) has two attachments, — a netted shield and a paper flower. The former consists of a slender twig formed into a hoop about 9 cm. in diameter. This hoop is wound round with red crewel, and crocheted in cobweb fashion with cotton cord and red and blue crewel, an opening being left in the centre. The colors are, going from the centre towards the edge, blue, red, and white. The netted shield, which is an important symbolic object, represents a snare for killing deer, therefore it is called *ma'ra neali'ka* ('face' or 'aspect' of the deer), or it is more specially named after those gods who are prominently deer. Thus this is *Tato'tsi neali'ka*. Other netted shields belong to Grandfather Fire and Elder Brother. When the Indian prays for luck in catching deer in the middle of the day, he places a netted shield in a votive bowl. It is then called *wu'tali*, and is thought to be instrumental in calling and snaring the deer. The flower is one of the ordinary paper flowers used by the Mexicans in adorning their saints and churches, and is blue and reddish in color. Possibly it represents the tobacco-flower, as sacred tobacco plays an important part in the cult of *hi'kuli*, of which this god is the patron. The arrow, whose foreshaft is smeared with much blood, is a prayer for luck in killing deer.

2. The other (Fig. 95) is decorated on its 'winged' part in a somewhat

unusual way; viz., by a long red stripe and an equally long black stripe on diametrically opposite sides, the space between them being left uncolored. Both stripes are adorned with zigzag lines in the ordinary way. There is an attachment of a macaw-feather and one of a netted shield, the colors in the latter being, from the centre outwards, red, blue, green, yellow, dark green. The arrow is a prayer for luck in killing deer.

ARROWS OF ELDER BROTHER (TAMA'TS PA'LIKĒ TAMOVĒ'KĒ ŪLU'). — These are very numerous, and the different prayers which they express are quite distinct. I have selected nine specimens for illustration.

1. In Fig. 96 is one from the god-house of this deity near the temple of Guayavas, near the pueblo of San Andrés. It has four attachments, two of them being snares of the deer. One is a diminutive snare of the same material as the real snare, and corresponding to it in every way. It is even folded up in the same way as the ordinary snares are found stored in the small god-houses of the ranches. A snare is always considered as the 'face' or 'aspect' (neali'ka) of the deer, or, in other words, of the deer god in question, and it is therefore here the 'face' of Elder Brother. To the 'winged' part another snare is attached, which is more complete. It is a square composed of four pieces of hollow reed of about equal length (5 cm.), cut off even, and strung on a string of ixtle. One side of the square is tied firmly to the rearshaft by a twine of ixtle. These four reeds are painted with dark-blue longitudinal zigzag lines, the ends being left unpainted. In other words, they are so many 'winged' parts of the arrow of Elder Brother, whose color is always dark blue. A diminutive snare ready for use is tied to the arrow just above the square. It hangs open in the square. This is in imitation of the manner of setting snares in the field. They form a square, either between two bushes which stand on either side of a deer-track, or between two poles. One end of the snare is firmly tied to a tree (the place of which is taken in the present instance by the rearshaft of the ceremonial arrow), and the snare itself is set by tying it to various places on the surrounding sticks or bushes. It is significant that the square is composed of 'winged' parts, which is the vital part of the arrow, symbolizing death to the deer. The square itself, even if there is no snare attached to it, becomes in the Huichol conception a symbol for a snare, and is also called 'face' or 'aspect' (neali'ka) of the deer. Generally but three reeds of the same description suffice to make it a snare (*cf.* Figs. 109, 150). Then there is a diminutive bow strung to the end of the string by which the snare is attached, and to the foreshaft below.

Fig. 96 ($\frac{66}{143}a$). Arrow of Elder Brother. (Length, 58 cm.)

This diminutive bow is 26 cm. long, made from Brazil-wood, and provided with a bowstring of twine of ixtle, attached to the bow in the same way as on the real bow. To the upper part of the rearshaft is strung another diminutive bow 16 cm. long, the material being bamboo, and the string being attached in the same way. The arrow is a prayer for luck in killing deer by snaring and shooting.

Fig. 97.

Fig. 98.

Fig. 99.

Fig. 97 ($155\frac{5}{8}$). Arrow of Elder Brother. (Diam. of front-shield, 9.5 cm.)

Fig. 98 ($124\frac{2}{3}$). Arrow of Elder Brother. (Length of loop, 2 cm.)

Fig. 99 ($123\frac{2}{3}$). Arrow of Elder Brother. (Length of sandal, 13 cm.)

2. Another from the same locality is seen in Fig. 97. It is somewhat damaged, the foreshaft having been lost; but it presents some interest, especially in regard to its 'winged' part, which consists of two parrot-feathers and two hawk-feathers alternating, placed with their upper sides next to the arrow, and tied by their quills in the usual way. Hairs from the tail of a deer are tied round outside of the feathers. It will be remembered that not only are deer-antlers plumes, but also the deer himself; and here is a striking illustration of the conception of the animal, his hair being employed in the place of feathers.¹

¹ The name of deer-hair when thus used is 'māpama'ri.' As the hairs are white, they serve in other cases as kūpu'ri ('cotton-wool') under the same name, 'māpama'ri.' There is in the collection an arrow to which is tied, instead of a plume, a tuft of deer-hair still attached to the skin (see p. 21).

There are also four hawk-feathers attached, all of different species. The uppermost is from the Piwa'mi; the second from the red-tailed hawk; the third from the Wi'tsi; and the last from the Ra'tu. All these help in killing deer. Two diminutive folded snares are attached, and finally a ceremonial front-shield. The name of the last is Hai'kuli [whirlwind] neali'ka. The central part and the edge are white; and between these two there is a zone containing various colors, the main colors being red and blue in alternate radial sections. At the inner edge of this zone may be noticed some green color. The ceremonial shield, which is that of Elder Brother, identifies the god as the whirlwind, which among the Huichols is not bad, as it helps them to walk. The arrow is a prayer for good luck in killing deer.

3. The next specimen (Fig. 98) was taken from the sacred spring of the god in Têaka'ta. It has three attachments, — an 'eye,' a wristlet, and a loop made from a string of red beads. The last-named is considered as a neali'ka. It expresses that the deer is surrounded by blood, and symbolizes a prayer that the supplicant may not err when shooting. The wristlet shows him as a hunter; and the 'eye' is a prayer that the god may watch over him, so that he may be successful on the hunt, which is the general prayer of the whole arrow.

4. This (Fig. 99) is from the god-house in Têaka'ta. It has two attachments. One is a small rectangular textile of wool made for the purpose, on which the figure of a man is embroidered in black. This figure is called Tate'vali neali'ka ('picture of Grandfather Fire'), but it is meant to represent the shaman who placed the arrow. The other attachment is a pair of sandals made from twisted strips of palm-leaf. These represent the sandals of ancient pattern (Figs. 246, 247) which the shamans put on at the feast of *tamales de maíz crudo*. The prayer expressed by the arrow is that the shaman may have good luck in singing at that feast.

5. A fifth specimen (Fig. 100) is from the god-house of Elder Brother near the temple of Guayavas, near San Andrés. It has four attachments, — two 'beds' and two 'eyes.' One 'bed' is a rectangular piece of coarsely woven ixtle, made for the purpose. It is fastened to the rearshaft of the arrow, the latter being stuck through loops left at the ends of the weaving. The other is a rectangular piece of cotton-cloth of about the same size, attached at the shoulder, the arrow having been stuck through a corner of the cloth for the purpose. The latter form of 'bed' is comparatively rare, and is of recent introduction through the acquirement of cotton-cloth. It is expressive of the same thought as that given by the loose textile; namely, that it is a bed, in this case the bed of a child, which is presented to the god as a representative of the child itself. The colors in one 'eye' are, beginning at the centre, white, blue, and red; and in the other, red and white. The meaning of the 'eye' is the usual one, that the god may keep his eye on the supplicant. Every year in the beginning of the wet season, from April to May, children under five years of age have their

arrows brought to the god-houses of Elder Brother, Father Sun (Tavé'rik^a), and Mother East-Water, asking them for health. Such arrows always have at least attachments of loose textiles of ixtle like that just described. The fact that there are two 'beds' and two 'eyes' shows that the Indian, for some reason known only to himself, placed the prayers for his two children on one arrow, and it does not necessarily imply that they are twins.

Figs. 100 ($\frac{6.5}{46.5}^a$), 101 ($\frac{6.5}{19.60}$), 102 ($\frac{6.5}{46.17}$), 103 ($\frac{6.5}{18.17}$), 104 ($\frac{6.5}{18.44}$). Arrows of Elder Brother. (About $\frac{1}{3}$ nat. size.)

6, 7, 8. The next three arrows (Figs. 101–103) are from the same place as the preceding specimen. They represent a numerous group of arrows belonging to Elder Brother, which are intended to secure luck in handiwork. No woman ever undertakes any kind of handiwork without first asking luck in doing it, and the commonest way is to make what is called a kau'rě (a piece of woollen textile, generally with some emblematic design in the weaving), place it on an arrow, and leave it in the god-house of Elder Brother. Sometimes the kau'rě may actually be considered as a sample of what she is going to do, as shown in Fig. 103. The textile shown in Fig. 101 is plain white. On that represented in Fig. 102

there is woven a female figure. Both express prayers for luck in textile work, such as making pouches, or girdles, or clothing. In the latter specimen the supplicant makes her prayer more emphatic by placing her own picture on it.

9. The last arrow of this god (Fig. 104), which is from the god-house in Têaka'ta, is specially instructive. It has five attachments. First is a back-shield on which are represented the designs on the back of a serpent, probably Ha'tsi. It is a back-shield of Elder Brother (Tama'ts Pa'likě Tamoye'kě na'ma), who has at his disposal serpents which bring luck in handiwork to women who stroke them (*cf.* p. 36). The back-shield expresses a prayer for luck in making a girdle; but the woman has other wishes besides. She is a lone woman, and cannot make her arrow herself, therefore she takes the opportunity, when making this offering, to express to the god all that is uppermost in her mind. To the string attaching the back-shield is fastened a wad of cotton-wool, which expresses a prayer for health. Two small sandals in wax, one little oval lump of beeswax representing a tobacco-pouch, and one netted shield in black yarn, form the rest of the attachments, and symbolize the following prayer: that the supplicant may have a husband (the sandals), and that she may have a son who will become a singing shaman (the tobacco-gourd, *cf.* p. 190) and catch deer (the netted shield, *cf.* p. 94).

ARROWS OF THE CORN MOTHER (TĀTE' OTEGANA'KA ŪLU'). — There are three of these which have been selected for mention.

1. The first (Fig. 105) is from the pueblo of Santa Catarina. To it are attached three wing-feathers of the turkey-buzzard (Sp. *aura*) and a small front-shield. The latter is made in a rather peculiar way; namely, by fastening a coil of crewel to each side of a disk of beeswax, a hole being left in the centre. The crewel is of various colors, — on one side, innermost red, then white, then blue; on the other side, innermost blue, then white. It is a prayer for corn.

2. The second (Fig. 106) has an unusual attachment, — a stool (Tāte' Otegana'ka u'pali), through the loosely woven seat of which the arrow is stuck. The seat is made of white cotton cord and thin black crewel. Most of it is cotton cord, the black forming two parallel stripes. The arrow is a prayer for health, emphasized by the white color of the stool. There are instances where *tamales* (Fig. 241) are attached to the arrows of this goddess as a request for plenty of food.

3. Another arrow, not pictured, has the royal eagle (Vě'lika Uima'li) embroidered on a votive scrap attached to it.

ARROWS OF MOTHER EAST-WATER (TĀTE' NAALIWA'MI ŪLU'). — These arrows generally represent prayers not only for life and health, but also for many other things. I will give a few instances.

1. On one of them is a diminutive sandal tied by the latchet, the mother who placed it praying that her son might become a singing shaman.

2. To another arrow, just below the 'winged' part, a red thread is tied. This signifies life, accordingly a prayer that the supplicant, a boy, may live long.

3. To a third arrow (Fig. 107) is tied a large 'eye' (Tāte' Naaliwa'mi si'kuli), made of black, red, and white crewel — a prayer for long life for a child. The spiral painted on the 'winged' part of the arrow is symbolic of life. The colors are red, black, and the natural color of the reed, which are the colors found on the 'eye.'

Fig. 105.

Fig. 106.

Fig. 107.

Fig. 108.

Figs. 105 ($\frac{66}{66}$), 106 ($\frac{66}{1961}$). Arrows of the Corn Mother. (About $\frac{1}{3}$ nat. size.)

Fig. 107 ($\frac{66}{1817}$). Arrow of Mother East-Water. (About $\frac{1}{3}$ nat. size.)

Fig. 108 ($\frac{66}{1827}$). Arrow of the 'Mother of the House of the Little Ones.' (About $\frac{1}{3}$ nat. size.)

In the collection are also six arrows which had been left in the cave of this Mother near Santa Catarina, each for a little one when it was bathed in the cave. Children are washed at the spring in this cave to insure health, and life is also asked through the arrows left there.

ARROWS OF MOTHER WEST-WATER (TATE' KYEWIMO'KA ŪLU').— These often represent prayers for luck in raising corn. One in the collection was deposited as a prayer for a child's health.

ARROW OF THE 'MOTHER OF THE HOUSE OF THE LITTLE ONES' (TĀTE' TŪLIRIKI'TA ŪLU'), Fig. 108. — It is from the cave of this Mother, near Santa Catarina (see p. 52). It has three attachments, — a wristlet of leather with a few blue beads attached to its middle part (Tāte' Tūliriki'ta matzu'wa), a wooden object called kalatsi'ki, and a back-shield of the goddess. The kalatsi'ki is a conventionalized representation of the real object (Fig. 286), which brings luck in killing deer. It is 12 cm. long, and serrated on the edges with the exception of one end, which serves as a handle. All but the handle is painted blue. Woven into the back-shield are a picture of the deer-god of the south (Elder Brother Wawatsa'li), and in front of the deer a representation of the same kalatsi'ki by which the deer is to be called to his death. Note that there is a kind of handle to the back-shield, probably showing that it is to be considered as the shaman's plume-handle (wi'ta mōye'li), which is another back-shield. Thus it is a kind of double back-shield. The arrow is a prayer for luck in killing deer.

ARROWS OF SPECIAL MAKES.

Under this heading are included arrows that are modified according to the use to which they are put, and those that are highly conventionalized.

DEER-HUNTER'S ARROW, OR ARROW OF ELDER BROTHER (TAMA'TS PA'LIKĒ TAMOYE'KĒ ŪLU'), Fig. 109. — It was found in his god-house at the temple of Guayavas, near San Andrés, suspended in a horizontal position by a twine of ixtle fastened at both ends. It is made from one piece of reed thicker than the rear-shaft of the bow-arrow, and is nocked at both ends. It has five painted sections, separated by narrow bands of the natural color of the stick. Each section is painted dark blue with longitudinal lines and zigzags; in other words, each is the 'winged' part of an arrow.

This arrow has fifteen attachments, as follows: — (a) Five snares or 'aspects' (neali'ka) of the deer. They are made by stringing three pieces of reed from 7 cm. to 9 cm. long, each made to represent a 'winged' part, on a twine of ixtle, and tying the two ends together so that the pieces form a triangle. The ends of the reeds are generally nocked and left unpainted, while the rest is painted dark blue with longitudinal zigzags and lines (see p. 95, where it is demonstrated that they are snares of the deer). The color of the arrow and of the snares agrees with that on the arrows of this god. The deer-hunter, who keeps this arrow in his house or private god-house, attaches one snare each year until the number has reached five, when he deposits the arrow in one of the god-houses devoted to Elder Brother. (b) Front-shield or 'face' of the Sun (somewhat damaged). It is a polygon of nine sides, measuring 15 cm. between two opposite corners. The central portion is open, being formed by a hoop, into which the ends of the interwoven sticks are inserted. The colors are, next to the hoop red, followed by white, and then red. (c) The 'eye' (si'kuli) of the Sun. (d) A netted shield of Elder Brother, about 4 cm. in diameter. The central part is white, and the rest blue (see p. 94). (e) An indistinct representation of the wife of the deer-hunter,

embroidered in dark blue on a piece of textile. A small loop of blue beads is attached to the figure, probably to the navel, signifying her sex and maternity. (*f*) A netted shield of Elder Brother, 6 cm. in diameter, the net being made of brown yarn. In close proximity to the shield, and evidently as its accompaniment, is a small bamboo peg 9 cm. long, and pointed at one end. The peg is attached to the arrow by a cotton twine tied round the upper part in a single knot; and the netted shield is tied to the same cord, at a distance of 2 cm. from the peg, by a free end of the yarn used in the weaving. The peg may represent an empaling-stick, which is set up in the midst of some narrow path or in some depression over which the deer are driven. The Tarahumares use this method of hunting, but I do not know whether such sticks are used by the Huichols. Therefore I believe that the attached peg is a conventionalized ceremonial arrow. One or more ceremonial arrows are always placed next to the votive bowl which contains the netted shield to entice the deer. — These netted shields (see p. 94) recall the Zuñi cord-shields,¹ and the snaring of deer in pitfalls or by means of spring-poles and ropes, as seen in the Troano Codex. According to Cushing, when a Zuñi hunts a deer, he makes what is called a little 'spider knot' of yucca, which represents the spider and his knot in the middle of his web. He puts this down on the ground on the 'trail of the deer,' usually in front of the first four tracks of the deer; and, pointing backward over this trail, he sticks up slantingly near the 'spider knot' a little peg, so that the feet of the deer will be impeded or caught, and the deer himself ensnared as in the hunter's web. The web is left open, that the deer may not escape. If it were not open, it would lift the deer up. When entire, it is symbolic of the lifting power of the 'cloud shield.' (*g*) 'Face' or front-shield of Elder Brother. The centre is yellow, surrounded by a section of black on which are two red stripes. The border is white. (*h*) Another 'face' or front-shield of Elder Brother. The colors are, innermost red, then white, black, red, white. (*i*) A third 'face' or front-shield of Elder Brother, 8.5 cm. in diameter. The colors are red, black, and white. (*k*) A back-shield or 'bed' of Elder Brother, 4.5 cm. by 4 cm. The dark-blue diamond-shaped figure on it, which is crossed by a dark-blue line, represents two hi'kuli growing on the ground. Elder Brother is also god of hi'kuli, which is expressed in the figure on his bed. (*l*) A tobacco-gourd, represented by a small oblong open basket 2 cm. long, made from thin pieces of wood interwoven with dark-blue crewel. A free end of the crewel attaches it to the same string, also blue, by which the back-shield hangs. The tobacco-gourd, as said before, is an essential part of the outfit of the hi'kuli-seeker, because he must have tobacco in order to gather the plant. Elder Brother himself was not only the creator of hi'kuli, but also the institutor of its cult, symbolized by the gourd.

As already stated, the sacred number of the Huichols is 5, therefore five

¹ See 'Outlines of Zuñi Creation Myths,' by F. H. Cushing (Thirteenth Ann. Rep. Bureau of Ethnology, Washington, pp. 389, 423, and elsewhere); 'A Zuñi Folk-Tale of the Underworld' (The Journal of American Folk-Lore, Vol. V, No. XVI, p. 52).

snare have to be put on in consecutive years. Every time one is put on, it means a prayer for catching deer. The two netted shields, which are also ceremonial snares, contribute to the desired result. The five 'winged' parts of the arrow, vital parts, one answering to each year, symbolize further the killing of deer. The number 5 also symbolizes the deer of the whole country, — in the four quarters and in the middle region. During these five years the hunter also puts on other symbolic objects which have reference mainly to the catching of deer. Three front-shields express adoration of the god, and so does the back-shield with its accompanying tobacco-gourd. The front-shield of Father Sun

Fig. 109 ($\frac{4}{5}$). Deer-Hunter's Arrow. (Length, 57 cm.)

has been attached because in his light the hunter sees his prey. A peculiar attachment on such an arrow is the picture of the hunter's wife with the attending 'eye.' She probably was taken ill during the five years, and one of the means to restore her health was to place her image on the magic arrow. The 'eye' above the picture, as usual, symbolizes protection under the watching eye of the god.

KO'MA, OR DEER-HUNTER'S ARROWS. — At the ceremonial race connected with the feast of *tamales de maíz crudo* three peculiar ceremonial arrows are used, each of which is called ko'ma. These three form a set, and each is worn on the back of a young hunter, suspended in a horizontal position by means of a loop, which passes round the neck of the man. At the conclusion of the feast they are put away in the god-house of the Sun. Ko'ma is the name of a ceremonial arrow to which a grass ring bound round with a twine of ixtle has been attached, the arrow piercing the ring diametrically. In two of the specimens pictured the rings are 13.5 cm. in diameter and 1.5 cm. thick; and in the third 10.5 cm. in

diameter at the broadest part, and of uneven thickness. Two pieces of twine of ixtle are attached to each ring as shown in Figs. 110-112, which serve to suspend the arrow. When in use, it is suspended with the 'winged' part of the arrow towards the right-hand side of the bearer. We give below three specimens belonging to one set. They were procured at a feast of *tamales de maíz crudo*, held at the temple of San José, near the pueblo of San Andrés. Each ko'ma belongs to a special god.

1. *Ko'ma of the Deer God in the South (Tama'ts Wawatsa'li Ko'ma)*, Fig. 110. — To the ring a piece of cotton-cloth is sewed, which covers about half of it. On it is an embroidery in crewel of a deer with two little ones on its back, whose heads are touched by either hand of a human figure standing between them. The color of the deer is red, with the exception of the nose and forelegs, which are blue. The three figures on its back are also red. Two small crosses have been left on the body of the deer, and a triangle of white between them, and

Fig. 110 ($\frac{66}{48}$). Ko'ma of the Deer God in the South. (Length of arrow, 53 cm.)

there are two white spots on the body of each of the young deer. The man holding on to the two little deer symbolizes the catching of deer. A tail-feather of the red-tailed hawk is tied to the rearshaft.

2. *Ko'ma of Grandfather Fire (Ko'ma Sauli'rika)*, Fig. 111. — Sauli'rika is the name of the shaman as a prophet and a magician, the god of fire being the greatest shaman. The grass ring is in this case bound round with a piece of a red handkerchief bought in a Mexican store, the red color being indicative of fire. To the inside of the lower half of the ring two tigers' claws are fastened, pointed at each other. The tiger belongs to the fire.

3. *Ko'ma of the Deer God in the North (Tama'ts O'to Ta'wi Ko'ma)*, Fig. 112. — To the ring, from the circumference to the centre, a piece of textile made from yellow-dyed yarn is attached, one end of it being sewed to the ring, and the other end being pierced by the arrow. On this textile is embroidered in red a human figure with hands uplifted. An open square has been left in the middle of the figure. A tail-feather of the red-tailed hawk is attached to the rearshaft by a cotton cord.

The three men who carry these ceremonial arrows run alongside of one another, the one who carries that of Grandfather Fire running in the middle, while the bearer of the arrow of the deer god in the south runs to the right, and that of the deer god in the north to the left of him. Note that the tail-feathers attached to the latter two are taken respectively from the right-hand side and the left-hand side of the tail of a hawk, corresponding to the position of the bearers of the arrows. The middle bearer is of course the most important of the three.

Fig. 111 ($\frac{6}{447}$). Ko'ma of Grandfather Fire. (Length of arrow, 51 cm.)

He is supposed to see everything, since he carries the powers of the curing and prophesying shaman. The deer god in the north is male, and the one in the south is female,¹ although the latter is called Tama'ts ('elder brother'). The figure representing the deer (Fig. 110) has antlers, which would suggest a male deer; but

Fig. 112 ($\frac{6}{448}$). Ko'ma of the Deer God in the North. (Length of arrow, 53 cm.)

it will be remembered that the roe is believed to have antlers, although only the shaman sees them. On other occasions the deer god in the south is called Ma'ra Wa'tsi. The circlets transfixd by the arrows are ceremonial snares; and the three arrows, as well as the whole race, symbolize luck in hunting. The middle runner represents a shaman of the hunt; and the claws of the tiger within his

¹ This statement was made by my informant when explaining this arrow. It disagrees with information obtained from other men (see p. 21).

ko'ma indicate the capture of the deer, whether in the north or in the south. He also guards against any evil or accident that may happen on the hunt, and is the principal medium of luck.

Fig. 113. Fig. 114. Fig. 115. Fig. 116. Fig. 117.
 Fig. 113 ($1\frac{6}{18}$). Arrow of Grandfather Kauyuma'li. (Length, 45 cm.) Fig. 114 ($1\frac{6}{18}$). Arrow of Grandfather Fire. (Length, 53 cm.)
 Fig. 115 ($1\frac{6}{18}$). Arrow of Grandmother Growth. (Length, 66 cm.) Fig. 116 ($1\frac{6}{18}$). Arrow of Grandfather Fire. (Length, 67 cm.)
 Fig. 117 ($1\frac{6}{18}$). Arrow of Great-grandfather Deer-Tail. (Length, 76 cm.)

ARROW OF GRANDFATHER KAUYUMA'LI (?), Fig. 113. — This is supposed to represent one of the ancient arrows, made from a different and inferior material from that used to-day (see p. 84). It is called kaluu'tsa, and is thought to belong to Kauyuma'li, the god who first taught the other gods to make arrows. It has another name, Sipora'wi ūlu'ya ('young deer arrow'), which is explained by the belief that the god visited the underworld in the shape of a deer. Here he was shot, but was afterwards revived by Elder Brother. I found this specimen in the god-house of Elder Brother at Têaka'ta. It is a straight stick, thin and fragile, cut from a certain bush called halio'ki. The lower end is cut off even, and the upper end is provided with a nock. Three natural nodes at the lower part constitute to the Indian the main difference between this arrow and one of the ordinary kind made from reed. The upper part of the arrow for more than one.

third of its length is painted with a spiral in blue and brown (probably meant to be yellow), and round the nock is a band of the same brown. It has no attachments. It expresses a prayer for health (*cf.* p. 100, Fig. 107).

Finally I will mention some curiously conventionalized arrows,—sticks having but slight indication that they are meant to be arrows.

1. ARROW OF GRANDFATHER FIRE (Fig. 114).—It was found in the temple of Santa Catarina, where it was deposited in order to be taken later to Têaka'ta. It is a stick of Brazil-wood which has been smoothed off, one end evenly cut off, and the other end nocked.

2. ARROW OF GRANDMOTHER GROWTH (Fig. 115).—It was taken from her cave in the neighborhood of Santa Catarina. It is simply a stick of Brazil-wood somewhat smoothed off, and pointed at one end.

3. ARROWS OF GRANDFATHER FIRE AND OF GREAT-GRANDFATHER DEER-TAIL (Figs. 116, 117).—These are sticks cut from the big-leaved oak (Huichol towā'ra; Sp. *encino roble*), and represent the pokers used for the fire at the temple of Santa Catarina. They are slightly smoothed off, most of the bark being left on. Both are pointed at one end,—the end used to rake up the fire with, which therefore is slightly charred in these specimens. The other end, in that of Grandfather Fire, is forked, while in that of Great-grandfather Deer-Tail it is cut off obliquely. The name of the nock is tame'.

IV. — FRONT-SHIELDS (NEALI'KA).

The Huichol Indians, as is apparent from the myth given below, used to carry two shields, — one in front, which may be compared to a buckler; and another on the back, which was also the mat or bed of the warrior. The myth, which is taken from the story of Great-grandfather Deer-Tail (Tato'tsi Ma'ra Kwa'ri), was related to me in the pueblo of Santa Catarina, and begins thus: —

“The ranches in the north and the south fought against Tato'tsi and his people, and conquered and ate many of them. However, Tato'tsi gathered the remaining warriors together, and led them towards the north. The enemy were living in a dismal cave.

“Tato'tsi then assumed the shape of a deer. On the summit of one of the hills forming the sides of the barranca¹ he made a hole, jumped into it, and covered the top over with a stone. Soon afterwards the enemy ascended the hillside from the valley below to fight with those above; but Tato'tsi loosened their ladders, which tumbled down, and the people fell with them and were killed. Then he mended the ladders, and descended to see how matters stood in the barranca, and all his men went with him.

“They met an old man who had a shield on his back, and who held another one in front of him. The shield in front was round in shape, made from ixtle, and had a hole in the middle to see through. It was shield and ‘mirror’ or ‘face’ [neali'ka] at the same time, because not only did it protect him against arrows, but he could also see the arrows through it. They killed the old man with stones, robbed him of his shield, and brought it here, as well as his arrows.”

The front-shield or neali'ka is primarily round, because first of all it symbolizes the buckler, which was round; but it has also come to symbolize the face (hence a mask is a neali'ka) or aspect of a god or person: in fact, it may be said to be the Indian expression for a picture, therefore rock carvings are called neali'ka. The round mirrors bought in Mexican stores are also called by the same name. My Huichol informants, who understood a little Spanish, sometimes even used to call these symbolic objects ‘mirrors,’ alluding to the pictures shown on them. The holes in the walls of a god-house, — one above the entrance, and a corresponding one at the rear, — which are always round in shape, are also called neali'ka. The round netted shields (*cf.* p. 94) are neali'ka, as are also the diminutive ceremonial deer-snares. We shall call these symbolic objects ‘front-shields,’ substituting at times ‘face,’ ‘aspect,’ or ‘picture’ as names expressive of the Indian thought in particular cases. The front-shields express prayers for rain, corn, or health.

There are front-shields which are not round, but angular, with varying numbers of sides, from six upwards. There are also back-shields, which, although rectangular, are called neali'ka; but this is only natural, as the term ‘neali'ka’ in this case merely expresses the picture shown on the back-shield.

¹ A barranca is a deep cañon.

Generally front-shields are flat, but they may sometimes have the shape of a Japanese umbrella (Fig. 131). They are either attached to an arrow, as in most cases, or simply hung to the roof inside of the god-houses. The latter is the case when they are large. They are generally attached by means of a special cord, either of white cotton or colored crewel or yarn, tied to the colored part of the rearshaft of an arrow, and fastened to the disk at one or two places towards the edge. Sometimes an end of the material used for weaving is left free, and long enough to serve the purpose of attaching. Those described in the following pages are not attached to arrows, unless so stated.

In a general way, the ceremonial front-shields are made on one and the same principle, by interweaving pieces of split bamboo with cotton cord or variously colored crewel or yarn in the form of a disk, symbolic designs being usually represented in the weaving. The size varies greatly, the smallest in the collection measuring 6 cm. in diameter, and the largest about 50 cm. As a rule, the splints are of the length of the radius of the disk, and pointed at their inner ends, although sometimes they may be as long as the diameter. The spaces between them towards the edge are filled in with smaller splints, also pointed at their inner ends, and in rare cases with pieces of coarse grass. The ends of the splints are left protruding one centimetre or more beyond the edge. In most cases two pieces more solid than the others, and as long as the diameter of the disk, are interwoven with the rest. These heavy splints intersect at their middle points, generally at right angles, forming a cross, which makes the object firm and level, and at the same time has a symbolic reference to the four quarters of the world. This cross appears only on one side of the front-shield. When the spaces are not filled in, then the front-shield is naturally in the form of a many-sided polygon, from six sides up, the number of sides sometimes being so many that the shield becomes practically round. The splints which constitute the framework in such case always appear distinctly under the weaving on one side, while on the other side the shield presents a smooth surface.

The ends of the different colored crewels used in this way to make various symbolic objects are joined in two ways: in some they are tied together; in others the end of each color is fastened to the splint. The inwoven figures are shown equally well on both sides.

No great importance should be placed on the varieties of tints sometimes used in the making of front-shields, and which may appear even on one and the same specimen. Red is represented by colors varying from light purple to yellow and brown; blue is represented by green and blue; black, by blue and black (see specially the colors on the front-shield represented in Fig. 130). This applies also to other symbolic objects the material for which has to be bought in Mexican stores. I have even known cases where the maker had to put in a different color from that he desired, selecting the one that most nearly approached it; for instance, dark yellow instead of red.

The finest front-shields in regard to size and workmanship come from San

Andrés, where the Indians are better off than on the eastern side of the river, and accordingly have more material to work with. The suggestion of many colors comes naturally to them from the appearance of Father Sun, their patron god, whom they mainly worship. While I was staying in San Andrés, during the feasts for making rain, I noticed that the gods for whom front-shields were mostly prepared were Father Sun and Mother East-Water. After the feast, those of the former were deposited in a god-house near the temple of San José, in the neighborhood of the pueblo of San Andrés; and those of Mother East-Water were taken to her cave near the pueblo of Santa Catarina.

In the collection are twenty-five front-shields (not including special kinds and those attached to arrows), by far the greater number of which had been sacrificed to the Sun. I have placed at the beginning the three different types of front-shield, for the sake of the instruction that they give in regard to shape and make. The first round one is by far the most common; and the reader will find, in most of the illustrations on the subject, fair examples of the ordinary type.

FRONT-SHIELDS OF FATHER SUN (TAYAU' NEALI'KA OR TAVÊ'RIK^a NEALI'KA). — Eleven of the fourteen front-shields here presented are from one locality, — the well-known god-house of Father Sun, in the neighborhood of the temple of San José, near the pueblo of San Andrés. One (Fig. 123) is from Popotita, one (Fig. 124) from a god-house on the edge of the mesa of San Andrés, and one (Fig. 126) from Pochotita. They were sacrificed either for procuring rain or to insure health.

To the Indian the Sun, of course, is a man. He was created by the shamans themselves in ancient times, as told before. Every time he rises in the east we see his front-shield, represented to-day by the ceremonial shields made for him. The central part of a front-shield, always defined by a ring, represents the hole through which the god sees, that is to say, his face especially. Therefore the hole is sometimes designated by a hoop, the centre being left open. This hole is plainly seen in all the Sun's front-shields, where the central part accordingly represents the Sun himself, — his personality or face. The human or animal figures which are pictured on the shields of this god and of others always have their feet turned toward the centre, often standing on the ring.

1. The first (Fig. 118) shows, as already stated, the most common type of front-shield. Round the centre is a blue band, succeeded after a short interval by a narrow red one, the diameter of the circular space formed by the latter being about 4 cm. The main figures are a man and two deer. The man is colored red, his head being very indistinct for lack of space. He represents the Sun, who, although not specially the god of the deer-hunters, may help them to catch deer, and thus secure rain. The deer are blue, and face each other. Between the deer and the man are two snares in blue, a little apart, but on the same blue line, which represents the ground. Between them, and standing on the ground-line, is

a red cross, representing the morning star, Tonoa'mi, which appears before the sun rises. That is just the time when hunters begin to run deer, and the front-shield is thus a symbol of the rising sun, which is preceded by the morning star; and it expresses a prayer that both these gods may help the supplicant to catch deer. Along the outer edge is a border consisting of a red and a blue band, the red being innermost. Outside of the red runs a single white cotton cord.

This shield is attached to a ceremonial arrow by two cords, which are also fastened to two diametrically opposite points of the disk, near the edge. These two cords are tied to the same point of the arrow, viz., the colored part of the rearshaft. The arrow measures in its entire length 48.7 cm., the rearshaft being 25.4 cm. long, and the foreshaft 23.3 cm. It has no feathers on the 'winged' part.

2. In the second type of front-shield (Fig. 119) the bamboo splints intersect each other at their middle points. Between these are interwoven other splints of about half the length of the radius; while smaller ones, which would be necessary to make it entirely round, have been omitted. The shield is thus in reality a many-sided polygon. The front side, which is represented in the illustration, is smooth, while on the opposite side the two heavy cross-pieces which keep the front-shield flat are plainly visible. The splints project beyond the edge of the weaving at an average of about 3 cm.

Fig. 118 ($\frac{65}{107}$). Front-Shield of Father Sun.
(Diam., 20 cm.)

The colors are black, yellow, and white, the last forming the background of the whole, and the black and yellow being arranged in concentric rings on it. The five inner rings, which are somewhat irregular in width, are black, as is also the edge. The remaining two rings are yellow, and of equal width. The centre is white. On both sides of the shield, in the central part, are traces of blood.

This front-shield, an imitation of the appearance of the sun, is a tribal one, and is a prayer for rain.

3. The third type of front-shield (Fig. 120) shows how the number of sides of the polygon may be reduced by omitting the splints from the interstices, as well as some of the intersecting splints. It is made from four strong pieces of split bamboo of equal length and breadth (all regularly cut and intersecting at their middle points) interwoven with yarn and colored crewel. The splints project very little and for varying lengths beyond the edge of the weaving, which on the right side has a smooth surface, while on the other side the form of the splints is plainly visible under the weaving.

The colors are white, black, and red, arranged in concentric rings, the centre being black.

This shield is also an imitation of the appearance of the sun, and symbolizes its heat, scorching everything, as shown by the black centre. It was deposited as a mark of adoration, and expresses, besides, a prayer for rain and health.

Fig. 119.

Fig. 120.

Figs. 119 ($\frac{5}{34}$), 120 ($\frac{6}{33}$). Front-Shields of Father Sun. (About $\frac{1}{2}$ nat. size.)

4. A peculiar feature of this shield (Fig. 121) is that the sticks of the supporting cross are not as long as the diameter of the shield; and one stick is longer than the other, although they cross each other at their central points. The long stick is wound with red yarn, and the short one with white cotton cord. Another peculiarity is that a strip of bamboo of the same length as the long stick just mentioned, but wound with yellow yarn, has been placed directly opposite it on the other side of the shield, and the two have been tied together at their ends with yellow yarn. The short stick has been tied to the shield without any corresponding stick on the other side, but a splint is interwoven in the shield, passing over the yellow stick in such a manner as to practically form a cross; thus a kind of double cross is formed, one half belonging to the rising sun, as indicated by the red color, and the other half to the setting sun, as indicated by the yellow.

The chief color of the shield is white. Round the centre is a narrow ring of black; and round the edge runs a narrow ring of red, surrounded by a still narrower ring of white.

Four figures may be distinctly seen, — two of men, and two of eagles, — one pair nearly opposite the other pair, the feet resting on the black ring, with the exception of those of one of the eagles. One of the men is yellow, and represents the setting Sun, Sakaimo'ka; the other one is red, and represents the rising Sun, Tavê'rik^a. I think the fact that various shades of red and yellow have been used on the figures has no significance. The maker probably had

not enough of one color. The eagles with spread wings—one with head turned to one side, and the other without a head—in the space between and to each side of the men, are uniformly black in color, and belong one to each of the men. Between the eagles and the red man, on either side of the latter, is a figure in black representing the double drinking-gourd (*topoli'r*, p. 126). There are two stripes of black near one of the eagles, while above the other are several of red, all indicative of clouds.

Fig. 121 ($\frac{55}{42\frac{1}{2}}$). Front-Shield of Father Sun. (Diam., 24 cm.)

To either end of a cord passing through the right knee of the yellow man a hawk-feather is fastened,—one hanging on the front side, the other on the reverse side, of the shield. It is the same cord by which the shield is attached to the rearshaft of its arrow. Below these two feathers, to a piece of yellow crewel passing through the right hand of the red man, another hawk-feather is tied. There is also a hawk-feather attached to the shorter bar of the cross. All round the edge of the shield, cotton-wool has been tied, symbolic of clouds. The shield has been smeared with blood at about the centre of the cross on both sides.

This shield was made at a feast for procuring rain, and it expresses prayers to both the rising and the setting Sun to enshroud the world in clouds, that it may rain. Further symbols of rain are the water-gourds.

It is attached to an arrow by a cotton cord tied to the 'winged' part. The arrow measures 45 cm. in its entire length, the rearshaft being 24.4 cm. long, and the foreshaft 20.6 cm. At the shoulder it is wound with sinew, under which may be seen four longitudinal black stripes.

Fig. 122 ($\frac{6.5}{430}$). Front-Shield of Father Sun. (Diam., 46 cm.)

5. In the fifth specimen (Fig. 122) the inner ends of the splints, as usual, are pointed, and only as long as the radius of the disk, with the exception of those which have been put in from the outer edge. All along the outer edge, at intervals of only about 3 cm., small wads of cotton-wool were formerly attached, symbolic of clouds, but the greater number of them have been lost through exposure in the cave where the shield was hanging. Two hawk-feathers are fastened to the central part by a cord. In regard to colors and their arrangement, the shield may be said to be divided into two parts by a large but narrow ring of blue. In the inner part are figures that no doubt represent the rays of the sun, as the whole section within the ring is expressive of the Sun himself with his various colors. The inner parts of the figures in white, outside the ring, with the blue and yellow cross-like figures within them, represent the shaman's plumes. The cross-like figures represent *hi'kuli*, or, what is considered the same thing, corn. The broad section of white, black, red, and yellow outside of them, symbolizes the rays of the sun, which may even scorch the earth, the red and yellow

ones being indicative of the heat of the sun. Between the shamanistic designs are seen as many figures of the double water-gourd, all in red.

The prayer thus indicated is addressed to the great shaman, — the Sun, whose powers are manifest in heat, — that he may rise surrounded by clouds, which bring rain, and hence corn. On the right side of the shield, in the centre, are traces of blood.

6. The sixth front-shield (Fig. 123) is round, and made of the usual materials. The pieces of bamboo are of the length of the radius of the disk, except two wider ones, which are a little longer. At the centre, on the back of the shield, these overlap about one or two centimetres, making the shield more solid. Outside they are split in two strips of the usual width.

This specimen is peculiar, in that a great number of open spaces are left in its surface. They were made by interweaving groups of two or three splints, and leaving an unwoven space between the groups. The central part (about 9 cm. in diameter) is entirely interwoven, the middle being white, surrounded by successive stripes of blue, red, yellow, and black. From this central part emanate ray-like sections. They are interrupted at half their length, however, by a ring of blue and black. The inner rays are all made by the joining of three and three of the splints, but the outer rays are in only three cases a direct continuation of the inner rays. These three rays follow in immediate succession on the shield. The rest are so placed that the outer rays come about opposite the open spaces between the inner rays. The position of the former was made possible by joining the splints in a different way from those of the inner part. The edge of the outer rays is bordered with concentric sections of red, white, and black. This forms also the edge of the shield. There are traces of cotton-wool that had been tied to it, and there are also traces of blood on one side, in the centre.

This shield represents the 'open' sun, with all its rays and colors, unobscured by any clouds.

7. The next specimen (Fig. 124) was found suspended by a cord to the roof of a god-house situated on the edge of the mesa of San Andrés. It is the largest shield I have met with. The two strong pieces of equal length that form the cross — one of pine wood and the other of bamboo — are proportionately large ;

Fig. 123 ($\frac{6}{137}$). Front-Shield of Father Sun. (Diam., 30 cm.)

and therefore it was not possible, as usual, to weave them in with the rest. They are firmly tied to one side of the shield by cotton cord, which attaches the arms of the cross, and by bark fibre, which fastens the centre.

Round the centre is a narrow ring of black, the diameter of which, measuring from the inner edges, is about 5 cm. The space within the ring is entirely hidden by a yellow paper flower such as the Mexicans use for adorning their saints. This central section has the usual meaning, representing the Sun himself; and the flower attached to it is a mark of adoration. Only 5 cm. from the edge runs another but very narrow black ring. On the space between these two rings a number of tigers¹ of various sizes are seen, all except one represented in the act

Fig. 124 ($\frac{65}{427}$). Front-Shield of Father Sun. (Diam., 50 cm.)

of running. They are arranged two and two facing each other, except two, one of which is in pursuit of the other. There is also one small tiger to be seen between two of the large ones. The bodies are generally of a black or dark-blue or even dark-brown color, with spots of red, or blue, or yellow. Some of them have white stripes and no spots, and one has red and yellow stripes. Although all the animals represented vary somewhat in appearance, they have one feature in common, — their large claws.

There is an inner circle of four animals of various sizes. Two of them — one blue, and the other black — represent male deer, as indicated by their antlers. A

¹ The tiger is the jaguar (*Felis onça* Linn.).

third, which is brown with yellow mouth, is a roe. On the side diametrically opposite to the roe is an animal which is probably a mepach (coati'). See p. 58.

Just outside of this circle of animals, or rather in the outer edge of it, are seen, at two diametrically opposite sides, representations of birds. One of them is somewhat of the shape of an obtuse angle, one side of which is red and the other blue, and is meant for a flying swallow. The swallow, like the cardinal bird, moves about in the middle of the day, and is therefore a sun bird. The other figure is blue, and represents a quail standing. At various places are seen short lines of red, blue, or yellow.

There are two blue serpents close to two tigers, near the top, on the left, one of them being between and the other just above them. The mouth is indicated in red on both of them. The bodies of the serpents are extended, and the heads are turned in opposite directions. On the right is another pair of serpents in nearly similar positions, the one nearest the centre being yellow with black mouth, and the other black with yellow mouth.

All the mammals, birds, and serpents represented in the main section of the shield are animals belonging to the Sun, and placed there in adoration of the god.

The large field occupied by these animals is limited by the narrow black ring mentioned before. Outside of it follows a space, which is filled up entirely with triangular figures—black, brown, white, yellow, blue, red—that fit into each other in an ornamental design round the whole shield. They are symbolic of clouds. The outer part of the weaving of the shield consists of radial stripes, alternately black and white, symbolizing rain. The mere edge is a narrow band of white.

The prayer embodied in this front-shield is thus that the Sun, surrounded by all his animals, may rise in clouds which produce rain.

8. Another front-shield of the Sun (Fig. 125) has a narrow ring of black round the centre, enclosing a section about 10 cm. in diameter. Inside of this are seen four terrace-like blue figures arranged in opposite pairs round a white centre. The spaces between the blue figures are partly filled in with red. This whole central section, bounded by the black line, represents, as before, the Sun himself.

On the main section, which extends from this black ring to the edge, are various figures on a white background, the most conspicuous among which is a

Fig. 125 ($\frac{6.5}{12.5}$). Front-Shield of Father Sun. (Diam., 35 cm.)

tiger. The body is long and jaguar-like, although out of proportion. The tail is turned upwards and forwards, bending back on itself at the end. The body and limbs are blue; but the spots on the animal are so numerous that most of the body appears as one mass of blue, red, and white blocks, and blue and white lines. Above the animal is a very light red cross, and in front of it a black one. In front of the tiger is a comparatively well executed eagle in very light red, the tail having stripes of dark red on it. The bird is represented with wings spread, legs apart, and head in profile. In the middle of the body, between the wings, is the heart, a white space resembling the symbol of a shaman's plume. To one side of it, and touching it with one leg, is a small black eagle, also with wings spread and head in profile, but without tail. The tiger and the eagle, as animals belonging to the Sun, express adoration, as well as a prayer for help.

The other figures are men and deer. Behind the tiger is a deer of the south, without antlers, in red. A man, dark blue in color (meant to be black), follows, with arms outstretched, the fingers (three in number) being very prominent. He wears a hat. On his right is a male deer of the north, in dark blue. In front of it is another deer of the north with antlers, although not so large. It is black and dark blue in color, with a tinge of pink on the hoofs. In front of this deer stands a man with arms outstretched, like the first man, and also with hat on. There is some light pink color on the top of the hat and on one side, expressing feather ornaments. In the man's left hand, by which he holds one of the antlers of the deer, is also seen a baton (*i'tsu*), the greater part of which is light pink in color, while the upper end is light green. The two men are shamans on the hunt. The one with prominent fingers wants to catch deer, while the other one is pictured as having already caught one. The baton which the latter holds in his left hand is the wand with which he consecrates the heap of *tamales* (corn-bread) at the feast of *tamales de maíz crudo*. These designs, therefore, also express a wish that this feast may come off, when the shaman with the wand will offer the *tamales* to all the gods.

Above these two groups of deer and men are seen four red figures representing certain red 'insects' which appear in the wet season. Three of them are of a very light color, a shade lighter than pink; and the fourth, the largest, of a dark-red color. They are called *Tâte' Ma'toli* or *Tâte' Mau'tuli*, and are, so the Indians say, red in color, looking something like ticks, and are frequently seen on the ground at the beginning of the wet season. They belong to the Corn Mother, who, according to one tradition, is the mother of the Sun. As they appear only when the soil is thoroughly drenched with rain, they become symbolic of rain. They are also symbolic of corn (*cf.* Fig. 134, *i*, where the same designs symbolize corn; see also Fig. 126, *m*; and compare the Zuñi conception of dragon-flies as having been created from corn-stalks). A pink cross is seen above the deer, and to the left of it is an irregular figure, also in pink.

Along the edge of the front-shield is a border consisting of two narrow red bands separated by a yellow band. To the black ring small wads of cotton-wool

are fastened at short distances apart by means of beeswax, and at one place are a red and a white glass bead. These do not appear in the illustration.

The Sun is here asked to bring rain, which is symbolized by cotton-wool and the 'insects,' so that the Huichols may have plenty of corn to eat, and catch deer enough to give the feast of *tamales de maíz crudo*.

9. This specimen (Fig. 126) was obtained from the god-house of Tayau' at the temple of Pochotita, near Santa Catarina. It is attached to a ceremonial arrow at

Fig. 126 ($\frac{6.5}{5.88}$). Front-Shield of Father Sun. (Diam., 37 cm.)

a, The Sun; *b*, *c*, Water-serpents; *d*, A moving serpent; *e*, *f*, Two children; *g*, Mountain-lion; *h*, Tiger; *i*, Wolf; *j*, Tiger; *k*, Shaman's plumes; *l*, Butterflies; *m*, Insects.

its shoulder. I found it hanging under the roof of the small god-house by a loop of ixtle twine, which is still to be seen near the edge. One of the Indians procured for me an arrow of the Sun, and of his own accord stuck it through the yellow crewel at the centre of the shield, which was damaged or broken.

This is the best specimen of front-shield that I secured. The central part (*a*), which measures 10.5 cm. in diameter, consists of a yellow centre surrounded by a white section, after which follows a broad black section containing ten white figures representing the shaman's plumes. This section is bordered with red; and the whole central part represents, as usual, the Sun specially, accentuating in this case his shamanistic powers. Outside of the central part is an elaborate system of variously colored figures on a white background, as follows:—(*b*) A water-serpent called Täte' Yulá'ma, a Mother of water in the

north, that appears in the beginning of the wet season. The real serpent is green in color, but is here represented with black body, and yellow mouth, eye, and belly. Its numerous legs, mostly with joints, are in black, red, and yellow. (*c*) Another water-serpent representing Tāte' Rapawiye'ma, Mother of water in the south. It is also green, and appears in the wet season. Its body is colored black, and the mouth and eye red. The legs are similar to those of *b*, although the arrangement of colors varies slightly. (*d*) A moving serpent without legs. It is pictured in black with yellow mouth, and from its neck backward protrude two equidistant horns, — the upper one red, and the lower black. This is the serpent Mother, Kyewimo'ka, in reality green; and the horns are plumes, — in this case, to speak with the Indians, "the children of the serpent." (*e, f*) Two human figures holding in each hand a yellow cross. One of them has on a yellow girdle. They represent the two children, called ai'keli, or a'keli (a corruption of the Spanish *angeles*), who play an important part at rain-making feasts. They, together with the shaman, lead the people in the procession which, at intervals during the night, passes around the ox that is to be sacrificed to the Sun. After the shaman come the ai'keli, then one or two violin-players, and then the people, two by two. The two children are in full ceremonial dress, with shaman's plumes tied to their heads by pretty hair-ribbons; and each carries a lighted candle, and a votive bowl containing chocolate and bread. One of them carries on top of the bowl the knife with which the ox is to be killed. One of the children belongs to Father Sun (Tayau'), and the other to Grandfather Fire. Early in the morning, before sunrise, they finally lead the procession to the ox; and the food-sacrifices which they carry, as well as the knife, are first offered to the Sun at the moment when he appears above the horizon, whereupon the ox is killed. The feast continues for two nights more, during which the same children carry chocolate and bread offerings to other gods who must be appeased at night; for instance, to Mother East-Water. These two children are also important figures at the ceremonies attending the arrival of the hi'kuli-seekers at the temple, receiving in a handkerchief those hi'kuli which are to be placed as an offering to Grandfather Fire. (*g*) A mountain-lion in dark blue. (*h*) A tiger, black and partly blue, with a longitudinal white and red stripe on the body. (*i*) A wolf, in black, with tail characteristically hanging down. (*j*) A tiger, the body black and partly blue, with squares of white, yellow, and red, intended for spots. (*k*) A pair of shaman's plumes. Another pair is between *b* and *i*. (*l*) Various colored butterflies, represented by a great number of diamond-shaped figures, most of them in one long row, placed on a line concentric with the circumference of the shield. They belong to Mother West-Water. (*m*) Small 'insects' called Tāte' Ma'toli, or Tāte' Mau'tuli, mentioned on p. 118. The majority of those pictured are colored red, four only being in black. There is also one isolated red one between *g* and *h*.

The Sun, which as usual is specially designed in the central part, is here again implored for rain. The different animals belonging to him are asked to

help make the prayer effective. The shamanistic powers of the Sun, symbolized by the two pairs of plumes, will help to bring about the desired result. The sacrifice of an ox, symbolized by the two assisting children, is brought forward as an inducement to grant the favor of rain, which is pictured as coming from north, south, and west. With the wet season is associated the appearance of butterflies and red and black insects.

The arrow to which the shield is attached has a rearshaft a little thicker than that of the bow-arrow, and is wound with sinew at the shoulder. It measures in its entire length 62 cm., the rearshaft being 34.8 cm. long, and the foreshaft 27.2 cm.

10. This shield (Fig. 127) is of somewhat irregular form, and slightly umbrella-shaped, because no bamboo cross is interwoven to keep it flat. Groups of splints have been interwoven at several places, and there are a number of open radial spaces of irregular lengths. Some of them extend from near the centre to the narrow border that forms the edge, and others are farther from the centre. The whole shield may thus be said to be divided into various irregular sections.

In the two larger ones, which are opposite each other, are two figures in red on a white ground. One represents a puma, and the other a spread eagle with head in profile. In front of the puma, but separated from it, except at two places, by a narrow unwoven space, is a radial section of blue. Next to this, but separated by a triangular unwoven space which extends from near the centre to the narrow border, is a white radial section with red transversal designs on its lateral borders. On the side diametrically opposite this last section, at the back of the figure of the puma, are seen four separated radial sections of about equal size; the sections, however, increasing a little in length towards the left. The first is red, the second blue, the third red, and the fourth white. The centre of the shield is red, after which come concentric bands of black, white, dark blue, red, and yellow. The shield is bordered by a red and a white band, both very narrow.

Very probably this shield has reference to a bird in its shape. In the

Fig. 127 ($\frac{55}{4}$). Front-Shield of Father Sun. (Diam., 29 cm.)

picture the bird is seen from above, the puma being on the right, and the eagle on the left. One wing was made larger than the other for convenience. The four radial sections of different sizes on top are indications of the head with its various colors, and the blue radial section to one side of the tail may be the lower part of the tail. In such a case the maker intended to give the shield the appearance of the eagle that holds the world in her talons,—Young Mother Eagle, who, according to one tradition, is the mother of the Sun. The two animals belong to the Sun, and the prayers indicated are for life.

11. Fig. 128 presents a round front-shield attached to an arrow. It is made, however, in a manner slightly different from that of the specimens

Fig. 128 ($\frac{2}{3}$ of life). Front-Shield of Father Sun.
(Diam., 16 cm.)

hitherto described. A circular space in the centre, about 5 cm. in diameter, is not interwoven, and the inner ends of the splints, as well as the 'cross' of the shield, are visible. Two small hoops of some strong, flexible, light-colored wood, about 4 mm. broad, are put around the outer edge of this space, one on each side of the shield. These hoops are kept in place and bound firmly together by cords at four equidistant points, and give the central part of the shield the appearance of a wheel, the hoops forming the tire. The cords which connect the two hoops pass round the arms of the cross. The colored crewel is arranged in narrow concentric sections, varying somewhat in width, the colors being white, red, yellow, and blue. A hawk-feather is tied to the cross in the middle by means of white cotton twine, the twine being fastened to the quill in the same way as to feathers attached to arrows (p. 88).

The shield is a representation of Father Sun and his colors. At the same time it may be considered *par excellence* a Sun shield, being provided with a hole, through which he looks. The cross in the middle signifies the earth upon which he looks down; and the hawk-feather attached to it has the usual meaning of magic powers. The shield is a prayer for health and life.

The arrow to which it is attached measures in its entire length 54.9 cm., the rearshaft being 38.5 cm. long, and the foreshaft 16.4 cm. There are no feathers on the 'winged' part, and the bands of color on it, though very indistinct, are blue and red.

12. The next shield (Fig. 129), which is octagonal in shape, has one hoop in the middle; but the arms of the cross, which may be recognized, and also the splints, pass through tiny holes in the hoop, leaving a central opening about 7 cm. in diameter. This makes the shield firm.

Inside of the central opening, three and three of the splints on opposite sides are interwoven, on the one side with light yellow crewel, and on the other side with blue thread. Thus this inner circle is divided into four parts,—two covered, and two open. On the central part, traces of blood are seen. There is one section of red next to the hoop. The rest of the shield is white, with one narrow green and yellow section in it.

The section of weaving which surrounds the hoop is woven double, the color on one side being red, and on the other side white. It may thus be considered a double front-shield. It expresses a prayer for health and life.

Fig. 129 ($\frac{65}{432}$). Front-Shield of Father Sun. (19 cm. between opposite corners.)

Fig. 130 ($\frac{65}{432}$). Front-Shield of Father Sun. (Diam., 21 cm.)

13. The specimen seen in Fig. 130 is made from the usual materials, and is in the form of a dodecagon, but is slightly modified by having a disk of pine-bark placed in the middle, into the edge of which the pointed ends of the pieces of split bamboo are stuck. From the centre of the bark to the end of the splints is about 11 cm.

There is one peculiar feature about this shield: three of the splints are interwoven for only about half their length (from the edge inward); for the rest of their length they are put loosely through the crewel, and not stuck into the bark. The meaning of this I do not know.

The colors, which are white, red, yellow, and blue, are arranged in concentric sections, but without any other intention than that of signifying the Sun with his colors. The splints project considerably beyond the edge of the weaving; and these ends are all wound with cotton-wool, symbolic of clouds. In the yellow section the crewel has been joined at ten different places. Whether this has any significance or not, I cannot tell. The probability is that the maker was short of material, because the inner part of this yellow section is made up of a different kind of thread from that used in the outer one. The shield is a prayer for rain.

14. The last of the Sun shields to be mentioned (Fig. 131) has also a solid central part, into which the points of the splints have been firmly placed; but in this case it is oval in shape, and made of wood. The shield is slightly umbrella-shaped, the front being convex.

One peculiarity about this shield is that an open space of about 2 cm. is left all round at about the middle of the splints, thus dividing the surface into two distinct parts,—an outer and an inner. The splints in this open space are

wound with crewel. Only half of the splints extend to the centre, the rest being but half as long as the others. These short pieces are inserted in the outer half of the shield, and alternate with the long ones. Both the short and the long splints protrude from 2 cm. to 3 cm. beyond the edge, where they were covered with white cotton-wool, but most of it has been lost.

The colors include almost all the colors of the rainbow, arranged in concentric sections, red and green being the most prominent. The oval-shaped piece of wood in the centre is decorated on both sides with strings of glass

Fig. 131 ($\frac{66}{431}$). Front-Shield of Father Sun. (Diam., 43 cm.)

beads of various colors stuck on with beeswax. On the outer side is a Latin cross; and on the inner, a figure like a Greek cross, which represents the four quarters of the world. The latter consists of a network of strings of beads, which formerly served as an ear-ornament. A yellow cord is attached for suspending the shield.

This shield was made for me by a Huichol, whom I furnished with the crewel. It is a prayer for rain.

FRONT-SHIELD OF THE CORN MOTHER (TĀTE' OTEGANA'KA NEALI'KA). — In the accompanying illustration (Fig. 132) is represented the only specimen in the collection, of a front-shield belonging to the Corn Mother. It was obtained from her god-house at Tēaka'ta near Santa Catarina, and is umbrella-shaped, although rather irregular in outline. On it are seen the following designs:— (a) A serpent called Hai'kě yoawi'mě, in green (blue). (b) The banks of a pool of water in which the serpent is supposed to be, represented by a double ring,—the inner one red, the outer green. (c) A blue cow (vaca hakwi'aka, *i. e.*,

'cow to make it rain'). (*d*) A yellow cow (rutu'li [flower] uima'li [girl]). (*e*) A red cow (hakwi'aka [to make it rain] rulēmě [red], *i. e.*, 'red cow to make it rain'). (*f*) The fields on which the cows walk, in blue and black. (*g*) The 'eyes' of various gods, represented in various colors, which indicate as many kinds of corn. The white 'eyes' are corn belonging to Mother West-Water; the red 'eyes,' corn belonging to Mother East-Water; and the blue 'eyes,' corn belonging to the Corn Mother. (*h*) Two black serpents called Hai'kě yu'wimě.

This shield is a prayer for rain and corn. From it we may also infer that the Huichols consider cows almost as important sacrifices as deer.

Fig. 132.

Fig. 132 ($1\frac{1}{2} \times 1\frac{1}{2}$). Front-Shield of the Corn Mother. (Longest radius, 14 cm.)

Fig. 133.

Fig. 133 ($1\frac{1}{2} \times 1\frac{1}{2}$). Front-Shield of Mother East-Water. (Diam., 26.5 cm.)

FRONT-SHIELDS OF MOTHER EAST-WATER (TĀTE' NAALIWA'MI NEALI'KA). — I present eight of them. Some were obtained from the western side of the river, the San Andrés side, but the most interesting are from the famous cave of this Mother near Santa Catarina. This place is called Tāte' Naaliwa'mi Šinauli'ta, or Tāte' Naaliwa'mi Ši'liki ('god-house').

1. The first (Fig. 133) was obtained from the above-mentioned cave. The central figure in white represents four clouds that are rising; and the four figures surrounding these, four birds that are soaring above the clouds. The two darker figures represent red birds, called Ista'mě rulēmě; and the other two, blue birds, called Ista'mě yoawi'mě. Both are species of swifts. The cross-shaped figures in the succeeding section represent corn of various colors, — red, yellow, and blue. A representation of Mother East-Water herself is shown by the zigzag band in blue and red. It is a river (ai'ki), Tāte' Naaliwa'mi ai'kiria, or, what is the same thing, a serpent. The nine triangular-shaped figures between the

head and tail of the serpent represent as many hi'kuli in various colors. They are symbolic of corn. The prayer embodied here is for rain and for health.

Fig. 134 ($\frac{66}{1625}$). Front-Shield of Mother East-Water. (Diam., 27 cm.)

2. On another specimen from the same place (Fig. 134) are seen the following designs:—(a) Butterflies. (b) Five humming-birds, three in blue and two in red. (c) A boy. (d) A girl. These are ai'keli of Mother East-Water (see Fig. 126, e, f). When questioning my informant of the meaning of these designs on this occasion, he said that they were tē'wi ('people'),—an interesting word, although not explaining my question. (e) The ox sacrificed. (f) A serpent manifestation of Mother East-Water, called Haira'ku, represented in black. (g) A serpent called Tāte' Īpou, another representation of Mother East-Water, pictured in red with spots. (h)

Another serpent representing the serpent Mother as a river (Tāte' Naaliwa'mi ai'kiria), in red and black. There are, all together, five serpents which are Mother East-Water. (i)

Grains of corn of various colors. This is the interpretation given by my Indian informants (cf. Figs. 125, 126 [m], and others, where similar figures represent certain small insects called ma'toli, or, more correctly, Tāte' [Mother] Ma'toli). From this it is evident that these small red and black insects of the wet season represent corn. Therefore they are here given additional colors. (j) A double drinking-gourd, called topoli'r or kurau'li. It is a natural growth, but resembles two gourds, one above the other, connected by a slender neck. These gourds are esteemed as 'medicine,' and are magic. The hi'kuli-seekers use such on their journey, both to drink from and to carry home the sacred water in.

Fig. 135 ($\frac{1625}{66}$). Front-Shield of Mother East-Water. (Diam., 32.5 cm.)

The shield expresses a prayer for rain, referring to the sacrifice of an ox at the feast. The result would be rain, symbolized by the various water-serpents, which are all different impersonations of Mother East-Water. The shield is also a prayer for luck in raising gourds and corn.

3. A third front-shield, from the same cave, is seen in Fig. 135. It had been deposited by hi'kuli-seekers when leaving a sacrifice of the plants there. On it are seen:—(a) Various hi'kuli, some black, some red. (b) Seven humming-birds, two in yellow, the rest black. (c) Four men (hi'kuli-seekers), one at each of the four quarters of the world, arranged in opposite pairs, one pair being red, and one pair black. One of the men is almost completely hidden by a paper flower. (d) Three double drinking-gourds, — one red, one dark blue, and one yellow. (e) Three cross-like figures — one red, one yellow, one black — symbolic of corn. (f) The original cereal of the Huichols and of the gods (wa've), represented by two adjoining streaks, one red and one yellow. (g) The 'insect' called Täte' Ma'toli (p. 118). (h) A kind of swift, Ista'mě, half black and half yellow. A paper flower from the Mexican stores is attached to the front part of the shield, near the edge.

The prayer here expressed is that the hi'kuli-seeker may be free from sickness. The hi'kuli, which is represented in the middle of the shield, is also corn.

4. The round specimen pictured in Fig. 136, which is from San Andrés, is somewhat similar to that shown in Fig. 128, in that its central part is made in exactly the same way; but the space enclosed by the hoop is in this case smaller, 2.5 cm. in diameter. This central part signifies the world. The rest of the shield differs materially in design. Immediately surrounding the central 'wheel' is a well-woven section extending to the ends of the splints. Next to the hoop is a narrow red ring, then a similar yellow one, then a dark blue one. From this blue ring radiate, on diametrically opposite sides, four sections, two opposite ones being blue, and the other pair red, forming thus a kind of cross. The four sections between the arms of the cross are colored, two yellow and two white, in opposite pairs. This whole section outside of the hoop and adjoining rings may be looked upon as representing eight rays of various colors, being emblematic of the colors of the rainbow which this goddess, who is one of the principal Mothers of rain, sends during the wet season. It is surrounded by a narrow white ring, followed by a broader one consisting of alternate blue and red radial sections, symbolizing rain. The companion of the rainbow is thus seen in the symbol of rain surrounding it. Finally comes a narrow white band, followed by a yellow one on the edge. The shield is a prayer for rain.

Fig. 136 ($\frac{1}{16}$). Front-Shield of Mother East-Water. (Diam., 10.5 cm.)

It is attached to the middle of the rearshaft of a ceremonial arrow, being bound to the upper black band with a white cotton cord. The arrow measures in its entire length 53 cm., the rearshaft being 31 cm. long, and the foreshaft 22 cm. Its rearshaft is somewhat thinner than that of the bow-arrow, and is wound with sinew at the shoulder.

In the next four figures (Figs. 137-140) are shown front-shields information about which is lacking both in regard to their significance and the object of their prayers.

Fig. 137 ($\frac{6\frac{1}{2}}{4\frac{1}{2}}$). Front-Shield of Mother East-Water. (Diam., 17.5 cm.)

Fig. 138 ($\frac{6\frac{1}{2}}{8\frac{1}{2}}$). Front-Shield of Mother East-Water. (Diam., 16 cm.)

5. Fig. 137, procured from one of the god-houses of the temple in Bastita (the northern temple), is made from pieces of coarse straw interwoven with white and black wool. Going from the outer edge towards the centre, the weaving covers about one-third the length of the straws. There is first a broad white, and then a narrow black ring, followed by a narrow white one. After this, two and two (in two cases three and three) of the straws are interwoven in ten radial sections with open spaces between. Two of these sections are twice as broad as the others, but probably for no other reason than a lack of calculation on the part of the maker. The color of the sections is alternately white and black, — five black and five white. This is of significance, since, as will be remembered, five is the mystical number of the Huichols. In one section blue has been used instead of black. After these radial sections, the rest of the straws are entirely interwoven to the centre, — about a third of their length. The central part shows first a narrow white and then a narrow black band, followed by a large white centre. Traces of blood may be seen on the shield. It was evidently once attached to an arrow.

6. Fig. 138 shows an octagonal front-shield from San Andrés. It is woven in concentric sections. The centre is blue, surrounded by sections of white,

yellow, and blue, which are once repeated, finishing off with a white section. The front is smeared with a little blood.

The shield is attached by a cotton cord to the rearshaft of a ceremonial arrow, which measures in its entire length 50 cm., the rearshaft being 27.2 cm. long, and the foreshaft 22.8 cm. Unlike the majority of ceremonial arrows, its upper end is not nocked, but cut off even. There are no feathers on its 'winged' part.

7. The next specimen (Fig. 139), also from San Andrés, consists of ten pieces of split bamboo placed together like the spokes of a wheel, and interwoven in the usual way, but so as to form a decagon. The inner ends are pointed, and have been stuck round and into the edge of a disk made of a kind of cork cut from a parasitic growth on a tree. This makes the shield firm. The cork is surrounded by sections of different colored crewel, the most prominent colors being red and blue (green being the same as blue to the Indian). Only half of the length of the 'spokes' has been interwoven in this way, leaving the splints to protrude about 2 cm. beyond the weaving.

Fig. 139 ($\frac{6}{5}$). Front-Shield of Mother East-Water. (Diam., 13.5 cm.)

It is attached to the broad black band on the middle of the rearshaft of a ceremonial arrow by a cotton cord. The arrow measures in its entire length 47.8 cm., the rearshaft being 29.2 cm. long, and the foreshaft 18.6 cm. There are no feathers on the 'winged' part. This arrow, however, differs from all the other ceremonial arrows in the following respect:

it has tied to the broad black band in the centre of its rearshaft, with red yarn, crosswise, a hollow piece of reed about 8 cm. long, nocked at both ends, but not plugged. One side of this piece is painted red with zigzag markings, and the other one blue with similar markings. It is an additional 'winged' part (*cf.* Fig. 150).

8. The last front-shield of Mother East-Water to be noted (Fig. 140) is in the form of a hexagon, and was obtained from the same place as the two

Fig. 140 ($\frac{6}{5}$). Front-Shield of Mother East-Water. (Diam., 17 cm.)

preceding specimens. The central part is white; then follow sections of red, brown, white, and red.

FRONT-SHIELDS OF MOTHER WEST-WATER (TĀTE' KYEWIMO'KA NEALI'KA). — The two front-shields of Mother West-Water shown here were taken from the famous cave of this Mother, near the Cora pueblo of San Francisco, in the territory of Tepic.

1. The first specimen (Fig. 141) is much more artistically executed than the second. It is made, as usual, of split bamboo and different colored crewels.

In the centre is a white section of an irregular square shape, surrounded by a narrow black section, which again is followed by a narrow white one. Round

Fig. 141 ($\frac{65}{417}$). Front-Shield of Mother West-Water. (Diam., 34 cm.)

Fig. 142 ($\frac{55}{525}$). Front-Shield of Mother West-Water. (Diam., 11 cm.)

this central part, and emanating from it, are seen on a white background numerous wavy lines in black, brown, blue, red, and yellow, representing the various colors of the serpents, which to the Indians are showers, in this case coming from the west. Towards the edge is seen a figure a little different from the rest, representing what seems most like the head of a serpent, — Mother West-Water herself. Conspicuous among the wavy figures are three red and three yellow serpentine lines following each other in alternate sections of yellow and red, and occupying a little more than a half-segment of the disk. There is a narrow border of alternate black and white short radial stripes on the edge of the shield, symbolic of rain, and the splints project about 2 cm. all round beyond the weaving. Traces of blood may be seen on the front or smooth side of the shield. The object of its prayers is plainly indicated as rain.

2. The second specimen (Fig. 142) also has a white centre, surrounded by a ring of blue. The rest of the shield consists of stripes of red, white, dark blue, yellow, and black, all making a kind of complex spiral suggestive of a rotary motion. As it was found in the cave specially dedicated to this Mother, there seems to be no doubt that it belongs to her, and the shield would then signify the movement of water in a whirlpool. One Indian, however, expressed to me the opinion that it belonged to the Sun.

It is attached to a ceremonial arrow by a piece of blue yarn. The arrow, which is broken in two, measures in its entire length 54 cm., the rearshaft being 30.6 cm. long, and the foreshaft 23.4 cm. There are no feathers on the 'winged' part.

SPECIAL FRONT-SHIELDS.

The front-shields hitherto treated are round, at least in their general characteristics, and they are all made from the same material, — bamboo and cotton cord or yarn; but I shall now present a number of these symbolic objects, some of which are of peculiar shape, and all of them of a material different from that hitherto shown. Some are made of solidified volcanic ash or wood, and the rest present more abnormal features in regard to both shape and purpose.

First of all is to be mentioned a peculiar ceremonial arrangement which I met with in the temple of Santa Catarina, and which represents the waxing and the waning moon. Underneath the smoky roof of the temple, in the dim light which pervades the place, I one day discovered a curious symbolic object which the Indians said represented *Mê'tsa*, the moon. It was called *Mê'tsa neali'ka*, and was a representation of the waxing moon. Through their assistance I also found out that there was a corresponding object on the other side of the roof, representing the waning moon. After considering the matter a few days, the Indians consented to sell me these objects, which appeared to me especially interesting, representing as they do two phases of the moon. They were made by order of the singing shaman seven years ago, when the new temple was being erected, as a means for causing rain, the Indians having been in sore straits for rain that year. The result was, according to the Indians, that considerable rain fell, the moon being supposed to have much influence in bringing it. The objects are very sooty, but their details may still very easily be made out.

REPRESENTATION OF THE WAXING MOON (*MÊ'TSA NEALI'KA*), Fig. 143. — This was hanging on the eastern side of the temple, over the entrance, underneath the roof, at about 3 metres from the ground. It is not quite circular in shape, although no doubt meant to be. It consists of a bamboo hoop 1.5 cm. in width, to the inside of which a crescent cut from a piece of walnut-wood, 1.5 cm. thick, is glued. The space between the crescent and the rest of the hoop is covered with a network of cotton thread. The name of the whole net is *wi'ta* ('cotton thread'). Wads of cotton-wool are fastened all round the edge of

the hoop, at short distances apart, by means of beeswax. To the middle of the netting is fastened a piece of wax, suggesting that a wad of cotton-wool was once attached there. A loop of red bark-fibre is fastened to the middle of the netting on one side, passing through the middle meshes. By this the object was hung to the roof. On the front side of the wood is an irregular oval figure made of coils of strings of red and light-colored beads. It is a special *neali'ka*. The whole object is made from a continuous cord, and resembles a fishing-net; but, as in the netted shield, the threads are twisted instead of knotted. It was evidently begun at the circumference, and worked spirally towards the centre, resembling in this respect, according to Cushing, the webs of the Zuñi water-shields, like those which the spider can spin and unravel at will. My Indian informants said, however, that this net represented a fishing-net for catching the fish *mū'ri* (Spanish, *bagre*, see Fig. 40, *a*).

The whole *neali'ka* represents the new moon, and expresses a prayer that it may bring the water symbolized by the fishing-net; the fish symbolizing also, as seen before, ears of corn. As the fish is caught in the net, so the corn is secured by rain.

Fig. 143.

Fig. 143 ($\frac{66}{1258}$). Representation of the Waxing Moon. (Diam., about 24 cm.)

Fig. 144.

Fig. 144 ($\frac{65}{1249}$). Representation of the Waning Moon. (Height, 27 cm.)

REPRESENTATION OF THE WANING MOON (*MÊTSE'LI TARU'RIMA*, 'COMING TO AN END'), Fig. 144. — This is attached to a ceremonial arrow (*Mê'tsa ūlu'ya*), which was stuck into the roof on the western side of the temple, above the niche of Grandfather Fire, at the same distance from the ground as the preceding specimen. It consists of a bamboo bow, the ends of which are connected by a cotton twine about 35 cm. long. A second piece of cotton twine connects the middle of this twine to the middle of the bow. The ends of the bow are incised

on both sides, as on a real bow, for convenience in attaching the twine. The bow is slightly damaged and broken. Cotton-wool was tied by pieces of string to seven points, six of which remain. A few black glass beads have also been fastened to the inside of the bow, at the place where the string attaching the wad passes over it. The 'winged' part of the arrow is of parrot-feathers, and the plume attached to it is from the red-tailed hawk.

FRONT-SHIELD OF FATHER SUN (TAYAU' NEALI'KA), Fig. 145. — This was taken from the god-house of Father Sun at Têaka'ta. It is a disk of solidified volcanic ash, with symbolic figures cut into it. Both sides present the same carvings, which consist of a circular figure in the centre, from which emanate five lines which extend to the edge, dividing the surface into five sections; in each of these a deer is carved. The deer have the following names: 1. O'to Ta'wi, 2. Sesota'li, 3. Sipora'wi, 4. Wawatsa'li, 5. Kauyuma'li. The carvings are not particularly well executed, and it is hardly possible to discern any difference in the appearance of these deer, or in the two sides of the front-shield.

The central circle is the front-shield of the Sun, from which his rays emanate. The prayer expressed is that the Sun may favor the supplicant by letting him kill many deer.

Fig. 145 ($\frac{11}{16}$). Front-Shield of Father Sun. (Diam., 8 cm.; thickness, 1 cm.)

Fig. 146 ($\frac{11}{16}$). Front-Shield of Mother West-Water. (Diam., 7 cm.; thickness at central part, 1.5 cm.)

FRONT-SHIELD OF MOTHER WEST-WATER (TĀTE' KYEWIMO'KA NEALI'KA), Fig. 146. — This is of the same material as the one just described. There is a small hollow in the centre of the upper side, and a carved zigzag line near the edge. Traces of wax remain on this surface, and variously colored beads are fastened with it. The other surface has not been carved, but both surfaces are slightly convex.

FRONT-SHIELD OF MOTHER WEST-WATER (TĀTE' KYEWIMO'KA NEALI'KA), Fig. 147. — This was taken from the god-house of Mother West-Water in Santa Catarina, near the temple, where it was found lying on the altar. It consists of

a circular piece of walnut-wood to which strings of beads and variously colored crewel are attached in coils by means of beeswax. The central part, which is formed wholly of glass beads, is divided into two sections, — one blue, signifying the sky; and the other white, representing clouds. The whole section is surrounded by two rings as well as by two adjoining zigzag bands, all made from worsted fastened on with beeswax. The colors are red and yellow. These rings and zigzags represent clouds at sunset. The coils of worsted, black, yellow, and red, represent grains of corn. To this central part, right on the middle between the white and blue sections, is attached a large paper flower. The front-shield is a prayer for rain.

Fig. 147.

Fig. 148.

Fig. 149.

Fig. 147 ($1\frac{5}{16}$). Front-Shield of Mother West-Water. (Diam., 20 cm.)

Fig. 148 ($1\frac{5}{16}$). Front-Shield of Father Sun. (Length, 11 cm.; width, 6 cm.)

Fig. 149 ($1\frac{5}{16}$). 'Face' of Grandmother Growth. (Length, 13.5 cm.)

FRONT-SHIELD OF FATHER SUN (TAYAU' NEALI'KA), Fig. 148. — This was lying on the ground in his god-house at Têaka'ta. It consists of a small oblong piece of Brazil-wood, flat on the back, but convex on the front between the two long sides, its thickness being in the middle about 6 mm., and on the sides 3 mm. The front side is covered with decorations of variously colored glass beads, put on in strings with wax. The colors are red, white, and blue, and the front-shield is a prayer for all colors of corn. There can be no doubt that the shape of this front-shield, which is the only one of its kind that I have seen, is an actual reproduction of another form of the ancient shield or buckler than the round one. The projection on either side is due to the application of the wax.

'FACE' OF GRANDMOTHER GROWTH (NĀKAWĒ' NEALI'KA), Fig. 149. — This was taken from her large cave in the neighborhood of Santa Catarina. It is an oval mask made from the bark of a certain tree. Long narrow eyes and a mouth

with teeth have been cut out. Five teeth are represented in the upper jaw, and two in the lower. A hole is pierced on each side and on the top of the mask, towards the edge. The teeth, the corners of the mouth, and the eyelids, are painted red. Outside of the red, the eyes and the mouth are painted blue; and red and blue spots are seen all over the face, symbolic of grains of corn in its various colors. Seven bits of cotton-wool are fastened to different parts of the face, emblematic of rain. The prayer expressed is thus for rain, and indirectly for corn.

'FACE' OF ELDER BROTHER (TAMA'TS PA'LIKĚ TAMOYE'KĚ NEALI'KA), Fig. 150. — This was obtained from the god-house of Elder Brother, near the temple of Guayavas, near the pueblo of San Andrés. It consists of three pieces of bamboo reeds, knocked at each end, one a little longer than the other two, strung on a cotton twine the ends of which are tied together so that the three reeds form a

Fig. 150 ($4\frac{5}{8}$). 'Face' of Elder Brother. (Length of the longest reed, about 10 cm.)

triangle. The pieces are not of the same thickness, showing that no importance is placed on the size of the reed. The longest is painted brown (red); the other two are painted, one half of the length brown (red), and the other half green (blue); and all have, besides, longitudinal zigzag markings and lines. In one case the brown (red) part comes next to the longest side, and in the other case the green (blue) part. The specimen represents the outlines of a deer's face (or head) seen from the front. It was deposited by a hunter to secure good luck. The three parts which constitute the ceremonial object are each the 'winged' part of an ordinary arrow, representing thus three arrows. The colors are those of fire and of smoke. (Cf. Figs. 96 and 109.)

'FACE' OF A DEER (TAMA'TS PA'LIKĚ TAMOYE'KĚ NEALI'KA OR MA'RA NEALI'KA). — It has previously been explained that the netted shield is the 'face' of a deer. Specimens are shown in Figs. 94 and 95, attached to arrows (see also Fig. 109, *d, f*).

Fig. 151 ($4\frac{3}{8}$). 'Face' of Elder Brother. (Length, 16 cm.)

'FACE' OF ELDER BROTHER (TAMA'TS PA'LIKĚ TAMOYE'KĚ NEALI'KA OR MA'RA NEALI'KA), Fig. 151. — We have also seen that the ordinary snare for catching deer, which, in diminutive representation, is hung on an arrow, is a 'face' or appearance of a deer (p. 95). One of such diminutive snares is here shown. They are always attached to arrows, more generally to those of Elder Brother, but I have found them on those of Grandfather Fire and Mother West-Water.

Fig. 152 ($\frac{1}{16} \frac{11}{32}$). 'Face' of Mother West-Water. (Diam., 4.5 cm.)

'FACE' OF MOTHER WEST-WATER (TĀTE' KYEWI-MO'KA NEALI'KA), Fig. 152. — This is a small circular piece of glass, around the edge of which is a sort of frame of beeswax. On the wax on the front side are numerous red glass beads, while the reverse side was stuck to a rock in the cave of Mother West-Water, near Santa Catarina, where the object was probably put as a prayer for health, imploring the Mother to keep her eye on the supplicant, and watch over him.

'APPEARANCE' OF ELDER BROTHER (TAMA'TS PA'LIKĒ TAMOVE'KĒ NEALI'KA), Fig. 153. — This is a zigzag made of a string of red glass beads fastened by small daubs of beeswax to the central part of the back side of a bow. The bow is from the god-house of Elder Brother in Tēaka'ta, where it was lying among other ceremonial objects on the altar. It is made of Brazil-wood, and furnished with a cotton string, which has been broken, and mended with hair from a horse's tail. The object was deposited by a man who wanted to make a bow, and is a prayer to the god for luck in making it, his prayer being emphasized by the serpent neali'ka, which expresses a wish that it may be strong. The 'picture' is that of a rattlesnake, which belongs to Elder Brother. The rattlesnake also belongs to Father Sun, as we have seen, and its rattles are sometimes attached to ceremonial objects of both these gods. The serpent represents strength, and the serpent 'picture' accordingly symbolizes strength.

Fig. 153.

Fig. 153 ($\frac{1}{16} \frac{11}{32}$). 'Appearance' of Elder Brother. (Length, 27 cm.)

Fig. 154.

Fig. 154 ($\frac{1}{16} \frac{11}{32}$). 'Appearance' of Grandfather Fire. (Diam., 4 cm.)

'APPEARANCE' OF GRANDFATHER FIRE (TATE'VALI NEALI'KA), Fig. 154. — It was taken from the cave of the god in Tēaka'ta. It consists of a Greek cross of beeswax, to each side of which a coil made from a string of red glass beads is fastened. A somewhat irregular disk, evidently meant to be round, is thus made. It also symbolizes the heart of the god (Tate'vali iya'li), and expresses a prayer that the god may direct his thoughts towards the supplicant, and take care of him. It was attached to an arrow, together with many other objects.

REPRESENTATION OF THE HEART OF GRANDFATHER FIRE (TATE'VALI IYA'LI NEALI'KA), Fig. 155. — A singular symbolic object of this kind is the one here shown, representing, like Fig. 154, the appearance and the heart of Grandfather Fire. A specimen similar to this is hanging under the roof of the temple of

Santa Catarina, which is dedicated to this god. It hangs above the entrance, about a metre higher than the *mê'tsa* (moon) described on p. 131. The smoke from the fire of the temple has made it as sooty as the rest of the interior, and its color is almost bluish. Close above it hangs an old rag made of *ixtle* (*ta'ra*), which is the 'bed' of the god. Through the favor of the guardian of the temple I secured an exact copy of this heart. A woman was set to work to make one, and it was finished in the course of a day. *Wa've*, the sacred seed represented in Fig. 135, *f*, was first toasted, then carefully ground on the metate, and finally placed in a jar and boiled. She afterwards kneaded it between her hands until it became plastic and half dry. In a few hours it was hard enough to be carried. The object is chocolate-colored, 7.6 cm. long, and 5 cm. thick at the broadest point. Through the narrow end is strung a cotton thread, by

Fig. 155 ($\frac{1}{2}$ 135). Representation of the Heart of Grandfather Fire. (Height, 8 cm.)

which it hangs. Every five years, when the roof and the symbolic paraphernalia of the temple are renewed, a new 'heart' is substituted for the old one. Being considered as an 'appearance' of the god, this symbolic object is intended to express not only adoration for the god, but also a constant prayer that he may be present with the people.

Fig. 156 ($\frac{1}{2}$ 136). 'Appearance' of Father Sun. (Height, 11 cm.)

'APPEARANCE' OR PICTURE OF FATHER SUN (*TAYAU' NEALI'KA*), Fig. 156. — This striking illustration of the Sun is embroidered on cotton-cloth. It forms the main and central decoration on one side of a pouch, which is richly adorned on both sides with embroidery of various patterns. The color is red on a white background; and the central figure, which represents an 'eye' (*si'kuli*), is surrounded by a zigzag line in green. The rays of the Sun are his facial painting.

V. — BACK-SHIELDS (NA'MA).

The second shield of the Huichol warrior, which he wore to protect his back, is to-day as important a ceremonial object as the front-shield. In the early times of the world, when the Sun was made, the Mothers covered themselves with back-shields against the heat of the Sun; at the same time the Fathers covered themselves with arrows. According to the myth, when the shamans were about to create the Sun, as described on p. 11, "they painted the face of the boy who was to be the Sun exactly as the hi'kuli-seekers paint themselves to-day, and they gave him his shield of stone (na'ma)."

The main idea underlying the use of the ceremonial back-shield is that it protects against the heat of the sun; and the prayers expressed by it are largely for health, but also for protection against evil, sickness, accident, etc. Back-shields represent prayers of all kinds, such as prayers for rain, good crops, and even that the supplicant may have children. It will be remembered (p. 108) that the same mat served the warrior as back-shield (na'ma) and bed (ita'li).

A Cora shaman once told me that the Coras were considerably annoyed by certain precautions which the Huichols took to prevent the rain from departing from their country into that of the Coras. To this end the Huichols placed small rectangular mats, with fierce animals represented on them, in the middle of the roads, to keep the rain back, which would not dare to pass these. Whenever the Coras found such objects, they used to destroy them.

Back-shields may be divided into two classes, — stiff mats and soft mats. Either kind may be attached to an arrow, or hung under the roof of a god-house or laid on its altar.

THE STIFF MATS are of two kinds:—

1. *Square or rectangular mats*, solidly made of splints of bamboo tied with twine of a bark-fibre called kau'nali, or sometimes with worsted (Figs. 157-160). These are also called hawimita'li ('bed [ita'li] of moisture [hawi'mě]'); and, as the name indicates, they are prayers for rain.

Figs. 157, 158, show the upper and under sides of a 'bed' from the temple of Grandfather Fire at Têaka'ta. It is made of strong splints of split bamboo, firmly interwoven with a double twine of bark-fibre. The splints are put close together in two layers, — one layer running crosswise, and the other lengthwise. As is always the case in these mats, the twine is put round the intersections of the splints in such a way as to form a different pattern on each side of the mat. The upper side of the mat is distinguished by the outer surfaces of the splints, which are uniformly convex. An end of the twine is left free, forming a long loop, by which the mat is hung under the roof of the god-house. 'Beds' of this kind belonging to Grandfather Fire are always tied with bark-fibre.

The mat seen in Fig. 159 is from the cave of Mother East-Water, near Santa Catarina. It is made in exactly the same way as the 'bed' of Grandfather

Fire just described, only the materials used to bind the splints together are black, red, and blue yarn, and white cotton cord, so arranged as to form four bands on one side of the 'bed,' — one of each color.

Fig. 157.

Fig. 158.

Figs. 157, 158 ($\frac{6.5}{8.99}$). 'Bed' of Grandfather Fire, Upper and Under Sides. (Length of side, 18 cm.)

Fig. 159.

Fig. 160.

Fig. 159 ($\frac{8.5}{10.31}$). 'Bed' of Mother East-Water. (Longest side, 14 cm.)

Fig. 160 ($\frac{4.5}{11}$). 'Bed' of Mother East-Water. (Length of side, 12.5 cm.)

The 'bed' shown in Fig. 160 was obtained from the god-house of Mother East-Water in the pueblo of San Andrés. The materials used for tying the splints are cotton cord and a three-ply or four-ply crewel, each strand of the crewel being of a different color. On one half of the mat the predominant colors are

blue and white; on the other half, yellow, green, red, and white. These different colors have reference to the various hues of flowers, which are the creation of this Mother as the result of rain in the spring.

2. *Rectangular mats*, made by interweaving pieces of split bamboo or straw with cotton cord and variously colored crewels, symbolic designs being represented in the weaving. These are the most common kind of stiff mats, and may be considered typical back-shields.

Fig. 161 (1883). Back-Shield of Grandfather Fire. (10.5 cm. $\times$ 6 cm.)

Fig. 161 shows one from the little temple of Grandfather Fire in Têaka'ta. The materials used are coarse grass, white cotton cord, and dark-blue yarn. The blue figures on a white background represent hi'kuli. The shield was deposited by a hi'kuli-seeker before going on the journey to procure the plant, that he might have success in his undertaking. There is one of Great-grandfather Deer-Tail almost identical with this, only the figures of hi'kuli are more numerous and a little smaller;

and it was deposited for the same purpose.

The specimen seen in Fig. 162 was secured at the same place as the preceding specimen, and is attached to an arrow by a cord from one corner, the cord running over the lowest black stripe on the rearshaft of the arrow. The materials employed are splints of split bamboo and different-colored crewels. The figure in the centre represents a tiger (black, with yellow and white spots) holding in one claw a baton (also black). This shield, which has been smeared with blood, is suspended with the tiger's head down. Below the tiger, in the central part, are six parallel longitudinal stripes, alternately blue and yellow, signifying rain. On each side of these stripes are two terrace-shaped figures; in either case only one is wholly visible, as it hides half of the one behind it. On one side it is red, half hiding a yellow one; on the other side blue, also half hiding a yellow one. They represent hi'kuli. Below these are eight red figures shaped somewhat like a Greek cross, symbolizing corn, the two towards the sides being only half finished. On both long sides of the back-shield are irregular-shaped figures in black, the black color also extending along the edge of one of the short sides. These represent the earth, with its hills and valleys. Above the tail of the tiger is an irregular-shaped yellow figure, bordered on the upper edge by transverse red stripes, representing variously colored clouds.

Grandfather Fire is here implored — through both the magic of hi'kuli and his principal animal, the tiger, whose power is symbolized by the baton — to send rain. The result will be grains of corn of the color of the god of fire.

The arrow to which this shield is attached measures in its entire length 58.7 cm., the rearshaft being 28 cm. long, and the foreshaft 30.7 cm. The rearshaft is much thicker than that of the bow-arrow, and a sinew is bound firmly round it at the shoulder. The color-bands are black and red, and the feathers on the 'winged' part those of the macaw.

The designs shown in the next back-shield (Fig. 163), which is one of Father Sun, are the following: On a white background is woven in red crewel an eagle with spread wings. It is Young Mother Eagle, the mother of the Sun, who holds the world in her talons. The head, the legs, and the tail are represented in side view. The bird is thus shown flying, and seen from one side. A square spot on each wing, the navel, the eyes, and the mouth, are in yellow. Above the eagle, on a stripe of red, are seven diamond-shaped white figures, representing 'eyes.' Five of them are perfect, the other two at the edges being half finished on account of lack of space. Along both

Fig. 162 ($\frac{35}{50}$). Back-Shield of Grandfather Fire. (Length of long side, 17.5 cm.)

Fig. 163 ($\frac{45}{51}$). Back-Shield of Father Sun. (28.5 cm. $\times$ 16 cm.)

edges of the longer sides are seen a series of terraces in red, as well as some in yellow. These represent the earth with its hills, over which the eagle flies. Below the tail of the eagle is a figure in red with two longitudinally placed yellowish stripes. It represents the double water-gourd (topoli'r). At one corner is a cord which serves to suspend the object, and in such a way that the eagle hangs head down. The shield expresses a prayer for life.

Fig. 164 shows a back-shield from the god-house of Father Sun, near San Andrés. It is attached by a cord (made of colored crewels twisted together) from one of its corners to a ceremonial arrow. The colors of the cord are the same as those on the mat; namely, white, blue, red, and yellow.

The materials used are splints of split bamboo, white cotton cord, and colored crewel. On a white background is represented a badly executed figure of the mountain-lion or puma. Its color is blue (except part of the hind-quarters and the tail, which are black); but there are two fields of yellow about it, — one between the hind-legs, extending also a little in front of them; the other between the fore-legs and the head. On each long side is a border consisting of a series of red triangular figures representing *hi'kuli*. The colors of those on one side (above the lion) are red and blue; and of those on the other side, red and yellow. Across the lower short side is a border of alternately red and black figures in the shape of half of a Greek cross, representing the black and red 'insects' mentioned before (pp. 118, 120, 126); and the opposite edge is covered with irregular, variously colored stripes that include all the colors (except black) used on the rest of the shield. These represent clouds of different hues.

Fig. 164 ($\frac{66}{120}$). Back-Shield of Father Sun. (19 cm. $\times$ 10.5 cm.)

Across the lower short side is a border of alternately red and black figures in the shape of half of a Greek cross, representing the black and red 'insects' mentioned before (pp. 118, 120, 126); and the opposite edge is covered with irregular, variously colored stripes that include all the colors (except black) used on the rest of the shield. These represent clouds of different hues.

This back-shield, on which is placed a picture (*neali'ka*) of one of the animals of the Sun, expresses a prayer for rain through this animal, as well as through the magic power of *hi'kuli*. The black and red 'insects' have their usual symbolic significance, — an abundance of rain (p. 118).

The arrow to which the shield is attached measures in its entire length 46.2 cm., the rear-shaft being 25.6 cm. long, and the foreshaft 20.6 cm. There are no feathers on the 'winged' part.

Fig. 165 ($\frac{66}{120}$). Back-Shield of the Setting Sun. (Length of longest side, 10.5 cm.)

The next back-shield (Fig. 165) is one of *Sa-kaimo'ka*, the Setting Sun. It was taken from the spring of this god (*kutsa'la*) at *Tëaka'ta*. It is not quite regularly made, and is attached to an arrow. The curved line represents a serpent; the other figures, which are red, flowers. It had been deposited at the spring by people who took water from it, praying that they might not get sick.

A remarkable stiff back-shield combining both forms is shown in Fig. 166. I came across it accidentally in one of the god-houses of the temple of Santa

Catarina,—that of Father Sun (Tayau'). It had in some unaccountable way escaped the destruction to which all ceremonial objects are liable. The material is worn away in a few places, but not enough to seriously damage the shield. Unlike other back-shields which I have seen, it is dedicated to three different gods,—Father Sun, Grandfather Fire, and Young Mother Eagle. The materials from which it is made are all indigenous, consisting of pieces of split bamboo, cotton cord (dyed and undyed), and thin strips of a green fibrous material, probably palm-leaf. An additional special shield of the stiff pattern makes up its central portion.

Placing the object on one of its short ends in front of us, we see on its upper part the figure of Young Mother Eagle, partially destroyed. It is shown in profile, with one wing spread, represented by four parallel lines. Part of the head and neck, which are stretched forward, has been worn away. The legs are apart, and the tail appears between them. The color of the bird is light reddish brown, and the material is cotton cord. We notice three irregular designs of a lighter color,—two on the body, and one on the tail. To the one in the middle a short piece of cotton cord is fastened, by which probably a plume was once attached to it.

If we now turn the object upside down, we observe the figure of a turkey, a bird of the Sun, which covers nearly its whole width. It is likewise shown in profile, in the act of flying. The head, body, tail, and wing have a greenish hue. The top of the body, upper and lower edges of the wing, and part of the head, are blue, having been made from cotton cord which had been dyed with native indigo. There are traces of the same kind of blue on the legs, the rest being worn away. On the tail are seen the remnants of yellow cotton cord; and the top of the head as well as the eye is made of red cotton cord. A short piece of cotton cord to which a plume was once attached is tied to that part of the body where the heart would be.

In the central part of the shield an opening 13 cm. by 10.5 cm. was left, which has been covered with a back-shield of about the same size. It is a rectangular solid mat of the kind called *hawimita'li* or 'bed of moisture' (p. 138), and is tied firmly to the main back-shield. The usual material of twine has been partly replaced by the green fibrous material alluded to above. On one side of this central back-shield is woven a bell-shaped figure of white cotton cord, on

Fig. 166. Back-Shield of Father Sun, Grandfather Fire, and Young Mother Eagle. (33 cm. × 21 cm.)

which again is seen a diamond-shaped figure or 'eye' of brown cotton cord. To the centre of this diamond-shaped figure is tied a loop of twine of ixtle. Probably a plume was attached here also. The 'eye' has its usual meaning, and the bell-shaped field on which it stands may be considered as half of another 'eye.' The tail of the eagle may also represent an 'eye.'

From one of the long ends of the central shield extend obliquely towards the legs of the eagle two sections in green. These sections, as well as the adjoining terraces and equidistant lines, represent the world, with its mountains and valleys, which the eagle above holds in its talons. The transverse narrow line of green, which above the eagle runs partly across the shield, denotes the sky.

We have in this back-shield a representation of the Huichol conception of the world, besides an expression of the power of the god of fire. The god of fire, as the supreme deity, rests in the middle of the world. The mountains and valleys are clothed in verdure, because the fire, the greatest of all shamans, is able to procure rain. His shamanistic powers are expressed in the ceremonial 'eye'; and the expression of moisture in his 'bed' is emphasized by the partly green color applied to it, indicative of verdure. Above is the sky, where Young Mother Eagle reigns, and watches over the whole world; and the Sun, as represented by the turkey, gives light and heat to it.

Fig. 167 ($\frac{9}{16}$). Back-Shield of Elder Brother. (10 cm. $\times$ 5.5 cm.)

In the next figure (Fig. 167) is presented one of Elder Brother's back-shields. It was procured from a god-house on the edge of the mesa of San Andrés, and is attached to the colored part of the rearshaft of a ceremonial arrow by a cord fastened to both ends of one of its long sides. The materials employed are straw, cotton cord, and crewel. In the weaving, on a background of white, is a poor representation of a deer in dark blue, the hi'kuli deer, in the shape of which Elder Brother originally appeared in the country of the hi'kuli, when the plant first became known to the Huichols. The tail of the deer, which is turned backward, reaches almost to his shoulder; and the space between it and the body is red, symbolizing his connection with fire, as is the space between the neck and the head on one side and the edge of the shield on the other. Behind and immediately adjoining the tail, is a black-and-red figure representing hi'kuli, the black being nearest the tail. Underneath the deer are some irregular designs in blue. Another design in red and blue is back of the deer. These all represent mountains in the country of the hi'kuli. The square part of the figure underneath the head of the deer signifies the mountain into which

the deer ultimately changed himself, and which may still be seen to-day. The red-and-blue figure behind it may be a symbolical representation of the plant itself growing on a mountain. On the border of the shield, behind the deer, is a narrow stripe of red; and there is another one farther out, which is red and blue.

It is interesting to note how the three phases of the god's appearance in the country of the hi'kuli are shown on this back-shield. The god appeared as a deer, that left hi'kuli in his tracks; he also appeared as a gigantic hi'kuli, which is shown by the hi'kuli connected with him; and finally he became a mountain or altar, which is also expressed on the shield. It expresses a prayer for life and health.

Fig. 168.

Fig. 169.

Fig. 170.

Fig. 171.

Figs. 168 ($1\frac{1}{2} \times \frac{3}{4}$), 169 ($1\frac{1}{2} \times \frac{3}{4}$). Back-Shields of Elder Brother. (Length, 14 cm. and 13.5 cm. respectively.)
 Fig. 170 ($1\frac{1}{2} \times \frac{3}{4}$). Back-Shield of Grandmother Growth. (Length of long side, 15.5 cm.)
 Fig. 171 ($1\frac{1}{2} \times \frac{3}{4}$). Back-Shield of the Corn Mother. (Length of long side, 21 cm.)

The arrow to which it is attached measures in its entire length 51.1 cm., the rearshaft being 25.5 cm. long, and the foreshaft 25.6 cm. There are no feathers on its 'winged' part, and the shoulder is bound round firmly with sinew.

Fig. 168 shows another back-shield of Elder Brother, which is interesting because it has a picture of a hi'kuli represented in an unusual way, namely, by a tree-like figure in white on a red background. It is attached to an arrow at its upper right-hand corner by a free end of the white cord of which it is made.

A third specimen of this god's shields is seen in Fig. 169. It was found in his god-house at Têaka'ta. In the weaving are shown the figure of a deer in red; and underneath, a snare, also in red. It is the expression of a prayer for luck in hunting deer.

The next figure (Fig. 170) shows a back-shield from the cave of Grandmother Growth in Têaka'ta. The irregular figure in red and black represents

a squash-vine, and the object was deposited in order to secure luck in raising squashes. Another back-shield of this goddess is a prayer for children.

The back-shield shown in Fig. 171 was taken from the god-house of the Corn Mother, an impersonation of Grandmother Growth, and is called a 'bed of water-serpents' (hai'ra ku'rě italia'lě). This bed is a picture of nine serpents, and in their midst is the symbol of a grain of corn. Six of the serpents may be readily distinguished. Their heads, which are all rather square-looking, are turned towards one of the short ends of the shield, and their tails towards the opposite end. Four of them are black, and two are blue. The next three are pictured as if lying so that the tail and head meet, forming diamond-shaped figures, one within another, instead of circular coils, as would seem more natural. The outermost is red, the next green, and the innermost yellow. The shield is a prayer for much rain, so that corn will be plentiful.

Fig. 172 ($\frac{15}{1088}$). Back-Shield of Mother East-Water. (15 cm. $\times$ 8 cm.)

Fig. 172 shows a back-shield from the cave of Mother East-Water, near Santa Catarina. On it is represented a mountain-lion in red on a white background, expressing a prayer that the lion may not attack the cattle, but remain quiet.

Another one of the same goddess, and from the same locality, is pictured in Fig. 173. On it the following symbols are figured: (a) A serpent. (b) White

Fig. 173 ($\frac{16}{1084}$). Back-Shield of Mother East-Water. (12.5 cm. $\times$ 6.5 cm.)

Fig. 174 ($\frac{16}{1085}$). Back-Shield of Mother East-Water. (Shortest side, 4.2 cm.)

Fig. 175 ($\frac{16}{1086}$). Back-Shield of Mother East-Water. (16.5 cm. $\times$ 7 cm.)

clouds. (c) A black cloud. (d) Rain (yellow and white vertical stripes). The result of the rain is seen underneath in the vegetation represented (e, f). (e)

Three flowers. (*f*) A squash-vine (a green and red band in the form of an angle). (*g*) The earth with its hills, from which clouds rise to fall down again as rain.

The various colors suggest that the fields are clad in green and flowers, and the earth is also full of moisture. The shield thus expresses a prayer for rain.

In Fig. 174 is seen a third specimen of Mother East-Water's back-shields. It was taken from the same place as the preceding. Many colors have been applied to it. Its meaning is very simple. The triangular-shaped figure at the bottom represents the earth (*kwié'*). Above this a gourd-vine with many-colored leaves is pictured, suggesting that the leaves are turning. Many gourds (*Sp. guaje*) of irregular shapes, but mostly triangular, and also in many colors, are seen above it, supposed to belong to the vine. It is a prayer for luck in sowing gourd-seed.

Fig. 175 represents another back-shield of the same goddess, from her cave near Santa Catarina. The diamond-shaped central part and the corners are white, as is also the transverse line running across the middle. This central diamond-shaped white section is surrounded by a red section, which again is surrounded by a black one. All the white on the shield represents native beer, and the diamond-shaped figure in red and black represents *ma'wali*, *i. e.*, that the beer has been placed in its gourd. It is a prayer for good luck in making beer, and that people may get drunk quickly on the brew.

I shall mention two specimens of back-shields of Mother West-Water. Both were obtained from the cave of the goddess at *Têaka'ta*, near Santa Catarina. In the first (Fig. 176) the six dark-blue figures in the upper part represent *hi'kuli*, the largest of which is standing on an altar (*niwa'tali*) of the same color. The prayer expressed by the shield is that the *hi'kuli* placed on the altar of Mother West-Water may not decay, but dry up well. In the second one, which is not figured, the main color is white, with shading of red and black, and the prayer expressed is that a child may not get sick.

Fig. 176 ($\frac{98}{155}$). Back-Shield of Mother West-Water. (15.5 cm. $\times$ 7.5 cm.)

THE SOFT MATS are (1) plain pieces of loose textile of ixtle, (2) loose textiles of ixtle or cotton into which wads of variously colored wool are woven, (3) scraps of closely woven textiles of wool or cotton.

All these soft mats are made on a special kind of small loom, and some have symbolic designs either painted on the textile or embroidered on it. The symbolic significance of others is expressed by the inwoven wads of yarn.

The most common appearance of the soft mat is simply a loose textile, generally rectangular in shape, and attached to an arrow. There is a god-house

near the temple of Guayavas, dedicated to Mother East-Water, where arrows placed by the hundred contain scarcely anything but such scraps of ixtle, which always express prayers for health. They were deposited there to implore health for children. They may also be found in the god-houses of other deities.

In Fig. 177 may be seen a back-shield of this kind. It was found in the god-house of Ka'tsi at Têaka'ta, and deposited in order that a little child might not get sick.

The second class of soft mats is illustrated by four specimens.

1. Fig. 178 shows one into which three transverse rows of black woollen wads are woven. It is from the god-house of Ka'tsi, and expresses a prayer that many lambs may be born in the herd, and that they may all be black.

Fig. 177 ($1\frac{11}{16}$ 87). Back-Shield of Ka'tsi. (Length of shortest side, 6 cm.)

Fig. 178 ($1\frac{11}{16}$ 88). Back-Shield of Ka'tsi. (25 cm. $\times$ 8 cm.)

Fig. 179 ($1\frac{11}{16}$ 89). 'Flower-Bed' of Ka'tsi. (10 cm. $\times$ 7 cm.)

2. The next specimen (Fig. 179) is called a 'flower-bed' of Ka'tsi (Ka'tsi rutu'li italiai'ya). This textile has some wads of red and blue wool woven into it, which signify flowers (rutu'li). The prayer expressed is that the god may have flowers for his bed, which would not be possible without rain, thus implying a prayer for rain. To the same arrow to which this 'flower-bed' is attached, a 'bed of moisture' (hawimita'li) is fastened, which emphasizes the prayer for rain.

3. A third one is shown in Fig. 180, which is another 'flower-bed,' but one belonging to Mother East-Water (*cf.* the preceding specimen as well as that seen in Fig. 181). It was placed on an altar at a feast for making rain in San

Andrés. It is woven from yarn, wads of black, white, and red wool being at the same time woven in at regular intervals, forming thus a kind of soft rug. The red wads were made from the ravellings of flannel, and are mostly applied to the central part, while the black is used on the sides, each color forming indistinct diamond-shaped figures on a white background. In the middle of the diamond-shaped figures is generally found a wad of black yarn, while in the black figures a similar red wad may be seen.

4. The fourth 'bed' (Fig. 181) is rectangular. It was procured from the cave of Mother West-Water in the neighborhood of the Cora pueblo of San Francisco. It was made at a rain-making feast at San Andrés, and is woven from

yarn in the same way as the preceding specimen, bits or wads of wool being likewise woven in at regular intervals. The colors of the wads are black, white, and yellow. The black and white are the natural colors of the wool, and the yellow is produced by a native dyeing process.

Fig. 180 ($\frac{6\frac{5}{8}}{1\frac{1}{2}}$). 'Flower-Bed' of Mother East-Water. (Length of side, 13 cm.)

Fig. 181 ($\frac{6\frac{5}{8}}{1\frac{1}{2}}$). 'Flower-Bed' of Mother West-Water. (Length, 13.5 cm.)

Finally I give five illustrations of *the third class* of soft mats, — certain votive scraps of wool or cotton.

1. Fig. 182 shows one of wool, on which are represented two children with a flower between them. The designs are all in red with the exception of the stomach of one of the children, which is blue. This indicates that it is female. It was placed in the god-house of Elder Brother at Têaka'ta as a prayer that children might not get sick.

2. The next specimen (Fig. 183) is also of wool, and was found in the same god-house as the one above. On it are embroidered three figures in black. The one with the diamond-shaped figure in the middle is supposed to represent a hen, and the one to the right a cock. Between them is a scorpion, signifying a prayer that the scorpion may not sting them.

3. Another of Elder Brother's back-shields is seen in Fig. 184. This is a firmly woven textile of cotton cord, having on one side a half-finished embroidery of a flower. It is a prayer for luck in embroidery.

4. A fourth 'bed' (Fig. 185) belongs to Mother West-Water. It is a piece of woollen textile with transverse parallel rows of stitches in alternately red and yellow crewel. It was dedicated to the goddess by a person who wanted to make a back-shield.

Fig. 182 ($\frac{6}{47\frac{5}{8}g}$). Back-Shield of Elder Brother. (Length, 15.5 cm.)

Fig. 183 ($\frac{6}{47\frac{5}{8}g}$). Back-Shield of Elder Brother. (Width, 19.5 cm.)

Fig. 184 ($\frac{6}{1\frac{1}{2}g}$). Back-Shield of Elder Brother. (14 cm. $\times$ 6 cm.)

Fig. 185 ($\frac{6}{47\frac{5}{8}g}$). 'Bed' of Mother West-Water. (Length, 8 cm.)

Fig. 186 ($\frac{6}{1\frac{1}{2}g}$). 'Bed' of Kauyuma'li. (9 cm. $\times$ 9 cm.)

5. Fig. 186 shows a 'bed' of Kauyuma'li, taken from his god-house at Têa-ka'ta. This is a square piece of brown woollen textile attached to the top of a stick 31 cm. long. The upper end of the stick is cut off straight, and the other end, which was placed in the ground, is pointed. The name of the stick is

kwitevo', no matter what kind of wood is used in its manufacture. The attached piece of textile, as usual, was made specially for the purpose. At the lower end the threads are braided into a fringe, each strand of which is tied into a knot towards the end. Three rows of diamond-shaped figures are stitched in red thread across the textile. Two such sticks were brought to my notice, and it seems to me that they are related to the za'pa to be described later (*cf.* p. 183), the only difference being that this kwitevo' is much simpler and not decorated. The diamond-shaped figures are Kauyuma'li neali'ka. Kauyuma'li (see pp. 12, 106) is a deer god, and his 'face' is the snare, which these diamond-shaped figures accordingly represent. The whole object is a prayer for luck in killing deer.

Fig. 187 ($\frac{95}{1087}$). 'Bed' of Mother East-Water. (Diam., 29 cm.)

A quite exceptional 'bed,' made of feather-work, is shown in Fig. 187. It is a 'bed' of Mother East-Water (Tâte' Naaliwa'mi ita'li), and consists of a number of feathers (hawk, parrot, and bluejay) placed on the same level around a common centre. The feathers are tied together by a twine of ixtle passed through the quills, and they are further kept in position by being tied with the same kind of twine to a hoop 7.5 cm. in diameter, made of a fine splint of bamboo. The 'bed' is tied to the seat of a chair (Tâte' Naaliwa'mi owé'n) by a twine from the hoop. In the centre of the 'bed' is a wad of cotton-wool, attached with beeswax, surrounded by a string of red beads fastened in the same way. Six wads of cotton-wool are also attached at about equal distances outside of the hoop. The wads of wool express prayers for life; and the whole 'bed,' prayers for rain. The chair, with its curious attachment, was brought to me by the owner from his private god-house, which was dedicated to Mother East-Water. The chair has only one arch, wound round with red twine, and the seat consists of a network of white, black, and red yarn.

It should be noted that the back-shield or 'bed' is sometimes considered as an altar (see Fig. 176). Niwa'tali is the Huichol name for the altar of the god-house, but it is also used in a wider sense in speaking of a mountain on which the goddess rests, for instance, as a fog. Thus it is easily understood that the na'ma, which is back-shield or 'bed,' may also be called 'altar.' In the collection are two such specimens, one of which I here reproduce.

This is a 'flower-bed' of the Corn Mother, Tâte' Otegana'ka rutu'li italiai'ya (Fig. 188), which is also distinctly called 'altar,' the inference being that the flower-fields of the country are just as much beds of the goddesses as the altar on which flowers are placed. Certain diamond-shaped figures,

Fig. 188 ($\frac{55}{1850}$). 'Flower-Bed' of the Corn Mother. (14 cm. $\times$ 6.5 cm.)

Fig. 189 ($\frac{65}{202}$). 'Bed' of Grandmother Growth. (Diam., about 22 cm.)

representing in many cases only the outlines but of various colors (blue, red, yellow, and black), are seen on a white background. These represent flowers. The figure in blue at one of the narrow ends, edged with red and black, represents the altar on which the flowers were placed, emphasizing the general conception of the whole object as an altar.

There seems to be no doubt that all 'flower-beds' (including the soft ones) should be considered also as altars of the god.

It remains to mention two peculiar 'beds' of Grandfather Fire and Grandmother Growth. These are made from grass, are round in shape, and belong to these two deities of vegetation. It is doubtful whether these may also be considered as back-shields, on account of their shape, which is that of the

front-shield. Possibly, however, there existed certain distinguishing shields of the chiefs, which thus would appropriately become emblems of the two great deities in question.

The one reproduced (Fig. 189) was found in the cave of Grandmother Growth, near Santa Catarina. It consists of concentric layers of different kinds of grass and herbs, tied together with twine of bark-fibre so as to form a disk about 22 cm. in diameter, a hole 4.5 cm. in diameter being left in the middle. To the edge, on two opposite sides, a bunch of oak-leaves is tied. Counting in the oak-leaves, four kinds of plants may be distinguished. This 'bed' is a symbol of vegetation, and embodies a prayer for rain, without which nothing will grow.

VI. — 'EYES' (SI'KULI).

An 'eye' is a cross, of bamboo splints or of straw, interwoven with variously colored twine or yarn in the form of a square, which is set diagonally. The string is wound around the sticks from the centre outward, the loops being so placed that one side of the square is smooth, while on the reverse side the sticks are plainly noticeable. Occasionally one stick may show on one side of the square, and the other on the other side. Some of the large 'eyes' are made with a double weaving, so as to present a smooth surface on both sides. In a few cases the central part is left open (see, for instance, Fig. 93). The colors used vary according to the god for whom the 'eyes' are made. Sometimes the sticks are of equal length; but generally one stick is much longer than the other, for convenience in tying the 'eye' to the head of a child or to an arrow, for transfixing some object that may be tied to an arrow, or for placing the 'eye' upright in the ground. Those in which the sticks are of equal length are hung to arrows or to the roofs of god-houses, and are attached by the free end of the string from which the object is made.

With the Huichol, the 'eye' is the symbol of the power of seeing and understanding unknown things. Kauyuma'li, one of the gods who put the world into shape, was able by its use to see into the earth, and to see everything above it. The shamans of old, according to the Indians, were able to see the Mothers by the same means. In the beginning of the world, the moon was called si'kuli, which my Indian informant interpreted as signifying a mirror.

The prayer expressed by this symbolic object is that the eye of the god may rest on the supplicant. 'Eyes' are especially used at the feast of green squashes, being tied to the children's heads in an upright position by means of a hair-ribbon. They are thought to insure health to the children. A shaman's plume is stuck underneath the same hair-ribbon. At this feast, some 'eyes' are also placed upright in the ground near the squashes, and express prayers for health and luck and plenty to eat. Other objects of this kind may be deposited in the god-houses, usually attached to an arrow or a chair, and indicate prayers for the health of a child, or for luck, principally in handiwork.

The 'eye' will also be recognized as a design in other ceremonial objects, for instance, on front-shields and back-shields. It is represented by a diamond-shaped figure in the designs of many girdles, ribbons, and pouches. The picture of the 'eye' on the disk Fig. 26 and those on the disk Fig. 39 are unusual representations.

At the feast of green squashes the si'kuli represents a male squash-flower. As the Indian would say, "since this flower could not become a squash, it was serviceable as an 'eye' for the children at the feast of green squashes." Here it is particularly the eye of Mother East-Water, in whose honor the feast is held; for she is the creator of squashes and of all flowers, and takes special care of

children. Squashes must not be eaten until this feast takes place. It was Mother East-Water's son, Kauyuma'li, who first made use of the 'eye.' I reproduce here a drawing of the squash-plant (Fig. 190), made by a shaman friend of mine, which will give a clear understanding of the subject. The plant, with squashes, leaves, and vine, is called koloku'ra. The flowers which fructify, not shown in the drawing, are called uipu'li.

As is well known, the calyx of the squash-flower is filled with wool, therefore the Indians say that the fruit grows out of the wool. The latter is considered by them as cotton-wool (kūpu'ri). This becomes a very important factor in their interpretation of this symbolic object; for, in the

conception of the Huichol, the male flower was first cotton-wool, then it became an 'eye,' and now it is both; therefore the edge of the symbolic object is considered as cotton-wool, while the central part is an 'eye.'

The idea expressed by cotton-wool, the relation of which to the 'eye' is generally emphasized by tying wads of cotton-wool to the corners of the 'eye,' is the same as always, health and life. Therefore the 'eyes' placed on the children's heads express prayers that the eyes of the goddess may rest on the children, and that she may keep them in health.

Fig. 191 ($\frac{9}{17}$). Rattle.
(Length, 18 cm.)

The feast of green squashes is called wima'kwari ('to beat the drum'). It is held in October. The men run deer and gather the squashes. In the mean while the shaman, seated in his armchair, facing as usual the door-opening of the temple (east), beats his drum and sings from early morning until sunset. On the same day the women bring the children to the temple, and place them on both sides of the shaman. Tied to each child's head are a shaman's plume and an 'eye.' At this feast the children are called tūwai'no. They carry rattles in their hands; but if a child is very small, the mother holds the rattle for it. The rattle, which is called kai'tsa, is made from a hard fruit resembling a small gourd, that grows on a certain tree found in the hot country, for instance in the cañon of San Juan Peyotan. The rattling noise is produced by small stones, which are picked from ant-hills and put inside. The same kind of rattle (Fig. 191) is used at the so-called *matachines*,—a certain dance which has developed from a church festival.

Fig. 190. The Squash-Plant (koloku'ra). (From an Indian pencil drawing.)

a, The ground; b, The seed and its root; c, The vine; d, The young leaves (rawa'li or šawa'li); e, Full-grown leaves (rawa'li or šawa'li); f, Squashes (ru'tsi); g, The squash-stems (wāpu'); h, Male flowers (rawa' or šawa'), si'kuli.

The children stand on each side of the shaman so as to form a row, which extends towards the door-opening (Fig. 192). At the end of each row stands a shaman called *Vê'rik*^a (the rabbit sun), to guard them. The shamans also carry rattles in their hands. The men return from the deer-hunt after sunset, and corn-cakes and native beer are offered to the children, the 'eyes' and the rattles having first been taken away from them by their parents. During this ceremony the children stand together on both sides of the shaman, and the people form a semi-circle in front of him (Fig. 193). The guardians of the children stand at the ends

Fig. 192. Feast of Green Squashes. 1. Daytime. (From an Indian pencil drawing.)

a, a, The shamans guarding the children; *b, b*, The children with their rattles; *c*, The singing shaman; *d*, The chair on which he is seated; *e*, The drum which he beats.

Fig. 193. Feast of Green Squashes. 2. After sunset. (From an Indian pencil drawing.)

a, a, The shamans guarding the children; *b, b*, The children; *c*, The singing shaman; *d*, The drum; *e*, Jars in which the squashes are cooked; *f*, Heap of squashes; *g*, The people. The temple and its opening are indicated surrounding the groups.

Fig. 194. Feast of Green Squashes. 3. Early morning, before sunrise. (From an Indian pencil drawing.)

People are here represented standing around the squashes.

of the semicircle, next to them. To the right of the children is a heap of squashes which are to be cooked, and to the left are the jars to be used for that purpose.

The children are then carried to their homes, while singing and dancing continue in the temple all night. The next morning the children are brought back. Before sunrise, the squashes, which have now all been cooked, are taken out of the jars, and first given to the children, and then to the grown people (Fig. 194). At this festival the adults drink *hi'kuli*, but native brandy is not allowed.

During the feast, ancient girdles (p. 186) are hung up next to the squashes. They are supposed to keep the children from getting tired when "they go yonder where the water springs forth." This expression is taken from the song used at the feast.

The hair of children, from the age of two years up, is cut by the grandfather once a year until it has been cut five times. A ceremonial arrow is left with the hair in the god-house, as a prayer for favors, and for the growth of more hair. After the hair has been cut five times, the parents leave an 'eye' and a textile of *ixtle* ('bed') in the god-house of Mother East-Water at *Têaka'ta*, that the child may not get sick.

It is noteworthy that the feast is accompanied by much noise of the drum

and the rattle. Once upon a time, so the myth relates, the squash was a little girl whose name was Riku'-ama, the name referring to her as making a rattling noise with bells (riku'a) or some other object. Perhaps this was originally suggested by the rattling noise which the dry seeds make inside of the squash when shaken.

Figs. 195-197 represent three 'eyes' worn by children at the feast, all dedicated to Mother East-Water (Täte' Naaliwa'mi si'kuli). They range in size from 8 to 18 cm.

The first of these has a white centre, surrounded by sections of blue, followed by a white and a blue section ; the

Fig. 195.

Fig. 196.

Fig. 197.

Figs. 195 ($\frac{6}{444} g$), 196 ($\frac{6}{443} b$), 197 ($\frac{6}{444} e$). 'Eyes' of Mother East-Water. (Length, 8 cm., 18 cm., 11.5 cm.)

Fig. 198.

Fig. 199.

Figs. 198 ($\frac{6}{441}$), 199 ($\frac{6}{440}$). 'Eyes' of Mother East-Water. (Length, 35 cm., 31.5 cm.)

one shown in Fig. 196 has a yellow centre, surrounded by a white and then a yellow section with a white border ; and the third specimen has a dark-blue central part, surrounded by red.

The 'eyes' left next to the squashes are larger, the long stick in most cases ranging in size from 25 cm. to 80 cm. Some of them are dedicated to Mother East-Water, and others to Mother West-Water. Those shown in Figs. 198 and 199 are dedicated to Mother East-Water. The centre of the former is dark blue, followed by sections of white, red, white, and

yellow; the centre of the latter is light blue, followed by a section of black edged with red.

The specimen seen in Fig. 200 is dedicated to Mother West-Water. It was originally hung to an arrow, but was found detached in the cave of the Mother near the Cora pueblo of San Francisco. In this 'eye' both sides present a smooth surface, the colors on one side being black in the central part, and the rest white, while the other side is uniformly black.

In Fig. 201 is seen one which is of an exceptional shape, being hexagonal. It was also found in the same cave of Mother West-Water, having first served at the feast of green squashes. Its color is gray.

The 'eyes' which are stuck into the ground next to the squashes are placed in such a way that

Fig. 200 ($\frac{65}{223}$). 'Eye' of Mother West-Water.
(Diameter, 20 cm.)

Fig. 201 ($\frac{65}{223}$). 'Eye' of Mother West-Water.
(Length, 37 cm.)

one side faces the east, and the other side the west; in the language of the Indian, they are "looking towards the east and towards the west, even if the Indian is sleeping." This throws light on the fact that the large kind of 'eye' often has a smooth surface on both sides. After the feast they are carried to the god-houses of the respective Mothers.

'Eyes' used on other occasions than at the feast of green squashes are mostly small, of the same size as those tied to the children's heads. In the collection made in 1898 there are seven which express prayers for the health of children, and which were deposited for that purpose in various god-houses. The gods to whom these specimens were dedicated are Grandfather Fire (two specimens), Kauyuma'li (four), and Ka'tsi (one specimen). Ka'tsi is one of the impersonations of the god of fire. His complete name is Ka'tsi Urai'meka, alluding to the facial painting of the hi'kuli-seekers (u'ra, 'spark'). The god-house belonging to this deity is at Têaka'ta.

There are three small 'eyes' which were offered for other purposes. The first (Fig. 202) is dedicated to Elder Brother (Tama'ts Pa'likě Tamoye'kě si'kuli). It is from his god-house at Têaka'ta, where it was stuck in the ground. Its color is red, with a blue border. A rectangular scrap, a piece of cotton-cloth without any hem, is attached to the 'eye.' The upper end of the long stick is thrust through one corner of the cloth. On the cloth there is a simple design of embroidery in red yarn, rudely executed. It represents a snare or Tama'ts Pa'likě Tamoye'kě neali'ka (*cf.* p. 135). It expresses a prayer that a child may be successful in learning to embroider.

Fig. 202.

Fig. 203.

Fig. 204.

Fig. 202 ($1\frac{1}{2}\frac{1}{2}$). 'Eye' of Elder Brother. (Length, 15 cm.)

Fig. 203 ($1\frac{1}{2}\frac{1}{2}$). 'Eye' of Ka'tsi. (Length, 16 cm.)

Fig. 204 ($1\frac{1}{2}\frac{1}{2}$). 'Eye' of Tate' Tûliriki'ta. (Length, 19 cm.)

Fig. 205 ($1\frac{1}{2}\frac{1}{2}$). 'Eye' of Great-grandfather Deer-Tail. (Diameter, 16 cm.)

The next 'eye' (Fig. 203) is dedicated to Ka'tsi (Ka'tsi si'kuli), and is from Têaka'ta, where it had been stuck upright in the ground in the god-house. The centre is red, followed by blue, and then white. It has an attachment in the shape of a small woollen textile, through which the long stick has been thrust. The textile is white, except for a short space about the middle, where the woof is made from a red thread. The prayer expressed is that Ka'tsi may keep his eye on the textile which the supplicant is going to weave, and help her.

The third (Fig. 204), which is dedicated to Tate' Tûliriki'ta, is not finished with the usual care. The cross is merely wound with a yarn made from cotton-wool. It was found in the cave of this Mother, near Santa Catarina,

and is a prayer for luck in raising cotton.

Finally, in Fig. 205 is shown an 'eye' which forms the seat of a ceremonial

stool dedicated to Great-grandfather Deer-Tail. The stool was taken from the god-house of this deity at Têaka'ta, and the 'eye' is accordingly that of the god. The colors of this 'eye' are, central part red, followed by sections of yellow, white, red, yellow, light blue, white, yellow, white. The man who deposited the stool did so, that the god might keep an eye on the maker, and lend him a hand in his work of making stools (*cf.* Fig. 69).

The symbolic object which we have described has no doubt a wide distribution among the tribes of the western coast. The Coras have 'eyes' similar to those of the Huichol, and they are found among the Tarahumares, where they are called wiši'ma. Among the latter they are rare. The sticks of the one I secured were of equal length, and the colors were yellow and black. It was hung to the end of a staff, and used by the shamans for warding off diseases or sorcery, for which purpose they wave it forwards and backwards. As is well known, symbolic objects of this kind are found in great quantities in the ancient graves of Peru. It is noteworthy that on a mummy with a false head, from Ancon in Peru, in the possession of this Museum, they actually serve as eyes. They are diamond-shaped, and have been so placed that the acute angles correspond to the corners of the eyes.

VII. — VOTIVE BOWLS (RUKU'LI).

Votive bowls are, as a rule, the ordinary drinking-gourds of the Huichols, more or less adorned to serve as sacrifices to the gods. The usual drinking-bowl (Sp. *jicara*) is simply a section of a gourd cut from the end nearest the stem. The inside is painted red or green; the coloring-matter, which is mixed with the ground, oily seed wa've, being rubbed on with the hand. This coating serves not only to ornament the gourd, but also to preserve it and make it water-tight. In regard to the colors employed, see pp. 24, 25. The best specimens are selected for ceremonial use, and the usual size is about 12 cm. in diameter and 4 cm. in depth. They are very often smaller, but seldom larger. Others of earthenware are generally smaller than the gourd vessels. An essential characteristic of the votive bowl is its ornamentation with glass beads, which, by means of beeswax, are attached in the form of symbolic figures to the inside, and in rare cases also to the outside. Sometimes the beeswax is put on so thick that the figures stand out in relief, as in Fig. 211. The beads are either put on in strings or one by one. No doubt in ancient times shell beads were used for this purpose. Grains of corn, artificial flowers, wads of cotton-wool, and sometimes even plumes, are attached to the inside.

The votive bowls are almost as commonly used for sacrifice as the ceremonial arrows. The prayers thereby expressed are essentially the same, — for food, health, and luck (including luck in making the real arrow or bowl); still the votive bowls are not considered quite as valuable. They are smeared with blood before being sacrificed. They are never attached to ceremonial arrows. Votive bowls, or their conventional representations, must be considered as drinking-gourds offered to the gods, who, so to speak, drink in the prayers of the people.

The votive bowl appeared first on the head of a roe. Elder Brother Kauyuma'li, the god who taught the ancient people how to obtain favors from the gods, is the one who also showed them how to adorn drinking-gourds for ceremonial purposes. Votive bowls are frequently mentioned in the mythology in connection with this god. He and the other gods put the world into shape with the help of votive bowls and ceremonial arrows. In order to secure the necessary blood to smear on the votive bowl, these shapers of the world had to kill a roe, who was a woman, whereby they offended the underworld people. During the fight that ensued, Kauyuma'li saw his chance to snatch from his opponents their votive bowl, which contained hi'kuli.

Below are described some specimens of votive bowls, the ordinary kind being first shown, then some simple forms, and finally some extraordinarily elaborate ones.

Fig. 206 is a votive bowl of Father Sun (Tayau' ruku'li), from the temple of San José, near San Andrés. The inside is painted red. Attached to the centre

of the bottom is a coil of blue beads, with a few red ones interspersed, representing the sun. On top of it is fastened a white and yellow paper flower, a symbol of a prayer for life. To one side is a large wavy design composed of strings of yellow beads, with a short string of red beads in the middle towards one side. This represents the sea in the west. Further, there are on the inside four coils of beads, the two on one side of the yellow design being white; and the two on the other side, one white and one red. They represent clouds. On the open space between the coils is a piece of wax on which is an indistinct impression of a Mexican ten-cent piece. This bowl expresses the prayer that the rising and setting Sun, the life-giver as well as life-destroyer, may be surrounded by clouds. The clouds are mostly white, but also roseate, as they appear through the light of the sun. The ten-cent piece was attached as an additional sacrifice.

Fig. 206 ($\frac{9}{16}$). Votive Bowl of Father Sun. (Diam., 12.5 cm.; depth, 4 cm.)

Fig. 207 ($\frac{6}{16}$). Votive Bowl of Deer Gods in the North and South. (Diam., 13 cm.; height, 5.5 cm.)

Fig. 207 shows a votive bowl of the deer gods in the north and south (Tama'ts O'to Ta'wi and Tama'ts Wawatsa'li ruku'li). It is from one of the god-houses of the temple of Bastita. The inside is painted green. In the centre is a starlike figure in yellow, surrounded on the edges by blue. This represents a section of an ear of corn with seven rows of grains (see p. 30). Towards one side is seen a similar figure in dark blue, yellow, rose, and light blue, which has the same significance. The larger of the two deer figures represents the deer god of the north. The upper part of its body and its head consist of rows of black and yellow beads, while the antlers, chest, belly, feet, and tail are of white beads. On the other deer the arrangement of beads is less distinct, the beads on the upper part of the body being black and blue, while those on the head and ears, the under side of the body, the tail, and part of the legs, are white. A row of black beads has been intermixed on the upper part of the body, and two rows of

light blue ones are found on the legs. The remaining figure, in dark blue, represents a snare; the attaching string is in yellow. The end of the string, which on the real snare, as will be remembered, is tied to a tree near by, was no doubt here attached to the votive bowl itself, but has become disengaged. The votive bowl is a prayer to the two deer gods, who are asked that they may allow themselves to be caught in the snare. The result will be rain and corn.

Fig. 208 is a votive bowl of Mother East-Water (Tâte' Naaliwa'mi ruku'li), from one of the god-houses of the temple of Bastita. On the inside, which is painted red, are seen numerous spots, each composed of beads of one color. They are white or blue, and symbolize grains of corn. The prayer expressed is that the supplicant, through the rain which Mother East-Water will send, may have plenty of corn.

Fig. 208.

Fig. 209.

Figs. 208 ($\frac{45}{118}$), 209 ($\frac{55}{123}$). Votive Bowls of Mother East-Water. (Diam., 9 cm. and 8 cm.; depth, 5 cm. and 3.5 cm.)

Fig. 209 is a votive bowl of the same Mother, from her cave near the pueblo of Santa Catarina. Round a centre of blue and white beads, expressive of corn, are seen four zigzag lines, three straight lines, and one line partly curved. The zigzag lines, two of which are blue, one yellow, and one blue and white, represent rain-serpents in the east in the various colors in which they appear to the Indians. The rest of the figures, two of which are blue, one red, and one blue and white, represent falling rain. The prayer expressed is that the Mother may appear in rain-storms, which give the Huichols corn.

In the collection are several other votive bowls belonging to this goddess, more or less like the ones described. In two of them are seen a baton like the one in Fig. 215, expressive of lightning (mimié'lika), which is the staff of this goddess. These express prayers that the lightning may not strike the cows and the people.

Fig. 210 is a votive bowl of Mother South-Water (Tâte' Rapawiye'ma ruku'li), from one of the god-houses of the temple of Bastita. In the centre is fastened a circular network of blue and white beads,—the same kind of beadwork as is used for ear-ornaments or for pendants of necklaces. It represents the sun in a cloud. At three different places are attached three small coils made from strings of beads,—two blue and one white. The two blue ones are connected, both having been made from the same string. The open end of the white coil extends to one of the blue ones. The white coil signifies clouds in the west; the blue coil to which it is connected, clouds in the east; and the other blue coil, clouds in the south. The votive bowl is a prayer that clouds may gather from the east, west,

and south, so as to enable the sun to appear in a cloud in the middle of the day. The whole bowl is dedicated to Mother South-Water, who wields the greatest power over these clouds. The connecting strings signify the union of the clouds in the east and west with those in the south.

Fig. 210 ($\frac{65}{17}$). Votive Bowl of Mother South-Water. (Diam., 9.5 cm.; depth, 4.5 cm.)

Votive bowls of clay are in imitation of those made from gourds. But I here present one (Fig. 211) which has a somewhat different shape, having a low base. It is from the cave of Mother West-Water, near the Cora pueblo of San Francisco. The centre

Fig. 211 ($\frac{65}{17}$). Votive Bowl of Mother West-Water, seen from above. (Diam., 6.5 cm.; depth, 4 cm.)

is taken up by a coil made of strings of white beads, signifying clouds (the name of the Mother associates her with the morning mist and clouds). Round it are grouped five figures, all made of blue, white, and pink beads: (a) a serpent, in the form of which the Mother appears; (b) a deer; (c) a baton of the Mother, her staff of dignity; (d) another deer; (e) a human figure, probably the Setting Sun.

In the centre are represented clouds (or rain) that are to come from the west. These are the object of the prayer. The goddess is mistress of the deer of the west, which help to make rain; her staff, lightning in the west, is one associated with rain; and the serpent, which is another of her impersonations, is a rain-serpent. The Setting Sun is the god of her region, who helps to bring about the desired result.

In Figs. 212-214 are seen more primitive forms of votive bowls, the first being of the ordinary kind but very shallow, and the other two being merely pieces cut out from any convenient part of a gourd.

Fig. 212 ($\frac{100}{20}$). Votive Bowl of Ka'tsi. (Diam., 11 cm.; depth, 1 cm.)

Fig. 212 is dedicated to Ka'tsi, a god of squashes (? *cf.* p. 158). It is painted red inside. On the centre of the bottom is a coil made of blue beads interspersed with white. The bowl is a prayer for luck in raising squashes.

In Fig. 213 is seen another votive bowl of the same god. The inside is colored with indigo, and further

Fig. 213 ($\frac{100}{20}$). Votive Bowl of Ka'tsi. (Diam. 7 cm.; depth, 1 cm.)

adorned with a human figure made of beeswax and blue beads. It expresses a prayer for the continued health of a child.

Fig. 214 shows a votive bowl of Elder Brother Kauyuma'li. It is colored with indigo. Five daubs of beeswax set with dark blue beads symbolize hail-stones. The bowl expresses a prayer that hail-storms may not occur.

Fig. 214 ($\frac{185}{187}$). Votive Bowl of Elder Brother Kauyuma'li. (Diam., 10.5 cm.; depth, 1 cm.)

Finally, I present three bowls that are more elaborately adorned than usual (Figs. 215-217).

Fig. 215 is a votive bowl of Father Sun (Tayau' ruku'li), from San Andrés. It is painted red inside, and adorned with the following designs, made almost entirely of strings of variously colored beads.

In the centre is the Sun, Tau or Tayau' (*a*), mainly in blue, the rays being edged with white. It is surrounded by the earth (*b*), with its hills, valleys, and plains (the straight lines), in black, red, green, yellow, and white. Three zigzag lines (*c*) — one in blue and green, another in yellow and green, and the third in black — represent rivers. A stick (*d*) adorned with strings of green, yellow, and black beads put on in wavy lines represents the staff of dignity of the Sun.

It is called *iwa'ut-shi*, and is fastened, one end to the Sun, and the other end to the male tiger (*g*), one of the fierce animals said to belong to him. Round the central decoration of the votive bowl are (*e*) the Sun (Ta-vé'rik^a) in the east, being a male figure in blue and black, with white eyes; (*f*) Mother West-Water, in the west,

Fig. 215 ($\frac{86}{170}$). Votive Bowl of Father Sun. (Diam., 24 cm.; depth, 6 cm.)

being a female figure in black and white, with white eyes; (*g*) a male tiger, in the south, in black, yellow, red, and green, the dark colors being applied to the body, — a 'man' who lives where the sun rises; (*h*) a female tiger, in the north, of the same colors, but differently arranged, the light colors being used on the body. Underneath this tiger is (*i*) a figure which my shaman informant called *Tata con la corona* ('father with the crown'). As said before, *Tata* is the vulgar expression for 'father.' The maker had, like many Spanish-speaking Huichols, a vague knowledge of Christianity, which he wanted to show off; on this occasion, however, making the mistake of calling the Virgin Mary *Tata* instead of *Nana* ('mother'). The remaining figures are (*j*) Mother South-Water, in red and black; (*k*) Sa'mayoi, a deity in the north, in red; (*l*) a bird (called Malu'i) that lives on the coast, and guards the people, in red; (*m*) the chair of the Sun, in red; (*o*) the male red-tailed hawk, in black and yellow; (*p*) the female bird of the same hawk, in yellow and red; (*q*) a male deer, in black, with green antlers; (*r*) a roe, in green and black; (*s*) two clouds, one in green, one in black. Between the figures *e* and *j* is a triangle in black and green, representing the chair in the Palacio Nacional, in the City of Mexico. A double zigzag design in blue and white beads, which runs along the outside edge of the bowl, indicates the sea surrounding the world.

The bowl expresses in a general way the Huichol conception of the world and some of its deities. The Sun, to whom the bowl is dedicated, is the father of all, who illuminates the world, and manifests his power in heat. Some of the gods (all supposed to dwell on the outskirts of the country of the Huichols) are here reproduced with their attendant animals, ceremonial chairs, and the clouds which they have the power to bring. Further interpretation may be inferred from previous expositions.

Fig. 216 shows a votive bowl of Father Sun (Tayau' ruku'li), from San Andrés. Both this and the next specimen were made for me by an intelligent Spanish-speaking Huichol of San Andrés, whom I furnished with the necessary beads. From an artistic point of view, they are somewhat remarkable, the beads having been formed into figures without any previous drawings being made. The bowls are almost entirely adorned with single beads, — by far the most laborious way, as each bead has to be threaded on a thong of maguey, and then placed in its proper place on the wax which covers the parts to be ornamented. It is safe to say that no other Huichol is able to do the work so well; nor are votive bowls so luxuriously adorned, because it would cost too much, from an Indian point of view. It will be noted that the emblematic designs are comparatively few in both specimens, the symbolic language expressed in votive bowls in general being no doubt quite limited.

The inside (Fig. 216, *a*) is painted red, but is almost entirely covered with bead decorations. The outside is also completely covered with beads, except the bottom. The central part of the inside is a cross, symbolic of the four quarters of the world, surrounded by concentric circles of blue and black beads, and a

zigzag of white beads symbolic of the mountains and valleys of the world. The rest of the figures on the inside are: (a) the 'face' of Father Sun (Tayau' neali'ka), in red, surrounded by variously colored beads; (b) the 'face' of Mother East-Water, the colors being mainly white and blue, surrounded on each side by batons symbolic of lightning (green and yellow); (c) the 'face' of Mother

Fig. 216, a ($\frac{65}{112}$). Votive Bowl of Father Sun. (Diam., 14 cm.; depth, 5 cm.) Fig. 216, b ($\frac{65}{112}$). Portion of Bottom of Votive Bowl of Father Sun.

West-Water, in blue, surrounded by variously colored beads, mostly arranged in the form of emanating rays; (d) a hen, in white, surrounded by an ornamental design; (e) the 'face' of Mother South-Water, the colors being mainly white and blue; (f) the emblem of the Christian cross, in green and red.

The outside decorations are largely ornamental, but across the bottom is a band (Fig. 216, b) consisting of alternate transverse rows of green and white beads. This, as the maker said, was meant to express a message from his young son, of whom he was very fond, dedicating the bowl to Porfirio Diaz, the president of Mexico.

Fig. 217 ($\frac{85}{111}$). Votive Bowl of Mother East-Water. (Diam., 20.5 cm.; depth, 8 cm.)

Fig. 217 is even more completely decorated inside and outside and also on

the edge, and is quite heavy from the weight of the beads. It belongs to Mother East-Water (Tāte' Naaliwa'mi ruku'li). In the inside are seen four deer — two male, and two female — and a deer-head, also crosses; and on the outside, a deer and crosses. Most of the beadwork, however, is ornamental. As in the preceding specimen, the bottom is decorated with a band consisting of alternate transverse rows of blue and white beads, meant to express the name of the maker's son, Fermin Gonsalez Minjares.

VIII. — THE ARK OF THE DELUGE LEGEND.

The Huichols have a story of a deluge, during which one man was saved in a boat or ark, specimens of which are occasionally manufactured and sacrificed as a means of causing rain. The myth of the Deluge is as follows : —

“A Huichol was at work felling trees in the preparation of his field for planting; but each day he found that the trees he had cut down on the previous day had grown up again. He worried over this, and grew tired of working; but still he came on the fifth day to try once more, bent upon finding out how it happened. Soon there rose from the ground, in the middle of the clearing, an old woman with a staff in her hand. She pointed with her staff towards Tāte' Rapawiye'ma [the south], then towards Tama'ts O'to Ta'wi and Tāte' Hau'tse Kūpu'ri [the north], then towards Tāte' Kyewimo'ka and Sakaimo'ka [the west], towards Uwio'tali [female], the east, and towards Tāte' Vēlika Uima'li [above], and finally towards Tāte'vali [below]; and all the trees which the young man had cut down immediately stood up. Then he understood how it was that his clearing was always covered with trees.

“Annoyed, he exclaimed, ‘Is it you who are undoing my work all the time?’

“‘Yes,’ she said, ‘because I want to talk to you.’

“The woman, who was Tako'tsi Nākawe', told him that he was working in vain. ‘A great flood is coming,’ she said. ‘It is not more than five days off. There will come a wind, very bitter, and sharp as *chile*, which will make you cough. Make a box from the fig-tree (*salate*) as long as yourself, and fit it with a good cover. Take with you five grains of corn of each color, five beans of each color; take also the fire, and five squash-stems to feed it with; and take with you a black bitch.’

“The young man did as Nākawe' had told him. On the fifth day he had the box ready, and placed in it the things he was told of. Then he entered, taking with him the bitch; and the old woman put the cover on. She calked every crack with glue from the root of the plant kwē'tsaka, asking him to indicate where there was an opening. Then she seated herself on top of the box, with a macaw perched on her shoulder. The box rode on the water one year towards the south, next towards the north, the third year towards the west, the fourth towards the east, and in the fifth year it rose upward, and all the world was filled with water. The next year the water began to subside, and the box stopped on a mountain near Toapu'li [Santa Catarina], where it may still be seen. The man took off the cover, and saw that all the country was still full of water; but the macaws and the parrots made valleys with their beaks, and the water commenced to run, and the birds separated it into five seas. Then it began to dry up, and trees and grass sprang forth, aided by the earth Mother (Tāte' Yuliana'ka).

“Nākawe' became wind, but the man went on with his work of clearing the field. He lived with his bitch in a cave; and in the daytime, while he was in the

field, she remained at home. Every afternoon, on coming back, he found corn-cakes ready for him. He was curious to know who made them. After five days had passed, he seated himself among the bushes near the cave to watch. He saw the bitch take off her skin and hang it up. Then he noticed that she was a woman, who knelt down to grind corn on the metate. He stealthily advanced towards her, approaching from behind, and quickly caught the skin and threw it into the fire. 'Now you have burned my tunic!' she cried, and began to whine like a dog. He bathed her with water mixed with the ground corn she had prepared, and she felt refreshed, and from that time on she remained a woman. He had a large family, and his sons and daughters married, and the world became peopled, and they lived in caves.

"When he set to work to plant corn, he thrust a pointed stick into the ground, making a hole, in which he left a few grains; but nothing sprang forth except stones, because he planted corn as the 'neighbors' [the Mexicans] do. Then he asked the Mother Above for a stick with which to make the holes, and now the corn grew well; and he also planted beans and squashes. He planted the first year in the south, and the second in the north, the third in the west, the fourth in the east, and in the fifth year he planted corn here in Toapu'li."

Fig. 218 ($\frac{6\frac{5}{8}}{2\frac{7}{8}}$). The Huichol Ark. (Length, without covers, 23.5 cm.; diam. of covers, 14 cm.)

a, Side View; b, c, Front View of Covers.

Fig. 218 shows a side view of the ark and separate front views of the two covers at the ends. It will be noticed at a glance that it does not exactly answer to the description given in the myth; but traditions always vary somewhat, and in one version of the Deluge legend preserved by the Coras the ark is described as a hollow log covered up at each end. The specimen here shown is from Santa Catarina, and was made by one of the principal men. It is a copy of one I saw being made by the officers of the temple. On that occasion (in December), and as a means of securing rain for the coming year, ceremonial objects, such as arrows,

votive bowls adorned largely with grains of corn, etc., were made in the temple to be used as sacrifices. Among the objects was such an ark. Fresh green hi'kuli-plants were also to be sacrificed, the specimens selected consisting of three or four grown together, and grains of corn were squeezed in between the plants of one growth. All these objects were to be sent to distant sacred places, east and west, north and south; and the destination of the ark was to Mother South-Water (Tate' Rapawiye'ma), which, as said before, is a large lagoon south of the country of the Huichols, and known under the name of *Laguna de Magdalena*. With the exception of *Laguna de Chapala*, which the Huichols probably never saw, there is no sheet of water so large in that part of Mexico.

The specimen here figured is a small log of wood from a fig-tree, called in Spanish *salate*, that has been hollowed out with an iron implement. Its name is ra'pa, the same as that of the fig-tree (compare with this the name of the Mother to whom it is dedicated, Rapawiye'ma). The bark has been entirely removed, and the surface somewhat smoothed. Both ends are closed by disk-shaped covers made from the same kind of wood. They are 3 cm. thick, tapering towards their inner edges, and made to fit into the ends of the hollow log. A piece of wood carved in a shape somewhat resembling a pair of ox-horns, and colored blue, is glued into a transverse groove on the top. It is intended to represent ox-horns, but in former days no doubt the Huichols would have used deer-horns. Its purpose was to entangle the craft in the bushes when the water subsided, and thus stop it. The outside of the ark is colored blue, and decorated with various yellow figures. The part which is supposed to be above water has the following designs, which are symbolic of water and its effects (Fig. 219): *a, b, f*, The sea (*a* showing the waves, which are considered as small serpents). *c, e*, Butterflies. *d*, A small snake called Hai'ku. The starlike designs scattered here and there are certain white flowers called toto'.

Fig. 219. Development of Design on Ark.

The cover nearest the 'horns' (Fig. 218, *c*) is decorated in the centre with a yellow spot, and above it with two Mexican centavos. The latter are fastened with beeswax as an offering. The other cover (*b*) is decorated with four yellow lines intersecting at their centres.

The following objects were inside of the ark:—

1. A wooden image (Fig. 220) representing the ancestor of the Huichols who

was saved from the Deluge. It is rudely carved and out of proportion, the head being about a third as large as the body. It is painted black, but the face is ornamented with some red color. The ancestor's name is Wata'kami, which means 'he who made coamil (wa'tsi, watsi'a).' He is a *principal* or *mayor*. His name was also Ūlu' No'no ('the small arrow').

2. A rudely carved wooden figure of the bitch (çuk ū'ka), Fig. 221. It is painted black except on the lower part of the tail, which is turned upwards, and the upper part of the ears.

Fig. 220.

Fig. 221.

Fig. 222.

Fig. 223.

Fig. 224.

Fig. 225.

Figs. 220-225. Contents of Ark.

Fig. 220 ($\frac{8.5}{228}$). Image of the Ancestor of the Huichols. (Height, 12 cm.)

Fig. 221 ($\frac{8.5}{229}$). Figure of the Bitch. (Length, 8 cm.)

Fig. 222 ($\frac{8.5}{230}$). One of the Five Squash-Stems. (Height, 8 cm.)

Fig. 223 ($\frac{8.5}{231}$). Pouch containing Corn of Different Colors. (9 x 12 cm.) The two upper designs represent the flower toto'; the lower two, the alligator.

Fig. 224 ($\frac{8.5}{232}$). Pouch containing Beans of Different Colors. (7 x 10 cm.) The starlike designs in the centre represent the flower toto'; the zigzag and dots on the border, the squash-vine and squashes.

Fig. 225 ($\frac{8.5}{233}$). Pouch containing Wa've-Seeds. (8.5 x 11 cm.) The design shows the creeper ha'pani.

3. Five squash-stems (wāpu'), with which the ancestor of the tribe kept his fire going (Fig. 222).

4. Five grains of each of the seven colors of corn, and the pouch in which they were preserved (Fig. 223).

5. Five beans of each of the five different colors, five squash-seeds, and the pouch in which they were preserved (Fig. 224).

6. Wa've-seeds and the pouch in which they were preserved (Fig. 225).

When, on returning from the Huichols, I passed the pueblo lying close to

Laguna de Magdalena, and of the same name, the priest there showed me some objects which had been found in the lagoon, and had puzzled him very much. All were weather and water worn ; but I at once recognized them as ceremonial arrows and the ark of the Huichols, the latter of which they had brought from their far-away country, and deposited on the waters as one of the extreme means of getting rain. To the Indian mind what has once been associated with an effect has the power of reproducing that effect, and therefore the ark, once connected with water, is thought to have the power of causing the waters to rise and descend again ; in other words, to produce rain.

IX.—THE SHAMAN'S PLUMES, AND OBJECTS CONNECTED WITH FEAST-MAKING.

SHAMAN'S PLUMES.—Certain plumes, which I call the 'shaman's plumes,' are invariably connected with the ceremonies performed by both the singing shaman, and the prophesying and healing shaman. The former is assisted in his incantations by Great-grandfather Deer-Tail, and the latter by Grandfather Fire, the greatest of all shamans. The shaman's plume, which is called by the same name (*mōye'li*) as the plumes attached to ceremonial objects, consists of two feathers and a small stick or handle, from the end of which the feathers are hung by means of colored crewel, which also covers the quills of the feathers. Round the same end of the handle (its top) a tuft of small feathers is bound by a bright-colored crewel, the windings of which cover about two-thirds of the handle. Sometimes, by way of ornamentation, cotton cord is wound over the crewel in open windings. The two hanging feathers are mostly taken from the tail or wings of the red-tailed hawk; and the small feathers, from underneath the wings or from the breast, or (rarely) from the leg, of the eagle or hawk. It is curious to note that out of twenty-one specimens of shaman's plumes secured in San Andrés, the hanging feathers on all but one are from the tail, as a rule the

Fig. 226 ($\frac{65}{459}$). Shaman's Plume of the Sun. (Length, 23 cm.)

Fig. 227 ($\frac{65}{459}$). Shaman's Plume of the Sun. (Length, 22 cm.)

extreme outer feathers. The crewel used on the twenty-one specimens mentioned is red, except on two handles, on one of which blue is used, and on the other yellow.

The shaman is hardly ever seen without one or more of these plumes in his hand; and when he sings in the temple, several plumes lie in front of him. When he wishes to bring the supernatural forces of the plume into action, he holds the handle in his right hand, generally giving it a slight trembling motion. Sometimes he may hold two or three plumes. The power of the hanging feathers emanates from their tips: therefore in curing the sick, or in influencing some object for magical purposes, he touches with the tips of the feathers only. When calling down the Sun, he points his plume toward him with outstretched arm; and when curing the sick, he passes it over the parts affected. With the plumes and incantations he calls forth rain, removes the spells of sorcerers, and performs all other feats of magic of which he is supposed to be capable. At the religious dances and feasts, shaman's plumes are worn on the heads of the principal performers, the handles being placed in an upright position under the hair-ribbons.

Fig. 228 ($\frac{95}{1773}$). Shaman's Plume of the Sun. (Length, 36 cm.)

Figs. 226–228 show shaman's plumes dedicated to the Sun (Tayau' mōye'li). The last one, on which there are three bands of crewel, — two red, and a central one dark blue, — has a peculiar attachment, a rattlesnake's rattle fastened to the back of one of the feathers by a cotton thread. This attachment adds to the value of the plume, because the rattlesnake is sacred to the Sun, who carries its rattles.

Often the handles are more elaborate, a narrow matting of pieces of split bamboo and white cotton cord and crewel being woven in with them. The original handle runs through the middle of the matting, and protrudes beyond it at both ends (see Figs. 229, 230, which present two shaman's plumes of Elder Brother, from his god-house near Guayavas).

These handles must be considered as back-shields: and in the god-houses such a handle may even be found deposited without any plumes attached, as a prayer for luck, as in Figs. 231, 232, which are called Tama'ts Pa'likē Tamoye'kē na'ma.

Having recognized that these plume-handles are back-shields, we shall find further light thrown on their meaning by considering Figs. 233–236, where sections of various arrows, with attachments of some peculiar and highly

suggestive back-shields, are shown. The illustrations represent an arrow of Mother West-Water (Fig. 233); two of Elder Brother (Figs. 234, 235); and one

Fig. 229 ($\frac{65}{17\frac{1}{2}}$). Shaman's Plume of Elder Brother. (Length, 14 cm.)

Fig. 230 ($\frac{65}{18\frac{1}{2}}$). Shaman's Plume of Elder Brother. (Length, 24 cm.)

Fig. 231 ($\frac{65}{4\frac{1}{2}}$). Plume-Handle of Elder Brother. (Length, 18 cm.)

Fig. 232 ($\frac{65}{4\frac{1}{2}}$). Plume-Handle of Elder Brother. (Length, 18 cm.)

Fig. 233.

Fig. 234.

Fig. 235.

Fig. 236.

Figs. 233 ($\frac{65}{18\frac{1}{2}}$), 234 ($\frac{65}{18\frac{1}{2}}$), 235 ($\frac{65}{18\frac{1}{2}}$), 236 ($\frac{65}{18\frac{1}{2}}$). Types of Plume-Handles. (Length, 6 to 14 cm.)

of a deer god called Tawiru'li (Fig. 236). To these arrows are attached small narrow mats made of pieces of split bamboo or coarse grass interwoven with white cotton cord and (with one exception) black or dark-blue crewel. The largest of these mats has one design woven in red. This mat is 14 cm. long, while the rest average 6 cm. in length. Although

all these are called back-shields (na'ma), they have another name, viz., wi'ta mōye'li. Wi'ta means 'cotton thread'; the whole word, 'cotton-thread plume';

and the name of the god to whom it is dedicated is added in each case. They are merely symbols of plumes, and even the species of hawk which they are supposed to represent may be expressed in the design of the weaving. Thus Fig. 235 shows a plume of the hawk Piwa'mi (see p. 21), and Fig. 236 one of the red-tailed hawk. We see accordingly that these elaborate handles on the shaman's plumes simply intensify the character of the implement as a plume. It is like attaching two plumes to another plume. The markings on the plumes may vary considerably. They often represent 'eyes' (Fig. 234), and they may even be so conventionalized as to express a human figure.

In Fig. 237 is seen the handle of a shaman's plume, to one of the protruding ends of which four small red parrot-feathers are tied. It is called Tate'vali na'ma. The color of the diamond-shaped figures is yellow with white borders on a red background. It was lying on the ground inside of the little temple of Grandfather Fire at Têaka'ta. It embodies a prayer for luck in killing parrots and other birds, either in the country of the Huichols or on the coast.

HEAD-PLUMES. — At ceremonies and feasts another kind of plume, called Ta wia'kami, consisting of the tail of an eagle or a hawk, is sometimes tied to the heads of men with a hair-ribbon, or fastened to their hats. On one occasion I saw four of these on a hat, placed in a slanting position, the one on each side pointing forward. The one shown in Fig. 238 is from San Andrés. I did not see such plumes in Santa Catarina.

Fig. 238 ($\frac{25}{57}$). Head-Plume. (Length 38 cm.)

dancers at the feast of hi'kuli, the stick of the plume being placed under the hair-ribbon. They are used in the same way at the dance called *matachines*,

Fig. 237 ($\frac{25}{57}$). Plume-Handle of Grandfather Fire. (Length, 33 cm.)

Another kind of plume, also attached to the head, is seen in Fig. 239. It is from Santa Catarina, and is dedicated to Elder Brother (Tama'ts Pa'likë Tamoye'kë möye'li). It consists of a number of the tail-feathers of the bluejay, each feather about 45 cm. long, which are tied by the quills round a short stick. The bunch of feathers is also called wa [bluejay] möye'li. Small green parrot-feathers surround its base, over the lower ends of which are wound white cotton cord and red crewel. One or two specimens of such plumes

are tied in an upright position to the heads of the

which was introduced by the church. Sometimes white down, which is symbolic of clouds, is fastened to the tips of the feathers with a kind of gum. In the plumes dedicated to Grandfather Fire the feathers at the base are from the little yellow bird hai'no, that belongs to him.

These plumes are much used by the Cora Indians, who, as I have observed, stick them into the ground at their rain-making feasts, together with ceremonial arrows and other objects. The Huichols generally import these beautiful blue plumes from the Coras.

When not in use, they are kept in a kind of 'case' (Fig. 240), which consists of a piece of the hollow dried stem of the *Cereus Pithaya*. The ends are closed by a ball of leaves from the big-leaved oak-tree, or sometimes by a kind of cork cut for the same purpose. Generally a handle of twine made from bark-fibre is attached to the middle of the 'case' for convenience in carrying.

SACRIFICIAL STICKS.—Whenever native beer or native brandy is drunk, or when water is used for religious purposes, either externally or internally, a quantity of the liquor or of the water is first sacrificed to the six regions of the world. There is no feast at which this is not done in one form or another. For the purpose a special stick is used, called nāwa' muina'ni. The specimen collected is cut from a bush called ra'ta, and is 33 cm. long; but the sacrificial stick may vary in length according to the size of the gourd in which the liquid is kept. The bark has been removed and the surface smoothed. Both ends are cut off even, and the stick has the natural white color of the wood. It always accompanies the gourd, which, filled with native beer or brandy or water, is placed near the altar or in the temple, ready for use. Before anybody drinks, the shaman sacrifices with this stick, dipping it into the fluid each time.

When the quantity of water is small and contained in a votive bowl, the sacrifice may be made with a bunch of flowers dipped into it instead of with a stick. The hi'kuli-seekers each carry such a stick on the road, and every time they drink water they first sacrifice with it to the six regions of the world. As might be expected, hi'kuli in its liquid form is also sacrificed to the regions of the world, but by means of a ceremonial deer-tail. The Huichols always wind up these ceremonies by

Fig. 239.

Fig. 240.

Figs. 239 ($\frac{1}{16}$ in.), 240 ($\frac{1}{16}$ in.). Head-Plume of Elder Brother, and Case in which it is kept. (Length, 64 cm., 71 cm.)

another offering to the west as a sacrifice to the dead, who live in this region, which is called Tatu'xapa.

TAMALES. — At all feasts of the Huichols a kind of corncake is used called *tamal*. A *tamal* is a small quantity of boiled ground corn enclosed in a wrapping of corn-husk (Fig. 241), the contents being boiled in the wrapping. The package, which is oblong in shape, and from 5 cm. to 8 cm. long, is secured by a strip of corn-husk tied round the middle or sometimes also round both ends. This aboriginal dish, which is in common use through the whole of Mexico, is the food most relished by the Indian and the working-classes. It is never kept long, hardly ever more than a day or two; and to the traveller it is the cleanest food which the Indian has, as the husks protect it from dirty fingers. The Indians put no salt in it; but at his greatest feasts the Huichol often mixes beans with the ground corn, and this he considers his choicest dish, though to me it was nauseating. When made wholly of green corn, the *tamales* are nice even to the palate of a civilized man, on account of their sweet, nutty flavor.

Fig. 241 ($\frac{8.5}{7.5}$). Tamal.
Length, 5 cm.

At the feasts, after these cakes have been duly offered to the gods, they are eaten by the people. Sometimes specimens of a smaller kind than usual are specially prepared for the gods for whom they are intended.

According to tradition, that great artisan Elder Brother originated the idea of making *tamales*. Great-grandfather Deer-Tail, who has no wife, was in a great plight, having nobody to rub the corn on the metate and to make corncakes (Mex. Sp. *tortilla*). He therefore asked for food, and Elder Brother told some women to make him *tamales*, but he ordered them to make them small and thin: therefore it is the custom to-day to make small *tamales* and sacrifice them to Grandfather Fire and Great-grandfather Deer-Tail, the ceremony consisting in throwing them into the fire.

FEAST CAKES. — Cakes of another kind, and of considerable interest, are made at the rain-making feasts as well as at the reception of the hi'kuli-seekers on their return from the country of the hi'kuli. They are all made from the same material and in the same way as the corncakes (Mex. Sp. *tortilla*): hence their name, 'small corncakes' (pa'pa ['corncake'] tuli'l ['small']). They are toasted longer, however, so that they become hard. They are tied to a twine of bark-fibre, and are called ko'ka ('bead,' 'necklace'), being considered as so many beads of a necklace. Such cake-strings, therefore, are looked upon as the necklaces of the gods to whom they are dedicated. In Santa Catarina the cakes are very neatly tied on at regular intervals, as seen in Fig. 242. They are then slung round arrows of the respective gods (see Plate IV, Figs. 1-5; cf. also p. 90). The arrows thus decorated are placed in the ground under the niche of Grandfather Fire at the back of the shaman when he is singing in the temple, and

cake-strings are also hung in festoons between them. In San Andrés less care is taken in the arrangement of the cakes (Fig. 243). The custom there is to string them up in festoons round the altar which, at rain-making feasts, has been erected outside of the temple. At the feast of hi'kuli the cakes are not tied to strings, but placed in a votive bowl. Besides, only one kind of cake is used, — the one called ma'ka.

Fig. 242 (1908). Cake-String. (Length, 95 cm.)

Fig. 243 (1909). Piece of a Cake-String.

When the feast is over, the cakes are eaten by the officers of the temple, and, if a great number have been made, some are also distributed to the people. I found the following forms of cakes (Fig. 244) :—

Fig. 244. Forms of Cakes.

- (a) An imitation, probably, of the top of the hi'kuli-plant (*cf.* Figs. 276 *d, f*, 277 *b*). It is called ma'ka.
 (b) The piece of steel used in striking fire from flint (tau'tsu).

(c) A snail-shell (kulu'pu, Sp. *caracol*).

(d) A flower (okoto'tsi) that grows in the Sierra.

(e) An ornamental design found on girdles, as well as in the facial paintings of the hi'kuli-seekers. This scroll, when joined to another, as shown in Figs. 277 *b* and 278 *d*, is a conventionalized expression of the linking of two hands, seen in side view. It is termed by the Indians *pilia'no* or *freno*, that is, 'bridle,' because the Mexican bridles have such a figure on either side of the bit.

(f) A front-shield (neali'ka).

(g) A serpent.

(h) A serpent with indications of scales, a 'plumed serpent.'

(i) An 'eye' (si'kuli).

(j) A dog.

(k) A cock.

(l) A hen.

In my collection are cake-strings dedicated to six gods. Their colors agree with those of the corn belonging to each god. From them the following conclusions are drawn in regard to the form and color of the cakes sacrificed to each (see Plate IV, Figs. 1-5):—

1. For Grandfather Fire, color yellow, forms *a* and *b*.

2. For Father Sun (Tayau'), color red, forms *c*, *e*, *g*, *h*, *i*.

3. For Elder Brother, color blue, forms *d*, *j*, *k*, *l*.

4. For the Corn Mother, color white, forms *b*, *d*, *e*.

5. For Mother East-Water, color light red (in San Andrés white), forms *b*, *e*, *g*.

6. For Mother West-Water, color white, forms *c*, *e*, *f*.

DRUM.—A necessary requisite for two of the feasts of the year is the drum (tê'po), on which the shaman beats with his hands an accompaniment to his song. These two feasts are that of squashes and green corn, and that of *tamales de maíz crudo*. The myth says that in early days the drum used to make a noise of itself in the forest; that it was a walnut-tree, and the chief men of the temple did not know what to make of it till Grandfather Fire taught them how to use it in the temple.

The specimen here shown (Fig. 245) was obtained from the pueblo of

Fig. 245 (1817). Drum. (Height, 64 cm.; diam. about 26 cm.)

Guadalupe Ocotan. It is a log of the big-leaved oak-tree, which has been hollowed out with an iron implement, one end (the upper) being evenly cut off. Over this end a sheepskin is stretched, although deerskin (nāwi') is generally used. The hair, of course, is first carefully scraped off, and the skin applied wet. It extends down the sides about 5 cm. all round. Here it is fastened by a row of pegs made of *otate* (ha'ku) inserted about 2 cm. below the edge, but scarcely visible above the surface, as well as by a narrow strip of sheepskin (or generally of deerskin) wound twice around. The lower end of the log is cut into the form of three clumsy legs about 13 cm. in length. About halfway between the bottom and top of the drum are two square holes (ma'ra ra'va) diametrically opposite each other. The inside is charred and smoky, because during the time the drum is in use, a burning torch of pine wood is repeatedly held inside of it to stretch the skin. The smoke escapes through the holes above mentioned. The drum is not so regularly shaped as might be expected, still it stands steady on its legs, and serves its purpose well.

WANDS.—At the feast of *tamales de maiz crudo* the shaman, when dedicating the heap of *tamales* to all the gods, makes use of a wand, which he holds in

his right hand while uttering his incantations. This staff, which is made from Brazil-wood, is called i'tsu. In the same hand with which he carries it he holds a shaman's plume alongside of it, in the usual position. A similar wand is placed with the ancient idols of Grandfather Fire in their subterranean cavities. It is associated with the god as a symbol of his dignity.

The idea of wands as insignia of command is no doubt very widespread among the Indians of the Southwest, and therefore when the Spaniards conquered the various tribes, they had little difficulty in introducing their canes of command (Sp. *la vara*), which are used to-day by the governors and other authorities, and are

Fig. 246.

Fig. 247.

Figs. 246 ($\frac{8}{3}\frac{5}{3}\sigma$), 247 ($\frac{8}{3}\frac{5}{3}\delta$). Sandals of Ancient Pattern. (Length, 29 cm.)

all made from the same material as the ancient ones, — the heavy red Brazil-wood.

SANDALS.— On the same occasion the shaman wears on his feet sandals of the ancient pattern, which are worn only at ceremonials, ox-hide sandals having entirely taken their place. At the feast of hi'kuli, too, the same ceremonial sandals are used by the shamans. We give here illustrations of two patterns (Figs. 246, 247) more or less carefully executed, both being for the left foot. The specimens were taken from the temple of Guayavas, near the pueblo of San Andrés. They are made from twine of palm-leaves, plaited so as to form a matting somewhat resembling in shape the sole of the foot. They are furnished with lacings of the same material, and both have the single-toe string.

Fig. 248 ($\frac{65}{73\frac{1}{2}}$).
Sceptre. (Length, 81
cm.)

SCEPTRES.— At the same feast a kind of straw sceptre (ipii'tsa) is carried by the male dancers (Fig. 248). It is made of pieces of coarse grass 45 cm. to 50 cm. long, tied together round a ball of oak-leaves. Below the ball of leaves they are brought together so as to form a handle. The flower-spikes have been left on five of the straws, giving the object a peculiar appearance. The straws are tied round the ball with twines of bark-fibre in the manner shown in the illustration. The straws are from a grass the seeds of which are the favorite food of the turkey; and the leaves composing the ball are from the big-leaved oak. After the feast the sceptres are burned.

Za'pa.— At this feast also, certain sticks called za'pa are carried in the hand. They consist of a single piece of wood, pointed at one end. The upper end is cut off even, and decorated with spirals or bands of paint. According to the Indians, they are dedicated to different gods. These ceremonial objects, which are not used on the western side of the river, are very rarely seen in the god-houses. In my collection there are three of them. One (Fig. 249), probably from the god-house of Elder Brother in Têaka'ta, is decorated with a spiral in blue and light

Fig. 249.

Fig. 250.

Figs. 249 ($\frac{11\frac{1}{2}}{18\frac{1}{2}}$), 250 ($\frac{6\frac{1}{2}}{18\frac{1}{2}}$). Za'pa. (Length,
34.5 cm., 37 cm.)

brown, and is called za'pa yoa'wi [blue]. A hawk-feather is attached to its top. Another one, which is of similar appearance only slightly smaller, is from the god-house of the Corn Mother in Téaka'ta, and is adorned with a yellow spiral. It is called za'pa rulé'mě [red]. There are indications that a feather was once attached to this in the same way as to the other za'pa.

At the feast, the young men who serve the food with much yelling, carry such an object in their hands. After the feast is over, these za'pa are deposited in some god-house, together with ceremonial arrows. As to their meaning, it seems that they are connected chiefly with rain-making. The last-mentioned za'pa, to speak like the Indians, "is of water, and remains with water;" that is, with the Corn Mother. It is certain that the purpose of depositing them in the god-houses after the feast is to produce rain.

In Fig. 250 is seen a za'pa, found in the god-house of Ka'tsi in Téaka'ta, which serves the additional purpose of a prayer for luck in handiwork. A votive woollen scrap, woven for the purpose, is tied to the top, and expresses a prayer for luck in making a blanket. On the wood are bands of blue paint (*cf.* Fig. 186).

Fig. 251.

Fig. 251 ($\frac{8}{16} \times \frac{7}{16}$). Banneret of Men. (23 cm. $\times$ 7.5 cm.)

Fig. 252.

Fig. 252 ($\frac{8}{16} \times \frac{5}{16}$). Banneret of Women. (16.5 cm. $\times$ 5 cm.)

BANNERETS. —

Connected with the feast of *tamales de maiz crudo* is a ceremonial 'race, performed by young men and women in separate groups. The goal is a shaman's plume some distance off in a tree; and every one of the runners, on coming back, pierces with a stiff piece of straw a ceremonial animal made of wa've, and gives it to one of the principal men to eat. The little animals are turkeys, deer, etc. The race is managed by

two men, — one in charge of the men, and the other in charge of the women. The former carries in his hand a kind of banneret called matsa'weli or matsa'we (Fig. 251), and the latter carries a similar one called kwiš (Fig. 252). The specimens figured were obtained at the feast given in the temple of San José.

The banneret of the men (Fig. 251) is made of two pieces of bamboo bent over at several equidistant places. Around the middle of these jointed sections a strip of palm-leaf is loosely wound, which keeps them together. A simple matting is thus formed, which is attached by the same strip of palm-leaf to the top of a long bamboo stick.

The other banneret (Fig. 252) is made somewhat more carefully. It consists of five pieces of split bamboo placed together lengthwise, and tied at both ends by thin strips of palm-leaf so as to form a kind of matting. Like the preceding, the matting is tied to the top of a long bamboo stick in the manner shown in the illustration.

The men who carry the banners keep waving them from side to side, and follow behind the runners in order that none may lag behind or fall, but that all may reach the goal. In Santa Catarina the women do not take part in the race.

SEA-SHELLS. — At the same feast, but only on the eastern side of the river, sea-shells are employed as a kind of musical instrument. When the heap of *tamales* is dedicated to the gods by the shamans, some of the people are appointed to blow into such shells five times in the daytime and five times at night. This is done as a signal to all the gods. After the feast the shells are carried to Mesa del Nayarit, where they remain through the wet season, to be afterwards brought back again for the next feast of the same kind. They are kept in Mesa del Nayarit in a god-house. According to tradition, the Chichimecas brought them first from that part of the coast where San Blas is to-day.

Fig. 253 ($\frac{9}{16}$ in.). Sea-Shell. (Height, 8.5 cm.)

I was not able to procure any shell that had actually been used at the feast. The one reproduced in Fig. 253 is, according to my informants, smaller than those. I found it in the god-house of the Sun (Tayau') in Têaka'ta. Its scientific name is *Murex (Phyllonatus) radix* Gmelin, and it is from the South Pacific Ocean, west coast of America. In Huichol it is called ku'ra. When I wanted to buy it, my request was at first absolutely refused by the man who had deposited it, who happened to be one of my party. Although left some years ago, it still remained to him a valuable prayer for life. Money and persuasion at last tempted him to part with it. Through the acquirement of this specimen, which is the only one I have seen in the god-houses, I learned of the interesting custom of blowing into shells just related. The natural markings on this shell symbolize to the Huichols grains of corn and water.

CLOWN'S PARAPHERNALIA. — Peculiar to certain rain-making feasts are a stick and a dried armadillo, which form the paraphernalia of the clown. This person, called in Huichol Sikwai'ki, appears at such feasts in the greater part of the country. However, he is not met with in Santa Catarina. While the clowns are very funny, they are also great 'botherations,' the Indians there

say. I am told that in San Sebastian the appearance of the clown is very general, and he also appears at the Christian feasts. Among the Coras the clown is called Raya'katč (Sp. *Viejo de danza*).

The stick seen in Fig. 254, which was secured at the feast in the temple of Guayavas near San Andrés, has a kind of rattle tied to its head. The rattle is a piece of the small intestines of an ox, about 15 cm. long, the ends of which are tied up to form an inflated bag, in which a few pebbles are placed.

The dried armadillo (ru'ya) pictured in Fig. 255 was secured in the temple of Ocota. It is a specimen of the ordinary kind (*Tatusia novemcincta* Linn.), from which the bones and intestines have been removed; the front part has been partially sewed up again. The animal hangs down at one side of the clown, being suspended in a horizontal position by a loop which passes over his shoulder. The loop is a strong twine made of strips of palm-leaf.

Fig. 254 ($\frac{44}{2814}$). Clown's Stick. (Length, 1.1 m.)

Fig. 255 ($\frac{66}{718}$). Dried Armadillo. (Length, 70 cm.)

The clown carries the stick in his hand, grasping it about halfway down, and he is frequently seen shaking it. At night he prevents people from sleeping by shaking it near their ears and gently hooking on to their clothes with its crooked end. The paraphernalia of the clown belong to the underworld, the stick being that of Grandmother Growth (see p. 51), and the underground animal being her husband, Nāgru'.

GIRDLES. — As has been alluded to before (p. 156), at a feast of green squashes, girdles of ancient pattern are hung in a row next to the ceremonial arrows and squashes, on the altar erected outside of the temple. Their native name is ravela'ruri, while that of the ordinary girdle is xuaya'me. I secured six of these from the temple of Guayavas, near San Andrés. The material is mainly

twine of a light brown ixtle interwoven in longitudinal stripes with yarn, which in three of the specimens is black, and in the other three red, blue, yellow, or even violet or green. They vary in length from 70 cm. to 1 m. or more, and in width from 1.5 cm. to 3.3 cm. These specimens, which I found stored in the temple, are the only ones I have come across. They are not used in the neighborhood of Santa Catarina. At the temple of Pochotita, for instance, a large 'eye' serves the same purpose; namely, to embody prayers for life and rain.

FLOWER-WREATHS. — At this and at certain other feasts the women may be seen wearing on their heads wreaths of two different kinds, — one made from red flowers, and another from yellow flowers. I have specimens of both kinds, obtained in Pochotita at the reception of the hi'kuli-seekers on their return from the hi'kuli country.

In Fig. 256 is seen one composed of red everlasting flowers. They are called *teola'li*, and were dedicated to the Sun (*Tavê'rik^a*). The yellow flowers are called *po'ali*, and are dedicated to the Corn Mother; they may also be seen at certain adopted Christian feasts, for instance Christmas, in which case they are tied to long strings, that adorn the god-houses in festoons.

Wreaths of either kind of flowers are rarely seen at rain-making feasts.

After the feast at which they have been used, is over, they are kept in the private god-houses of the family until the next rainy season, when the seeds are taken from them and sown by scattering them over the fields.¹

Fig. 256 ($\frac{7}{10}$). Wreath of Red Everlastings. (Diam., 29 cm.)

It remains to discuss the objects connected with the hi'kuli feast, with which more symbolic objects are associated than with any other feast.

HUICHOL CALENDAR. — Before the hi'kuli-seekers start on their journey to gather the plants, two strings of bark-fibre are made, — one for the captain of the company to take with him, and another for the man who remains in the temple. Each string is tied into the same number of knots, — as many as there are to be days on the journey. Such a knotted string is called *tapo'li* [Sp. *nudos*, 'knots'] *yê'li* [Sp. *dios*, 'god']. The one figured (Fig. 257) is from Santa Catarina. By means of these strings, which are a form of primitive calendar, the people at

¹ Artificial flowers have the same name as flowers of the field (*rutu'li*). The Indians, in the season, constantly adorn their hats with real flowers, especially red orchids and a very fragrant white flower called in Spanish *Corpus*. They also deposit flowers in the temples, at the sacred pools, and at other sacred localities. The flowers of the pochote-tree, for instance, are offered to Grandfather Fire and Father Sun.

A detailed black and white line drawing of a long, twisted rope or cord, intricately knotted and coiled into a large, irregular loop. The rope is adorned with numerous small, evenly spaced knots or beads along its length. The drawing is set against a plain, light background.

A detailed black and white illustration of a squirrel, likely a chipmunk, sitting upright. The squirrel is wearing a small, light-colored garment with the word "Danas" written on it. It is holding a large, dark, feathery object in its paws. The squirrel has long whiskers and a bushy tail.

STUFFED ANIMALS. — On their journey to and from the country where the plant grows, the hi'kuli-seekers are supposed to be accompanied and guided by the gray squirrel (*Sciurus nayaritensis* Allen), which is called t'aku'. This animal is one of the hero-gods of their mythology, who defended the Sun against the many animal gods who were inimical to him on the day of his birth. Together with the gigantic woodpecker, it helped the Sun to set on that day. In accordance with its diurnal habits, it is believed to be the Sun's companion, and is supposed to know more than other animals, hiding nuts and finding them again. It is considered as the 'cotton' of Grandfather Fire (Tate'vali Kupuriei'ya). Stuffed specimens of this animal may be met with in the god-houses and in the temple, as well as at the hi'kuli feasts.

The specimen shown in Fig. 258 was kept in the temple of Ratontita at the feast of hi'kuli, where it was being used. It has been so prepared that it sits

in an upright position, the hind-feet being turned in, suggesting the posture of a squatting Indian with legs crossed. The fore-paws are held kangaroo-fashion. It was skinned by being opened only from the mouth down to the breast, and all the bones were taken out except those of the paws. It is fairly well stuffed with straw, and the incision has been well sewed up again. A piece of red textile has been put into the mouth as well as in the eyes. The body is partly enveloped in a piece of yellow newspaper, which is bound round with crewel, as well as with a bark-fibre that runs round the middle of the body and at the same time keeps the tail in an upright position along the back. Three feathers are bound by the same fibre to the left side of the body. One is from a macaw, and the other two are from a certain crane that lives on the west coast of Mexico. Round its neck, two wing-covers of a large green shining beetle are tied by means of a twine of ixtle. Two small reddish-colored clay birds are also attached to it,—one round the neck, and one over the stomach; these were bought from Mexican stores, and are the usual toys of children. A large metal crucifix, which the owner retained, hung over the belly of the animal, and formed one of its conspicuous ornaments.

Another specimen which I found stuffed in a crouching position was sitting on a drum in the god-house of the temple of Ocota. Between its fore-paws had been tied a paper match-box of the ordinary kind sold in Mexico. It was spread open, and was supposed to be the squirrel's book, which had been presented to it by the Sun.

Another hero-god that is also found stuffed at the feast of hi'kuli is the small striped skunk *Spilogale*, the species being unknown. The animal is called in Huichol upi'ts. It lives under ground, is of nocturnal habits, and difficult to procure. On the one specimen which I secured in Ratontita, and which is the only one I have seen in use, a paper flower is attached to the mouth, another one to the left fore-paw by a thin copper wire, and a third one covers the anus. At the hi'kuli feast at Ratontita, which I attended, a specimen of this animal and one of a gray squirrel were placed in a corner of the dancing-place, both being tied to sticks planted in the ground, to keep them in an upright position. A fire was made in front of them, and kept burning during the feast. Two jars were standing near by,—one containing native beer; the other, water brought from the hi'kuli country, with which the people had first been blessed, and in which the shaman's sacrificial stick remained throughout the feast.

I have found stuffed animals used only in the southeastern part of the country, where I also saw a kind of rat stuffed for ceremonial purposes. On the western side of the river, as well as in Guadalupe Ocotan, they are not used.

COCOON NECKLACE.—With the gray squirrel is connected a string of cocoons of the moth *Attacus orizaba* Westwood (found from Mexico to the Isthmus of Panama). The specimen shown in Fig. 259 contains seven cocoons, silver gray in color, and from 5 cm. to 9 cm. long. They were brought by the Huichols from the hi'kuli country, and are tied by their upper ends to a string of ixtle.

The string with its cocoons is called ku'tsi, and is put round the neck of a stuffed gray squirrel. These cocoons, which are those of a night animal,— their beds, in which they sleep before coming to life again, — are supposed to be the dreams of the gray squirrel, by which he is guided.

Fig. 259 ($\frac{2}{3}$ Nat. size). Necklace made from Cocoons. (Nat. size.)

TOBACCO-GOURDS. — The tobacco-gourd (ya'kwai) is a most necessary part of the hi'kuli-seeker's outfit. He is seen carrying a dozen or more of them. The specimens pictured (Figs. 260–263) were obtained in San Andrés and Santa Catarina. They are made from gourds raised for the purpose, and those with many excrescences (Fig. 263) are considered the most valuable ones. A round opening is made in the top of the gourd, and it is furnished with a stopper cut from another gourd or from wood, or sometimes a corn-cob is substituted for it. The stopper is attached

by a twine of ixtle to the twine by which the gourd is carried about. This latter twine is strung through two holes on opposite sides of the gourd, knots on the ends preventing it from slipping through.

Tobacco, also called ya'kwai, is carried in one or more of the numerous tobacco-gourds which a hi'kuli-seeker always wears. The shaman is never seen without carrying one or two, even if empty. During the long time of preparation for the hi'kuli feast, as well as at the feast, the hi'kuli-seekers adorn them with designs in yellow coloring-matter, which was brought from the country of the plant. All tobacco-gourds are dedicated to Grandfather Fire, and the significance of the designs should be considered in that light.

In the Huichol conception, tobacco-gourds, as well as all ceremonial ornaments, were alive in ancient times; and, to use the expression of my informant, they are alive yet, although they are only semblances of the originals. Tobacco-gourds were and are serpents, and the sacred package (Fig. 266) inside the gourd is the heart of the serpent. The serpent was the messenger of the fire; but after the world was put into shape, it remained as a tobacco-gourd, and every time the stopper is removed, the Indian hears in the squeaking noise the hissing of the reptile.

In Fig. 260 are seen figures of two deer and one dog. The dots represent, as usual, corn.

Fig. 261 shows two starlike flowers called toto'. The irregular zigzags probably denote clouds, and the spots corn.

In Fig. 262 is seen a 'bed' of the god of fire (Tate'vali italiai'ya), with four plumes of his eagle attached to it. The dots signify corn.

In Fig. 264 is seen a tobacco-gourd enclosed entirely in a scrotum of a deer. The stopper to this is a corn-cob.

Fig. 260.

Fig. 261.

Fig. 263.

Fig. 262.

Fig. 264.

Figs. 260 ($\frac{8.5}{4.1}$), 261 ($\frac{8.5}{4.1}$), 262 ($\frac{8.5}{4.2}$), 263 ($\frac{8.5}{3.5}$), 264 ($\frac{8.5}{3.5}$). Types of Tobacco-Gourds. (Height, 8, 8, 9.2, 11.5, 4.5 cm.)

In this connection we shall consider a tobacco-gourd used entirely for ceremonial purposes (Fig. 265). This beautiful little gourd, which is furnished

with a short string, is from Santa Catarina. It is ornamented at four diametrically opposite points with coils made of strings of green, yellow, and white beads, each coil representing a 'face' of Elder Brother (Tama'ts Pa'likē Tamoye'kē neali'ka). It was placed on the altar of the god-house of the hunter, together with ceremonial arrows and votive bowls, and expresses a prayer for the death of the deer.

Fig. 265 ($1\frac{1}{2}$ ff.). Ceremonial Tobacco-Gourd. (Height, 4.5 cm.)

SACRED TOBACCO. — The hi'kuli-seeker carries inside of one of his tobacco-gourds filled with tobacco a diminutive package of sacred tobacco (Fig. 266).

This small quantity of tobacco, which is given by the captain to every one while on the road, is enclosed in a wrapping of corn-husk, and looks like a small *tamal*.

Fig. 266 ($\frac{1}{2}$ ff. a). Package of Sacred Tobacco.

Like tobacco and the tobacco-gourd, it is called ya'kwai. Any one who carries this sacred package is under strict ceremonial regulations. The hi'kuli-seekers walk in a certain order, which must never be broken, nor must any private person pass in front of one who carries ya'kwai. These and further restrictions, which include the separation of husband and wife, and forbid bathing and the eating of salt, all come to an end when the ya'kwai is burned at the feast of hi'kuli.

HATS. — The hi'kuli-seekers are always seen with plumes stuck on their home-made straw hats, often in great profusion. In the collection is one hat the brim of which is entirely covered with tail-feathers of the turkey, the quills having

Fig. 267 ($\frac{5}{8}$ ff.). Hi'kuli-Seeker's Hat. (Diam., from brim to brim, 45.5 cm.)

been attached to a string tied round the crown. In Fig. 267 is seen one adorned with tails of the gray squirrel. Round the crown are tied a hair-ribbon and an anklet of beads.

The symbolic designs of the cross, each consisting of two pieces of red flannel sewed to the hat, are decorations common to all hats.

FEATHER ORNAMENT. — At the feast of hi'kuli a feather ornament called irau'li is largely used (Fig. 268). It consists of a small wing-feather of a parrot, attached to a cord of ixtle tied round its quill. The ixtle is sufficiently stiff to make a kind of prolongation of the quill. Such feathers are tied to a hat

Fig. 268 (1833 a-f).
Feather Ornament.
(Length of feather, 11
cm.)

generally in great profusion, together with the usual feathers of the hawk, eagle, etc. Sometimes, as we have seen, they are tied to ceremonial arrows and to chairs, and they express prayers for life. They may also be seen tied to the hat at other feasts, for instance those for making rain, and used in much the same way as flowers.

SERPENT STICKS. — On the occasion of the feast, the dancers, both men and women, carry certain decorated bamboo sticks called iwa-i'tsa (in San Andrés, i'tsu). The sticks are held in an upright position, resting against the shoulder. In Figs. 269-272 are seen four of these sticks, selected as fit representatives from a collection of thirteen which were found in the god-house close to the temple of Guayavas, as well as in the temple of Ocota. The decorations consist of shallow carvings made with a knife, and smeared with burnt grass of a certain kind mentioned on p. 35. In two specimens from Ocota they are painted with indigo.

These sticks all represent the serpent Ha'tsi, which is supposed to have once been Great-grandfather Deer-Tail (p. 35). Although the markings, which represent those of the serpent, vary considerably, they may, on close examination, well be reduced to one common form, the clearest representation of which is seen in Fig. 271. Each of these markings, on the live snake as well as on its symbol,

Fig. 269.

Fig. 270.

Fig. 271.

Fig. 272.

Figs. 269, 270, 271, 272 (345). Serpent Sticks. (Average total length, 1.1 m.; thickness, 1.5-2.5 cm.)

represents a butterfly (kupi'ts), the symbol of summer and rain. The zigzag lines represent the tail of the serpent. To judge from these zigzag lines, which universally indicate the rattle of the rattlesnake (see, for instance, similar carvings on tobacco-gourds and flutes), the serpent must be a kind of rattlesnake. In a conventional way the zigzags have often been put at both ends, and in one instance in the middle, of the sticks.

Thus in the dance of hi'kuli we have a veritable representation of a 'serpent dance,' the performers carrying in their hands conventionalized representations of rattlesnakes.

DEER-TAILS. — The male dancers at the hi'kuli dance carry in one hand a deer-tail (ma'ra kwa'ri). The bones of the tail have been removed by pulling the skin off without cutting it, and a stick has been inserted instead, to keep the

tail stiff, and at the same time serve as a handle. While dancing, the men thrust the deer-tails out in different directions, suggesting the presence of the deer themselves. They are frequently found in the god-houses and sacred caves. The specimen here pictured (Fig. 273) is from the god-house of Elder Brother, near the temple of Guayavas.

Fig. 273 ($\frac{9}{16}$). Deer-Tail of Elder Brother. (Length, 35 cm.)

COMBS. — The dancers carry attached to their girdles combs, called matsi'kyu, or, more completely, Tato'tsi Ma'ra Kwa'ri matsikyu'ya, because they are dedicated to Great-grandfather Deer-Tail. The specimen seen

in Fig. 274 was procured at the feast of hi'kuli at Ratontita. The material from which these combs are made is the fibre of a small species of century-plant, called in Spanish *lechuguilla*. I have no doubt that it also grows in the Huichol country, as it is a plant commonly seen through the moderately warm countries of Mexico. The mode of manufacture of this object, which looks much like a small whisk broom, is evident from the illustration. The handle is made by tying the 'whisks' around with a twine of ixtle. In its windings the twine is made to pass under small bunches of the fibres in such a way as to form designs of the butterfly, the

Fig. 274.

Fig. 275.

Figs. 274 ($\frac{9}{16}$), 275 ($\frac{1}{16}$). Combs. (Length, 25 and 11 cm.)

same as seen on the serpent sticks (Fig. 271). An end of the twine is left free for attachment. The twine, and the tips of the comb, are colored with Brazil-wood dye. The combs vary in length from 11 cm. to 25 cm.

Fig. 275 shows another comb, in which the ornamentation produced by the windings represents the same design, butterflies.

After the feast is over, the people — no doubt to their mind 'new people' — comb their hair with these combs, which are used for one year, that is to say, until the next hi'kuli feast.

X. — FACIAL PAINTINGS.

The hi'kuli-seekers, during the months of preparation for the feast, as well as at the feast, paint their faces with various designs in yellow. Both the root from which the coloring-matter is obtained (p. 25) and the piece of stone on which it is rubbed are brought from the country of the hi'kuli. The paint is applied with a straw; and each man adorns himself by the aid of a mirror, or two may help each other in turns, both squatting during the operation. I have seen faces being painted both at the feast given on the return of the hi'kuli-seekers to their country and at the great feast itself. On the former occasion the painting was done at sunset, and on the latter in the middle of the day, when the dance, which had begun a little before midnight, was about half finished. When arriving at the temple on their return, not only do all members of the party have their faces painted, but the legs of the mules that carry the loads of hi'kuli are ornamented with similar designs. Also tobacco-gourds, a necessary part of their outfit, are, as we have seen, constantly kept adorned with designs of the same character. During the time of preparation for the feast the painting is done in accordance with the inclination of the individual or the dictates of the leading man, but without any regularity. Sometimes fresh designs are put on every day, and again they may be omitted for a week or more. The hi'kuli-seekers' wives also have their faces painted, the women being as expert in the art as the men.

As we have seen, the hi'kuli cult is intimately connected with the worship of the god of fire, who, on account of the imposed taboos (p. 18) keeps the seekers as 'prisoners' until the feast has been observed. Although the paintings are all made in yellow, the color of fire, they represent the faces of several gods, or more probably of all the gods.

Facial paintings are called u'ra ('spark'). A more complete name is u'ram [spark] ta'rai [yellow root, namely, that of the hi'kuli country]. The same names are applied to the decorations on the tobacco-gourds and to those on the mules.

During my last stay among the Huichols, in order to discover if possible the meaning of these designs, I had two different shamans make some for me. I drew faces of natural size on a paper, and gave a number of them to each of my friends to adorn in their own way, — as many as they could be induced to make. The result is given in Figs. 276–278. As will be seen, there is a difference in the technique of the two series, the best executed designs (Figs. 276, *a*, *c–f*; 277, *b–e*; 278, *a*, *c*, *f*) having been made by the younger shaman assisted by his wife; but the others are equally interesting.

It is seldom that facial paintings are as elaborate as most of those presented, much depending on the artistic ability of the man. Even a few scattered daubs on the face may sometimes serve the purpose; but on festive occasions everybody does his best to turn out a fine painting. The most common patterns used are those representing hi'kuli, flowers, clouds, and corn. These will easily be

a

b

c

d

e

f

FIG. 276. FACIAL PAINTINGS

a *b*, Of Grandfather Fire; *c*, Of Great-grandfather Deer-Tail; *d*, Of Father Sun; *e*, Of the Setting Sun; *f*, Of Elder Brother.

recognized in the illustrations, which, in their general characteristics, give a good idea of the actual paintings.

1. FACE-PAINTING OF GRANDFATHER FIRE (Tate'vali Nealikai'ya Urai'ya), Fig. 276, *a*. — The three circular figures on the forehead are pictures of hi'kuli, which plant, growing on a level with the ground, presents a somewhat similar appearance when viewed from above (*cf.* Fig. 2). As we have seen, hi'kuli may be considered as the votive bowl of different gods: therefore such a design as this also represents a votive bowl, and it is worthy of note that such representations of hi'kuli bear an unmistakable resemblance to the netted shield (see Figs. 276, *d, f*; 277, *a*). The descending parallel lines on the cheeks are tail-feathers of the royal eagle (Vê'lika kwa'ri), and those below are raindrops (wita'li). The serpentine lines on the nose and chin are representations of the fire-serpent Sipuli ki'a. The small crosses are sparks. The two men are representations of the god of fire himself, and all the rest of the paintings are phases of the fire.

2. FACE-PAINTING OF GRANDFATHER FIRE (Fig. 276, *b*). — On each cheek is a back-shield or 'bed' (Tate'vali na'ma italie'ya). The one on the right cheek has the following meaning: The curved lines are eagle-plumes of the god of fire (Tate'vali Vê'lika mōye'li); the longitudinal parallel lines are the 'bed' of Grandfather Fire (Tate'vali italie'ya); and the short horizontal lines emanating from the innermost longitudinal line are ears of corn. The back-shield on the left cheek is more complete, being carried out in greater detail, so as to resemble the real back-shield, and it has the same meaning. Above the forehead, as well as on each side of the face, are five representations of a serpent called Kōwivyo'. It is blue and yellow, and in the Indian conception is seen above the rainstorms when the latter are approaching. The two crosses are sparks, and the dots corn.

3. FACE-PAINTING OF GREAT-GRANDFATHER DEER-TAIL (Tato'tsi Ma'ra Kwa'ri Nealikai'ya Urai'ya), Fig. 276, *c*. — The barbed lines¹ on top, sides, and chin are clouds (hai). On the cheeks and nose is a picture of corn-fields, the barbed longitudinal lines on the sides showing the boundaries of the fields. Between the boundaries are ears of corn, indicated by spots.

4. FACE-PAINTING OF FATHER SUN (Tayau' Nealikai'ya Urai'ya), Fig. 276, *d*. — Over the forehead are two red-tailed hawks, a female on the right side of the face, a male on the left side. Next to each is a serpent, and between the serpents a row of clouds. On each side of the face are three figures representing hi'kuli, underneath which are raindrops (wita'li). On each cheek is a front-shield or face, representing the Sun himself (Tayau' neali'ka). On the chin is a row of burning candles (kati'la, *Sp. vela*), above which on either side are clouds. The custom of burning candles has of course been introduced through the influence of the Catholic Church.

5. FACE-PAINTING OF THE SETTING SUN (Sakaimo'ka Nealikai'ya Urai'ya), Fig. 276, *e*. — The square on the nose is the earth (kwi'atsa). From it springs

¹ By a 'barbed line' I mean a line set with square teeth either on one side or on both sides.

a

b

c

d

e

f

FIG. 277. FACIAL PAINTINGS

a, Of Elder Brother Wa'kuli; *b*, *c*, Of the Corn Mother; *d*, Of Mother East-Water; *e*, Of Mother West-Water; *f*, Of Mother Ha Uli'ma.

forth over the forehead the squash-vine with its squashes (the dots) and flowers (the barbed edge). On each cheek is a heap of ears of corn in the harvest time. On the chin are barbed lines representing clouds (hai).

6. FACE-PAINTING OF ELDER BROTHER (Tama'ts Pa'likě Tamoyé'kě Nealikai'ya Urai'ya), Fig. 276, *f*.—On each cheek is a hi'kuli. On the chin is a row of burning candles such as are placed when the Indians go out hunting deer. The three remaining figures on the face are arrows. On the forehead is a male deer in a snare which has been tied to a tree. Down on the right are two dogs in pursuit of it. In front of the captured deer is an open snare placed between two sticks and tied to a tree, ready for use. A roe chased by a dog is running into it. The vertical lines on the right represent rain (wita'li).

7. FACE-PAINTING OF ELDER BROTHER WA'KULI (Tama'ts Wa'kuli Nealikai'ya Urai'ya), Fig. 277, *a*.—This god is probably an impersonation of Elder Brother. On the cheeks are pictures of hi'kuli. Below the mouth, and extending up on both sides of it, is a design representing the vine ha'pani. The dots signify corn. The designs all round the edge of the face and over the forehead, as well as over the nose, are ornamental, and called sika'li.

8. FACE-PAINTING OF THE CORN MOTHER (Táte' Otegana'ka Nealikai'ya Urai'ya), Fig. 277, *b*.—Down along the cheeks and over the mouth, as well as on the nose and chin and round the edge of the face, are barbed lines which represent clouds (hai). On the cheeks are representations of hi'kuli or votive bowls. On the nose is a scroll design which I have termed 'freno' (*cf.* Fig. 244, *c*). It is one of the most important ornamental designs, and frequently used. It is derived from the clasping of hands, and here is a very interesting case where the original meaning of the design is evident. The votive bowls on the cheeks belong to different goddesses, the one on the right cheek being that of Ka'riwali (Ka'riwali urai'ya nealikai'ya), and the one on the left that of the Corn Mother (Táte' Otegana'ka urai'ya nealikai'ya). The two goddesses are sisters, or perhaps impersonations of the same goddess, and their identity is symbolized by the 'freno' design over the nose. The three S-shaped, barbed figures on the chin are certain small animals said to be caterpillars (called in Spanish *gusano* and in Huichol kwi'ster), which live on the trees in the wet season, boring under the bark. The descending lines on either side of the chin are raindrops.

9. FACE-PAINTING OF THE CORN MOTHER (Fig. 277, *c*).—On each cheek, next to the nose, is the hi'kuli of fire, while farther back on either cheek is the hi'kuli of corn. The former are votive bowls of Grandfather Fire, and the latter those of the Corn Mother. On the nose are clouds (hai). On the chin is a squash-vine with three squashes. Across the forehead are three rows of clouds (hai), and on the middle of it two coiled serpents (Hai'ku) with heads facing each other. The result of the clouds is seen in the descending rain, and the grains of corn below it.

10. FACE-PAINTING OF MOTHER EAST-WATER (Táte' Naaliwa'mi Nealikai'ya Urai'ya), Fig. 277, *d*.—The face is covered with serpents, or, which is the same

a

b

c

d

e

f

FIG. 278. FACIAL PAINTINGS

a b Of Young Mother Eagle *c*, Of Rutu'li Iwia'kami; *d*, Of Young Mother Wa'ra; *e*, Of Mother North-Water; *f*, Of the Singing Shaman.

thing, the picture of a rainstorm (nonalite'r). A few grains of corn are scattered among the serpents. The barbed lines are clouds (hai). However, the inner row of barbs depending from the outer barbed line represents rain (wita'li).

11. FACE-PAINTING OF MOTHER WEST-WATER (Tâte' Kyewimo'ka Nealikai'ya Urai'ya), Fig. 277, *e*. — The partly barbed curved lines on the cheek are tail-feathers of the hawk Piwa'mi attached to the 'bed' of the Mother, indicated as usual by the longitudinal parallel lines. On the nose is a serpent (Hai'ku) with three grains of corn near it, and surrounded above and below by clouds (hai). On the chin is a similar serpent. All the barbed lines are clouds, and the dots corn. The serpentine line and the straight line in the outline of the face are indicative of trees sprouting.

12. FACE-PAINTING OF MOTHER HA ULI'MA (Tâte' Ha Uli'ma Nealikai'ya Urai'ya), Fig. 277, *f*. — 'Ha' means 'water.' Which one of the rain Mothers this is, is difficult to say, but it is one in the west. On each cheek is a front-shield. On either side of the nose is a back-shield or 'bed' with plumes attached. Above the eyebrows is the maize-plant (iku' é'tsi). The figure between the eyebrows is a god-house. The star-like figures scattered everywhere represent the flower toto' (more correctly, toto' sikuta'mi, p. 65).

13. FACE-PAINTING OF YOUNG MOTHER EAGLE (Tâte' Vê'lika Uima'li Nealikai'ya Urai'ya), Fig. 278, *a*. — On the nose as well as on the forehead and on the sides of the face, is the vine ha'pani. On each cheek is a flower of the same plant (ha'pani rutu'li), which is white, red, and yellow. On the chin are figures representing clouds, green corn, and sugarcane.

14. FACE-PAINTING OF YOUNG MOTHER EAGLE (Fig. 278, *b*). — On each cheek is a representation of the eagle in front view. On the border of the right cheek, as well as on the chin, are six deer (five male, and one female) and a dog. Along the forehead are six bluejays, or, as the Indians expressed it, 'jay plumes' (wa möye'li).

15. FACE-PAINTING OF RUTU'LI IWIA'KAMI (Rutu'li Iwia'kami Nealikai'ya Urai'ya), Fig. 278, *c*. — Rutu'li Iwia'kami ('flower skirt') is the sister of Young Mother Eagle, and is considered identical with her. The barbed lines on each side of the face are bamboo reeds (ha'ka), from which arrows are made, and the same meaning is attached to the rest of the barbed lines. The barbed S-shaped figures are the roots of the bamboo-plant (ha'ka nana'li). Round the mouth is the representation of the root of a vine which grows in the wet season, and which is found among the roots of the ha'ka. On either cheek is a picture of a flower, Rutu'li Iwia'kami, the name of the goddess as well. Four venomous serpents of a species called Mošia'ka are represented. This serpent is about two feet long, and found in the hot country (Tierra Caliente).

16. FACE-PAINTING OF YOUNG MOTHER WA'RA (Tâte' Wa'ra Uima'li Nealikai'ya Urai'ya), Fig. 278, *d*. — The name alludes to the Virgin Mary as patron saint of Mexico, called 'Guadalupe,' and is another impersonation of Young Mother Eagle above. On each cheek is a back-shield or 'bed' with plumes

of the royal eagle attached. The descending lines inside the back-shield are candles. The short lines emanating from it are corn. The four figures over the left eye represent the flower *toto'*, and the eight figures along the edge of the face from the chin upwards are called 'angel pictures' (*ai'keli nealikai'ya*). The two children who perform at certain sacrificial feasts are called 'angels' or '*ai'keli*' (see p. 120, Fig. 126, *e*). The design across the forehead, and extending down on the right side of the face, represents the *freno* design first mentioned under Fig. 244, *e*.

17. FACE-PAINTING OF MOTHER NORTH-WATER (*Täte' Hau'tse Kupu'ri Nealikai'ya Urai'ya*), Fig. 278, *e*. — On each cheek, as well as on one side of the chin, is a front-shield. On the left side of the chin is a parrot with a large tail (*totowi' kwarie'ya*). Above the mouth is a squash-plant (*kuluku'r*). The two rows above the eyes are ears of corn, and the curved lines between the eyebrows are ornamental.

18. FACE-PAINTING OF THE SINGING SHAMAN (*Malea'kami Nealikai'ya Urai'ya*), Fig. 278, *f*. — All the lines indicate tracks (*há'ye*), which run round a corn-field, the latter represented by the dots (ears of corn). The tracks are those of wind, rain, and water.

XI.—MISCELLANEOUS SYMBOLIC OBJECTS.

Under this heading are included certain symbolic objects which it was not possible to classify with those hitherto treated.

Fig. 279 shows a pipe of Grandmother Growth (Nākawe' yana'ya),—a piece of bamboo one end of which is closed through a natural growth of the plant, the

Fig. 279 ($\frac{6}{63\frac{1}{2}}$). Representation of Grandmother Growth's Pipe. (Length, 15.5 cm.; diam., 2 cm.)

piece having been cut off just below one of the joints. It is colored black, and has daubs of white, brown, and red all over it. About the middle are two blue beads, fastened by means of beeswax. This symbolic pipe, which the supplicant left filled with tobacco, was sacrificed to gain luck in raising tobacco. To-day among the Huichols only the hi'kuli-seekers use pipes on their journey. The name for these is osoya'na. The bowl is of clay, and the stem is a piece of bamboo reed.

Fig. 280 is a small carved stick of bamboo, called i'tsu, of the same kind, only diminutive in size, as those mentioned on p. 193. It was found in the god-house of Elder Brother, near the temple of Guayavas, where it was deposited by a man who wished luck in making the sticks used at the dance.

Fig. 280 ($\frac{6\frac{1}{2}}{4\frac{1}{2}}$). Diminutive Serpent Stick. (Length, 19 cm.)

Fig. 281 shows a diminutive drum of Elder Brother (Tama'ts Pa'likē Tamoyē'kē tē'po), from the same god-house. It is a cylindrical piece of wood, one end of which is cut into the form of three legs. It is adorned all over with variously colored glass beads, and was deposited by a shaman who desired luck in making a drum.

Fig. 281 ($\frac{6\frac{1}{2}}{4\frac{1}{2}}$). Diminutive Drum of Elder Brother. (Height, 4.5 cm.; diam., 3.2 cm.)

There are in the collection six specimens of such small drums, decorated with glass beads or painting of some sort. One is dedicated to Grandmother Growth, while two belong to Elder Brother, one to Mother West-Water, and one to Ka'tsi. Some of them are made with four legs. The prayers expressed by the drums are in most cases for luck in making real drums. One of them embodies, besides, a prayer for rain and for green corn. Another is a prayer for the recovery of a sick child. One of the Elder Brother drums (Fig. 282) expresses the prayer of a shaman that he may not get tired of beating the drum. The top of this drum is decorated with variously colored beads, which have been stuck on to four daubs of bees-

Fig. 282 ($\frac{6\frac{1}{2}}{4\frac{1}{2}}$). Diminutive Drum of Elder Brother. (Height, 3.5 cm.; diam., 4.2 cm.)

wax, each decorated daub signifying the heart of Elder Brother.

Fig. 283 shows one of a pair of sandals taken from the god-house of Elder Brother, near the temple of Guayavas. They are the shaman's ceremonial sandals

in diminutive size (p. 183). Such a pair is placed every five years in the god-house, on behalf of a child who wants to become a singing shaman.

Often the small sandals are attached to arrows; and as the real sandals are used at two feasts of the year, the prayers expressed by the diminutive sandal vary. In one case a shaman prays that he may eat *tamales* at the feast of *tamales de maiz crudo*; and, as that feast cannot come off without killing deer, he indirectly asks for luck in killing deer. In another case he asks for luck in singing at the same feast.

Fig. 283 ($\frac{1}{4}$ in.). Diminutive Shaman's Sandal. (Length, about 9 cm.)

In Fig. 284 is a representation of the tobacco-gourd of the hi'kuli-seeker. It is a small piece of wood carved into an oval shape. Through a hole pierced longitudinally in it, a string is passed to represent the string of the real tobacco-gourd. On opposite sides are small daubs of beeswax, to which a few beads were evidently once attached. This little object had been deposited by a man who raises the kind of squashes from which tobacco-gourds are made; and the prayer expressed is that he may

succeed in raising squashes covered with many excrescences or abnormal growths on the outside. This kind, as will be remembered, is considered of much more value than squashes with a smooth surface.

Stems of squashes, mentioned on p. 172, are also deposited at certain sacred places for luck in raising squashes. I have seen specimens in the cave of Mother West-Water, in the little temple of Grandfather Fire in Têaka'ta, and in the cave of Grandmother Growth. I was told that every supplicant leaves five stems and burns five others in the middle of the field which he makes ready for the planting of squashes.

Fig. 285 shows a stick of Brazil-wood called kalatsi'ki. It was secured in the temple of Santa Catarina, where it had been made by one of the officers of the temple in order to be taken later to the little temple of Grandfather Fire in Têaka'ta. It is flat, slightly curved sideways, and is notched on both edges for more than half of its length, the rest of the stick serving as a handle. It symbolizes the notched deer-bone against which the shoulder-blade of the deer is rubbed to produce a rattling accompaniment to the hunting-song. The noise is supposed to be specially efficacious in decoying the deer into the snare: hence a symbolic stick like this is deposited for luck in killing deer.

Fig. 284.

Fig. 285.

Fig. 284 ($\frac{1}{4}$ in.). Representations in Wood of Hi'kuli-Seeker's Tobacco-Gourd. (Length, 2 cm.)

Fig. 285 ($1\frac{1}{2}$ in.). Wood-Carving representing Notched Deer-Bone or Kalatsi'ki. (Length, 37 cm.; greatest width, 2 cm.)

I give here an illustration (Fig. 286, *a*) of the real kalatsi'ki, a metatarsal bone of a deer, as well as the shoulder-blade (Fig. 286, *b*) with which it is rubbed, also taken from a deer. The first-named bone is from the left side, and the notches are made on the inner side; towards one end the notches become shallow incisions. On the shoulder-blade, which is taken from the right side, are transverse incisions across the two long borders of the concave surface. When in use, the shoulder-blade is held with the right hand by the spine, and rubbed against the notched bone held in the left hand. This rubbing of bones accompanies the song in the house during the entire night before the hunt, and singing with a similar accompaniment is kept up for one night after the return of the hunters.

I learned, however, that a more important instrument of accompaniment to the hunting-song is the musical bow, which is of the same kind as that used by the Coras, and practically the same as the one found among the southern Tepehuanes and the few neighboring Aztecs. As the musical bow is at present attracting considerable notice, it may be of interest to describe here the one found among these latter tribes (Fig. 287). It is considerably longer, thicker, and narrower than the ordinary bow. Among the Coras it exceeds the ordinary bow in length by about 30 cm.

Its necessary accessory is a resonator in the form of a large gourd, on top of which it is placed. The gourd selected for the purpose is round, and compressed from the ends. It rests on the ground with the neck turned upwards. A large circular hole is carved out of the lower end, and a smaller hole is to be found on the side. The bow, having been made taut, is placed on the gourd with its back down, the middle part resting on it. The shaman, who when playing is seated on a stool or a kind of bench, keeps the bow steady by a cross-piece of fat pine wood, which he presses with one foot. This piece of wood, which is about 70 cm. long, 3 cm.

Fig. 287 ($\frac{85}{32}$, $\frac{105}{35}$, $\frac{105}{35}$). The Musical Bow of the Southern Tepehuanes and the Aztecs. (Length of bow, 1 m. 36.5 cm.; diam. of gourd, about 38 cm.)

Fig. 286, *a* ($\frac{45}{32}$), Notched Deer-Bone or Kalatsi'ki; *b* ($\frac{65}{31}$), The Shoulder-Blade with which *a* is rubbed. (Length, 23 cm. and 16 cm.)

wide, and 2 cm. thick, has a transverse slit at one end, to fit the back of the bow, over which it is placed. This tends to keep the bow more steady than the

sandalled foot could do, the use of a stick also precluding any interference with the resonance of the gourd. This custom prevails among the southern Tepehuane Indians and the neighboring Aztecs. The Coras, however, glue the back of the bow solidly to the gourd, for the occasion, thus making one instrument of them. They also place the gourd over a small excavation in the ground in order to increase its resonance.

This musical bow is played by two thin round sticks of tough, heavy wood, each about 40 cm. long. It produces a loud sound, resembling, at some distance, that of the Huichol drum, yet with a rather pleasant mixture of the 'cello, more apparent when near by.

The musical bow has the same name as the shooting bow, and is called by the southern Tepehuanes, and their neighbors the Aztecs, *tawito'l*. By the Coras the name *tunamo'ti* is applied. The Huichols call it *tōpi'*. The gourd and the playing-sticks, as well as the stick on which the foot is put, have their special native names. In the Nahuatl (Mexicano) of that region the playing-sticks are called *otsu'l*, and the stick with which the player keeps the bow from moving is called *kwa'wite*. Among all these tribes, with the exception of the Huichol, it is used at religious ceremonies, when it takes the place of the drum of the latter tribe. These facts settle beyond doubt the question recently raised, whether or not there is a musical bow indigenous to America. To deny its existence among the Coras and their northern neighbors would be equivalent to doubting the originality of the Huichol drum.

Among the Huichols the musical bow is rare, but I heard of its use on the eastern side of the river. It is beaten with two arrows,—one of Elder Brother, and another of the Setting Sun. Probably the choice of accompaniment depends upon the decision of the shaman. The notched bones or the bow are specially used at the time before clearing the fields in the winter for the coming year, work on which cannot be commenced until a deer has been killed.

Fig. 288 shows a bunch of six deer-hoofs called *riku'a* ('rattling objects' or 'bells') taken from the god-house of Elder Brother. Each is attached to the end of a twine of bark-fibre in the following way: A hole is made longitudinally through the point of the hoof, the extreme point being cut off for the purpose. Through this hole the twine is put, and a knot is tied in it to prevent the hoof from slipping off. The six twines are tied together at their ends. The bunch was deposited to obtain luck in hunting deer.

In Fig. 289 is seen a strip of deerskin, which is tied round the ankle in order to secure luck in hunting. The skin, apparently taken from the stomach

Fig. 288 ($\frac{25}{1}$). Bunch of Deer-Hoofs. (Total length, about 18 cm.)

of the animal, is cut into a rectangular form, with long narrow strips extending from the corners of one of the short sides. To the opposite corners two red woollen tassels are attached by yellow strings. Such ankle ornaments are not in common use, but may be seen at the dance of the hi'kuli feast.

In the god-house of Elder Brother at Têaka'ta I found the skin of the

Fig. 289 ($\frac{8}{401}$). Deerskin Anklet. (Total length, 71 cm.)

Fig. 290 ($\frac{8}{1082}$). Cow of Burnt Clay. (Length, 9.5 cm.)

Fig. 291 ($\frac{8}{820}$). Cow of Beeswax. (Length, 8 cm.)

hawk Piwa'mi, left as a prayer for luck in killing birds. It was complete with the exception of the wings, which were missing.

Fig. 290 shows an image of burnt clay, representing a cow, which was found in the cave of Grandmother Growth at Santa Catarina. On both sides it is adorned with white beads on three daubs of beeswax. It is a prayer for luck in raising many large cattle. The same prayer is expressed by the cow represented in Fig. 291. It was found deposited on the altar in the church of San Andrés. It is made of beeswax, and adorned all over with blue, white, and black beads.

Finally it should be mentioned that I have found diminutive jars of clay as well as diminutive *comales* (cf. p. 78) deposited in the cave of Grandmother Growth, near Santa Catarina, as prayers for luck in the manufacture of large utensils of the same kind.

XII. — CONCLUSION.

From the symbolism of the Huichols it may be inferred that the main thought of their prayers is food,—corn, beans, and squashes. Even in the hunting of the deer, the primary consideration is that the success of the chase means good crops of corn. This is illustrated in the picture of the corn-plant on the deer-snares shown in Fig. 19. The means of providing food is rain: therefore most of the symbolic objects express, first of all prayers for rain, and then prayers for health, good fortune, and long life. In many cases the supplicant himself is represented on symbolic objects in the shape of a human figure or a heart; but in others the god is thus depicted.

It seems probable that the act of sending a prayer to a god is symbolized by attaching a representation of the prayer to an arrow. The direction which the arrow is to take seems to be indicated by the painting of the rearshaft of the arrow, which is symbolic of the deity. In other cases the prayer is directed to the god by placing the symbolic object representing the prayer in the temple of the deity or by tying it to his chair or placing it in his votive bowl.

In the preceding chapters the symbolic objects described have been classified according to their form. In conclusion I will give a review of the prayers expressed by these objects and of the symbols utilized by this Indian tribe.

PRAYERS. — Speaking in a general way, arrows and back-shields seem to convey mostly individual (or personal) prayers, while front-shields mostly serve to convey tribal ones. 'Eyes' cover both purposes to an almost equal extent.

In regard to prayers, as in most cases of symbolism, we can trace a connection between the object and the symbol expressing it, although often the two seem at first glance to bear no relation to each other.

It is easy to understand how their chief prayer, that for rain, is embodied in idols, in the mask, face, or eyes of the gods, and in rocks and stones of odd shape, as well as in symbolic representations of all the paraphernalia of the gods,—their arrows, front-shields, back-shields, staffs, and girdles. We also find it expressed in reproductions of animals, and of various natural phenomena connected with rain, such as the sea, clouds, lightning, and rivers; and, finally, even in artificial objects associated with water, such as the ark of the Deluge Legend.

We also readily understand the relation of prayers for success in raising corn, beans, and squashes, to arrows, front-shields, and disks, or to the back-shields of the Mothers who created these plants, the object of the prayer often being depicted on or attached to the symbol. Such prayers are also often found applied in beadwork to chairs, stools, or votive bowls of the goddesses, or painted on these objects. Sometimes real kernels of corn are fastened to the inside of a votive bowl, and dried stems of squashes are deposited in the god-houses, to convey the same idea. The ceremonial objects which express prayers for rain

and bountiful crops are also used to implore the gods to grant, what to the Indian is next in importance, health and long life. But there are, besides, some special symbols that pray for these blessings, as, for instance, small bamboo sticks, — representations of the staff of the Mother of the gods, which is a symbol of longevity. Other symbols used as prayers for health and long life are parrot-feathers, artificial flowers, a spiral painted on the rearshaft of an arrow, a red thread tied around an arrow, but, above all, wads of cotton-wool, on account of their resemblance to the clouds that bring rain, the original source of all life and health. Still, cotton-wool, in itself the chief symbol of clouds, may also be used to convey prayers for luck in raising cotton-plants.

Prayers in regard to cattle, mules, and other domestic animals, as well as for success in making arrows, bows, chairs, stools, back-shields, bamboo serpent-sticks, drums, textile work of any kind, and earthenware or other implements, are expressed by sacrificing diminutive representations of the articles in question.

Luck in raising squashes from which tobacco-gourds are made, is asked for by sacrificing a diminutive tobacco-gourd attached to an arrow or to a chair. Generally, however, this little gourd expresses a prayer for luck in killing deer, because its prototype, so necessary a part of the hi'kuli-seeker's outfit, gives success in hunting deer. It may also express a woman's prayer that her son may become a shaman.

Prayers against evil or accidents are expressed by depicting on a back-shield the source from which danger threatens. Thus, a person fearing that the scorpion may bite his fowls, deposits with the gods a piece of woollen cloth on which is embroidered the picture of a scorpion between two hens; for the purpose of protecting his cattle against the mountain-lion, a man will sacrifice a back-shield with a picture of that ferocious animal on it. Frequently special devices are resorted to, such as cutting holes in pieces of cocoons found on the Madroña tree and placing them on the bed of Grandmother Growth as a prayer that the wind may not drive away the clouds, but pass on through the holes. A double vessel of burnt clay serves the same purpose. Protection against hailstorms is invoked by placing their symbol, executed in beadwork, on the inside of a votive bowl.

Other symbols as expressions of prayers are more difficult of interpretation. Thus a diminutive drum, which represents generally a prayer for assistance in making drums, may in other instances convey a prayer that the shaman may have luck in beating the drum while singing at the feast of green corn; furthermore, as this feast induces the gods to send rain, it may express a prayer for rain and green corn. It may also express a prayer for the health of a child, because at the same feast the children eat first, and in this way gain health and life.

Another symbol of diversified meaning may be found in a pair of sandals of ancient pattern attached to an arrow. Such sandals are worn only by shamans at the greatest feast of the Huichols, that of *tamales de maíz crudo*. They therefore become the symbol of a prayer that this feast may come off, also that nothing untoward may happen to the shaman at the feast; but, inasmuch as the

feast cannot be celebrated unless a deer has been killed, a pair of such sandals also expresses a prayer for luck in killing deer. Furthermore, as in olden times only the men wore sandals, which at that time were of the ancient pattern referred to, these sandals are also used to express a woman's prayer for a husband.

We have already seen how prayers to avoid evil are represented on back-shields, the idea arising, no doubt, from the ancient use of the back-shield as a protector of the body, especially from the dangerous heat of the sun; but the other reputed use of this object, as a mat or bed of the deities, has a stronger influence upon native reasoning. Thus the Huichol mainly associates with the back-shield the idea of a resting-place for the deities, and it has become a powerful medium through which he asks favors. The prayer is generally expressed by woven or embroidered figures on the back-shield. In this connection we see a prayer for success in killing deer expressed by the picture of a deer and a snare; the prayer of a woman who desires to have a child, by a human figure embroidered on a piece of woollen textile that serves as a back-shield; a prayer that the *hi'kuli* may not decay, by a picture of *hi'kuli* on a mountain or altar woven on a back-shield; a prayer for success in making native beer, by the picture of a gourd containing beer woven on a back-shield; a prayer that many black lambs may be born into the flock, by rows of wads of black wool on a loose textile.

SYMBOLS. — The system of symbols applied to express abstract ideas or concrete objects is very elaborate. Many symbols of the Huichols are, however, ambiguous in their significance. This is largely due to the fact that, owing to a strong tendency to see analogies, the most heterogeneous phenomena are considered as identical. For instance, most of the gods and all the goddesses are believed to be serpents; so are the pools of water and the springs in which the deities live, and even the staffs of the gods; these last, however, are also considered as arrows. In the sky, in the wind sweeping through the grass, the moving sea, the sinuously flowing rivers, the darting lightning, the descending rain; in fire, smoke, clouds; in fact, in all natural phenomena, — these Indians see serpents. It may be added that they see serpents even in their own flowing hair, in the girdles around their waists, in the ribbons streaming from their heads and their pouches, in their wristlets and anklets. Therefore they frequently decorate their handiwork with the markings on the backs of serpents or with the rattles of rattlesnakes. Maize (the plant itself as well as its fruit, the ears of corn), the bow with its elastic re-action, the piercing arrow, and even the tobacco-gourd, — all are considered as serpents. Even the trails of man meandering over the land appear to them as serpents. The gods are symbolized by painted or carved representations of the human figure, or by their various paraphernalia. They are also sometimes embodied in small rock crystals. The eye and the heart are frequently used to represent a deity, as is also his wristlet or his bed. Faces of the gods are generally expressed by front-shields, and sometimes by broad colored bands on the rearshaft of an arrow. The face of the deer god is sometimes

indicated by a snare for catching deer, or by coils of variously colored beads on tobacco-gourds. The power of the god is symbolized by arrows, and for this reason the rays and the heat of the sun, through which he manifests his power, are considered his arrows. This power is also symbolized by batons. Lightning, for instance, is looked upon as the baton of Mother East-Water; and the power of Grandfather Fire is symbolized by the figure of an eagle carved on his disk.

Although the gods are obviously natural phenomena personified, and besides represent the four elements, they are also, to the Indian, human; in fact, ancient Huichols engaged in much the same occupations as the tribe of to-day whose customs and religion they originated.

The front and back shields of ancient times, as well as the arrows associated with them, become in their modern counterparts powerful ceremonial objects. All such paraphernalia derive their significance and importance from their reputed use by these gods. The symbolism expressed in this way is remarkably rich.

It has been pointed out that the deer is considered as identical with hi'kuli, and hi'kuli identical with corn, and certain insects identical with corn. The same tendency to consider heterogeneous objects as identical may be observed in the fact that a great variety of objects are considered as plumes. Clouds, cotton-wool, the white tail of a deer, the deer's antlers, and even the deer itself, are considered as plumes, and all serpents are believed to have plumes.

It has been shown that the front-shield is the most important symbol of the Huichols, and specially adapted to serve as a kind of sign-language between man and god, conveying prayers and adoration, as well as religious and cosmic ideas. The disks on which the idols stand were without doubt originally front-shields, and should be classed with them. We observed how the original front-shield (neali'ka), with its central hole through which the warrior could look, became symbolic of a face and of an appearance, and how at last it even served as an expression for a picture. This comprehensive use of the word neali'ka as signifying 'front-shield,' 'face,' 'appearance,' and 'picture,' suggests that the Huichols have in it a veritable word for 'symbol.' This view is corroborated by the fact that even an 'eye' is sometimes called a neali'ka. However, it seems to me more probable, considering the state of mental development in which we find the Huichols, that a designation of something concrete, like front-shield, should have been gradually applied to abstract conceptions readily suggested by it, such as first the appearance of man, and next the appearance of objects in general, i. e., pictures. The symbolic use of back-shields, especially in their character as mats or beds, is also very extensive. Mountains on which the fog rests are viewed as altars, i. e., mats or beds of the goddesses, themselves fog and rain.

Flowers, plants, and trees play an important part in the religious life of the Huichol, the hi'kuli-plant above all. Flowers are sacrificed, and are of symbolic significance. Certain flowers are considered as votive bowls of the deities. A magnificent yellow flower, which grows during the wet season, is looked upon as the votive bowl of Mother East-Water, while hi'kuli is that of Grandfather Fire

and of the Corn Mother. Other flowers are symbols of life, and are frequently worn on the head or on the home-made hats, expressing, like plumes, prayers for life. Life (*toki'la*) is considered as something above, to obtain which man must reach upward. Since some gods are considered trees, may we not see in this idea an allusion to the Tree of Life, the Cross of Palenque?

A spiral painted on the rearshaft of an arrow, the blood of the deer, and the color red, are also emblems of life; and health, life, and luck are symbolized by cotton-wool, by the hair from the tail of the deer, by the deer itself, and by the color white.

Regarding the representation of symbolic objects, we find that terraced figures, zigzag lines, and notches along the rim of stone disks, are used to express the earth with its hills and valleys, while the earth on which the god walks is indicated by a diametrical line across the disk.

While rain is generally expressed by descending parallel lines, it may also be represented by the figure of a water-bird swallowing a serpent, by a multitude of variously colored serpents, by the plumes on the serpents, by pictures of small red and black insects that appear during the wet season, and finally by representations of the waxing and the waning moon. Clouds are indicated by coils of red and white beads and by wads of wool of the various colors in which the clouds appear. Snakes painted red and black or in other colors, and the facial painting of the *hi'kuli*-seekers, convey the same idea. The wind, too, assumes the shape of serpents flying through the air, and its track in the corn-field is designated by a band of curved lines interspersed with dots. Rivers are represented by zigzag lines; and the sea, by a large wavy design in beads, or by blue beads covering a corn-cob on top of a representation of the white rock near San Blas, or by a zigzag line around a votive bowl; while the waves of the sea are depicted as a series of small serpents. The sky in the day-time is denoted by a broad reddish band painted along the edge of a stone disk. The four cardinal points of the world are indicated by the figure of a Greek cross; but the upper section of the rearshaft of an arrow may indicate east, and its lower section west.

The sun is most commonly figured as a circular space surrounded by rays, while the different stages of his journey are indicated by various colors. Thus the sun of the east has a yellow centre; the sun in the middle of the day, or south, has a red centre; the sun of the north has a blue centre; and the sun of the west, a variegated star-like centre. Stars are generally denoted by dots or spots, but the morning star is represented by a Latin cross in red. As the morning star is revered as an important god of the Huichols, it can easily be understood why a Christian cross has been used as its symbol. Zigzag lines, or irregular curved lines, or red, tongue-shaped figures, depict lightning; and hailstones are seen in rock crystals, or in daubs of beeswax set with red beads in a votive bowl.

The usual expression for corn is dots, either painted, or indicated by beads fastened with beeswax to the inner side of a votive bowl; but the Huichols

interpret as corn the natural markings on shells and rocks, or coils of worsted fastened to a disk. Ears of corn are depicted by short painted stripes or rays, and also by the painting of a fish, which is called by the Mexicans *bagre*. Heaps of corn in harvest-time are represented by interlaced horizontal and vertical lines. Corn-plants are indicated in about the same manner as ears of corn, only whenever the former are meant, the short stripes are attached to a band which represents the earth, or to the outer edge of a snare, etc.

The symbols for beans and squashes are much alike. Generally speaking, dots represent the fruit, and zigzag lines the vine. However, beans may also be indicated by ray-like rows of beads on a chair; and the bean-plant, with its roots and fruit, by a coil and a string of beads.

Hi'kuli may be designated by a green band painted on the middle of the rearshaft of an arrow, but more frequently it is denoted by a cross-like figure; at other times by triangular figures, or by short lines emanating from a circle around a cross.

Flowers appear as wads of variously colored wool on the mat of Mother East-Water. They are also indicated by outlines of diamond-shaped figures on a back-shield of the same goddess, or by various painted designs. Sprouting trees are expressed by serpentine and straight lines; bamboo reeds by barbed lines; and the roots of this plant by S-shaped barbed figures.

Serpents are shown by curved or by zigzag lines; they are also seen in the corn-cob on top of a representation of the white rock near San Blas, because both the corn-plant and the ear of corn are viewed as serpents.

The heart of a god (or of a person) may be expressed by diamond-shaped, square, or round markings in the middle of a human figure; but it may also be shown as a string of red beads in the form of a coil on a disk, or, finally, as a small representation of the real heart made from a certain seed (*wa've*). A cross surrounded by a square in the middle of a bird, and a large dot on a scorpion, also stand for the hearts of the respective animals.

DIVERSITY OF THE MEANING OF SYMBOLIC DESIGNS. — If we now take a rapid survey of the various meanings which one and the same symbol may serve to express, we obtain some interesting results.

A bed is most completely shown by a design of longitudinal lines crossed by an equal number of horizontal lines, in imitation of the real bed or back-shield; but the cross-lines are generally left out, and we find that parallel longitudinal lines are made to serve as expressions not only for their most common synonyme, falling rain, but also for a bed, and further for the tail and wing feathers of the royal eagle. A similar combination of lines, which, however, rest on a horizontal line, stands for candles; but when the lines are very short, they signify corn-plants. Short lines emanating from a circle around a cross mean hi'kuli; in another case, short radial stripes surrounding a circular space (the sun) designate plumes of various kinds of hawks belonging to the sun. Longitudinal lines painted on an

arrow signify its path ; while similar lines in a facial painting, but interspersed with dots, symbolize corn-fields.

Irregular lines with short side-lines are bean-plants, and when dots are scattered about this design, they indicate that the bean-plant is in fruit. These are easily distinguished from irregular lines in various colors, which mean serpents, that is, showers in the west.

Curved lines in general indicate serpents ; but when there are dots between curved lines, they mean ears of corn in the fields. Bands of curved lines with dots between them are the tracks of wind, rain, and water in the fields.

Interlaced horizontal and vertical lines mean heaps of corn in harvest-time ; however, a triple row of curved lines, connected with cross-lines, and the outer line barbed, represents the vine ha'pani.

Barbed bands, which occur so frequently in facial paintings, generally denote clouds ; when they are applied in a more or less horizontal position, the barbs that turn upwards are clouds, and those that turn downwards are rain, and therefore of the same significance as the descending parallel lines, but this distinction is not always observed. Sometimes the barbed bands represent the bamboo-plant, which furnishes material for arrows. The recumbent S-shaped designs represent caterpillars, and in other places bamboo-roots.

Zigzag lines stand not only for rain-serpents, but also for lightning, the sea surrounding the world, hills and valleys projected on the horizon, bean-plants, and squash-vines. Dots and small circular spots of various colors are corn, but also beans and squashes, flowers of the squash-vine, and sometimes even ears of corn.

A cross refers to the four cardinal points, but also signifies money, sparks, etc., while half of a Greek cross stands for hi'kuli (and accordingly corn), and for certain small insects which appear during the wet season (and therefore also for corn). A cross enclosed in a circle on the figure of a bird designates its heart.

Coils of bead strings (and in one case of worsted) depict grains of corn, also beans, the heart of a child, the face of a god, and, finally, clouds. Diamond-shaped figures represent the eye of the god and the power to see and understand unknown things ; in one case, when embroidered on a piece of cloth, they are viewed as a snare, and represent the face of the deer god ; and when crossed by a line, they designate hi'kuli growing on the ground. Triangular figures mean clouds, hi'kuli, or the earth.

A broad band on the rearshaft of an arrow may indicate the face of a god, east or west, according to the color used, the god's wristlet, hi'kuli, and life. A band along the edge of a disk may signify the sky, the earth, etc. A square may indicate the earth, the heart of a person, or hi'kuli. A circular figure surrounded by long or short rays is the Sun. When the rays are short, they are called plumes, and when they are long, they mean his rays or arrows. A circular space enclosed in a complicated design expresses hi'kuli as well as a votive bowl.

Rock crystals express hailstones as well as the Corn Mother ; they are also the ancestors or relatives of the Huichol.

Daubs of beeswax set with blue beads in a votive bowl are expressive of hail-stones; but when set with variously colored beads, they represent the heart of Elder Brother. Beads of various colors set in a votive bowl mean grains of corn, while blue beads covering the corn-cob on top of a representation of the white rock near San Blas signify the sea.

RELATIONS TO OTHER TRIBES.—As the Huichols are neighbors of the Nahuatl, to whom they are linguistically related, it is only reasonable to expect that some similarities may also be found between the culture of this tribe and that of the Aztecs. Thus the myth of the creation of the sun as told by the latter people¹ recalls that related by the Huichols. Their ceremonial cakes, too, may be recognized as similar to those used by the Aztecs. At Pochotita a steep stairway of three narrow steps leads up to one of the god-houses. No doubt other instances of analogy between the two peoples can be found in the material here presented.

It suggests even closer similarities to the culture of another tribe. At the conclusion of a lecture which I delivered in 1898 before the Anthropological Society of Washington, on the general subject of this memoir, Mr. Cushing expressed the opinion that these symbolic objects might throw much light on the origin of Maya writing. He said substantially, that the Huichol Indians, judging by the account I had given of them, were to-day in the status of culture that the Zuñi Indians had reached in remote prehistoric times; while, in the highly developed condition of their symbolic art, they even more nearly represented the Mayas of, say, two or three thousand years ago. One could not, by seeing the little votive shields that had been shown on the screen, fail to be impressed by the resemblance of these, if arranged in rows, to the shield-shaped writing in the ancient Maya temples and codices. It was easy to infer, Mr. Cushing thought, that these Huichol prayer-shields, hung up at intervals in the god-houses and temples, were, in the first place, highly developed forms of such little dance-shields as the Zuñi and other northern Indians used in their sacred dramas. If hung up at more regular intervals, and accordingly in more orderly array, in the temples, they would speedily come to be regarded as 'speaking shields,' and so would ultimately be graven and painted on the walls of the temples themselves, precisely as are the shield-like iconograms, or so-called 'glyphs,' of the ancient Maya ruins.

It is of interest to add that Major Powell coincided in this view, and that since then Mr. Cushing has carried on researches which tend to confirm his opinion even in detail. It certainly is interesting to find, for instance, in the Dresden Codex, illustrations of the God of Death associated with the locust and the tiger, the meaning of which will be found in my study of the Huichols. These people told me that two animals (both called in this special capacity *mi'tso*)

¹ Codex Ramirez, Proc. Amer. Philos. Soc., Vol. XXI, pp. 619, 622.

protect them against the God of Death: the one is the locust, whose chirping is, of course, magic, like the singing of a shaman, and who rejuvenates himself by shifting his skin; the other is the tiger-cat, who, through the spots of 'decay' on his skin, protects man from the arrival of this dread enemy, for which reason the Huichols never kill it. It may be seen in the Dresden Codex that the God of Death carries the dead on his back, as the Huichol God of Death carries them on the back of his head (see Fig. 48). In the same Codex the God of Death is seen with a locust either on his back or on his head, while the tiger is represented alongside of him. I hope that Maya scholars will be able to find other similarities in the subject-matter of this memoir.

I am not ignorant of the fact that the myth of the creation of the sun, alluded to above, is, in its general traits, common to many American tribes, and I have no doubt that in the same way analogies to various other tribes may be found in this treatise. The ceremonial cakes, for instance, are used also among the Zapotecs¹ of to-day, as well as among nearly all the Pueblo Indians of New Mexico and Arizona. But such phenomena should not cause surprise, as researches tend more and more to convince us of the similarity of Indian thought, under similar conditions.

¹ *Apuntes historicos* por Dr. D. Eulogio G. Gillow, Mexico, 1889, p. 206.

APPENDIX.

* * * The figures refer to pages.

I. INDEX OF PRAYERS, WITH THEIR REPRESENTATIVE SYMBOLS.

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- between zigzag lines, fruit of the squash-vine, 200.
- one red dot in an irregularly outlined figure, a spring in a mountain, 37.
- round red and oblong yellow, near serpents on a disk, the front-shields of the serpents, 39.
- large red, on the disk of Young Mother Eagle, the heart of the constellation Scorpion, 57.
- large circular, stars, 37.
- formed by a coil of red beads on a disk, the heart of a child, 34; formed by a coil of white beads surrounded by a row of blue beads, on a chair, grains of corn, 74; formed by a coil of beads, and accompanied by a string of beads, in a votive bowl, beans and the root of a bean-plant, 74; formed by coils of black, yellow, and red worsted on the front-shield of Mother East-Water, grains of corn, 134; formed by a coil of white beads in a votive bowl, clouds, 162; formed by a coil of white beads in a votive bowl, clouds in the west, 163; formed by a coil of blue beads in a votive bowl, clouds in the east and in the south, 163.
- between the arms of a cross or around a cross, grains of corn, 35.
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- Greek, the four quarters of the world, 124, 140.
- half of a Greek, small insects appearing during the wet season, and therefore rain and corn, 118, 126, 141.
- cross-shaped figures on a front-shield, hi'kuli, also corn, 114.
- small, sparks, 198.
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- red, on a disk, money, 37, 39.
- on a human figure, the heart, 93.

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- shamanistic powers, 144.
- on a back-shield, snares representing the face of the deer god, 151.
- in the middle of a human figure on a disk, the heart, 59.
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- attached to a circular band on a front-shield, clouds, 37.
- painted red on an edge of a back-shield, hi'kuli, 142.
- on a back-shield, the earth, 147.

SQUARE FIGURE:

- painted across the nose, the earth, 198.
- in the middle of a human figure, the heart of the person represented, 59.
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- on the lower part of a disk, with a red centre, the sun of the south, 38.
- in the upper part of a disk, with a blue centre, the sun of the north, 38.
- on the right of a disk, with a star-like centre of various colors, the sun of the west, 38.
- on the forehead, hi'kuli, also a votive bowl, 41, 198.

STAR-SHAPED FIGURE:

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- in the centre of a disk, a spring or pool, 54.

BEEHIVE-SHAPED FIGURES on a disk, hills on which corn is planted, 37.

FLOWER-LIKE FIGURES on a disk, leaves of the 'toy' bush, 35.

SWASTIKA-LIKE YELLOW FIGURES, two, on a disk of the Corn Mother, the 'eyes' of the Corn Mother, 54.

TONGUE-SHAPED FIGURES on a disk, lightning, 55.

WING-LIKE FIGURES on a disk, corn-stalks with ears of corn, 55.

S-SHAPED BARBED FIGURES, caterpillars, 200; also the roots of the bamboo-plant, 202.

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RAYS :

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eight, of various colors, the rainbow, 127.

NOTCHES along the edge of a disk, hills and valleys, 27.

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red and blue, on a 'bed,' flowers, 48.

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set with variously colored beads, the heart of Elder Brother, 204.

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middle, painted green, hi'kuli, the middle of the world, 91.

III. INDEX OF OBJECTS AND IDEAS, AND THEIR REPRESENTATIVE SYMBOLS.

- POWER :** batons, 49.
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 magic, plumes, shaman's plumes, 121.
 to see and understand unknown things, 'eyes,' 154.
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- HEALTH AND LUCK :** cotton-wool, 45, 65; hair from the tail of a deer, 45; the deer itself, 21; the color white, 44; plumes, 21.
- LIFE :** the color red, 63; blood of the deer, 91; a spiral, 100.
- HEAT OF THE SUN :** a black circular section in the centre of a front-shield, 111; white, red, yellow, and black curved sections on a front-shield, surrounding a 'sun,' 114.
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 of Grandfather Fire, a blue band edged with black, on an arrow, 65.
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- WRISTLET :**
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 of Father Sun, breast-feathers of the red-tailed hawk, 39.
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- PLAINS :** straight lines of various-colored beads, 165.
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 with springs, outlined figures with a single red dot, 37.
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- HILLS** near by: notches along the edge of a disk, 27.
- FIRE :** the color yellow, 63.
- RAIN, RAINDROPS :** in general, descending lines, vertical lines, water-gourds, double water-gourds, serpents, dots.
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- RIVERS :** zigzag band in blue and red on a front-shield, 125; zigzag line in blue and green, yellow and green, and black beads on a votive bowl, 165.

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RAINBOW : eight rays of various colors surrounding the centre of a front-shield, 127.

SKY :

in the day-time, a broad reddish band along the edge of a stone disk, 37, 40.

in the evening, red wool, 45 ; white and red beads, 162.

CLOUDS : coils of red and white beads, 162 ; smoke from the fire, 20 ; stripes of black and red crewel on a front-shield, 112 ; irregular zigzag lines, 190, 202 ; wool of pochote, 45, 48 ; cotton-wool, 112, 114 ; barbed lines on the forehead, sides of the face, and chin in a facial painting, 198, 200 ; irregularly outlined dots in a facial painting, 198, 200 ; straight and curved barbed lines turned upwards, and horizontal lines with barbs turned upwards, in a facial painting, 200.

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rising, four white figures forming a diamond in the centre of a front-shield, 125.

at sunset, the evening sky, red cotton-wool, 134 ; rings and zigzag lines of various-colored beads, 134 ; triangular figures attached to the inner side of a circular band from which rays emanate, 37 ; triangular figures in the centre of a front-shield, 117.

dark, rain-laden, a red and black snake, 54.

WIND : serpent in a blue space (considered as the sky), 41.

sounds of, the reeds in the necklace of Grandmother Growth, 52.

tracks of, and of rain and water, on the earth and in the corn-fields, a band of curved lines with dots within, 203.

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east, the upper section of the rearshaft of an arrow, painted red, 91.

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THE SUN : circular spaces surrounded by rays, sometimes painted red, 27, 133 ; a coil of blue beads interspersed with beads of other colors, 162 ; broad curved sections of white, black, red, and yellow surrounding the sun, 114.

in the day-time, a central circular design on a disk, 38.

in the east, a circular design with yellow centre, 38.

in the south, a circular design with red centre, 38.

in the north, a circular design with blue centre, 38.

in the west, a circular design with variegated star-like centre, 38.

rays of, radial lines emanating from a central circle, 133 ; the arrows of the sun, 37.

STARS : large and small circular dots and spots, 37.

the morning star, a red Latin cross, 111.

LIGHTNING : irregular curved red and blue lines, 39 ; red tongue-shaped figures on disk of the Corn Mother, 35 ; zigzag line on an arrow, 83 ; baton of Mother East-Water, 163.

HAILSTONES : rock crystals, 63 ; daubs of bees-wax set with blue beads in a votive bowl, 165.

CORN : dots, spots, 48 ; short lines (barbs), 198 ; rows of short perpendicular lines, 168 ; coils of white beads surrounded by a row of blue beads, 74 ; spots on the figure representing the white rock near San Blas, 80 ; representations of the small red or black insects appearing during the wet season, 118, 126 ; angular and cross-like figures, 114.

fields of, red and yellow dots surrounding hills, 37 ; the skirt of the Corn Mother, 54 ; dots between straight vertical lines, 198 ; weeds in, green dots in the design of corn-fields, 57.

grains of, dots, 29, 30, 47 ; five dots in an inscribed cross, 35 ; dots around a cross

(meaning money), 37 ; dots in a votive bowl, 47 ; red and blue spots on the face of Grandmother Growth, 135 ; spots of various-colored beads in a votive bowl, 163 ; coils of black, yellow, or red worsted on the front-shield of Mother East-Water, 134 ; the natural markings on the kura shell, 185.

CORN :

ears of, rays painted alternately blue or red, 29 ; short longitudinal stripes on a votive bowl, 47 ; on the skirt of the Corn Mother, 53 ; wing-like figures on a disk, 55 ; a fish, 132 ; short horizontal lines emanating from the outer line of a bed, 202 ; spots between longitudinal lines, 198.

transverse sections of an ear of, an 'eye' with dots, 30 ; red, yellow, and black 'eyes' on the right cheek of Grandmother Growth, 144 ; a star-like figure of yellow beads (indicating seven rows of grains), 162.

plants, short green and yellow stripes attached to a band (the earth), 41 ; short lines (barbs) emanating from the outer edge of a snare, 41 ; wing-like figures on a disk, 55 ; the serpent Hakwi'aka Yū'wimē, 55.

green corn, black and white lines emanating from the back of a serpent, 55 ; a black fish with white stripes and spots, 55.

of various colors, black, red, and yellow spots on the face of Grandmother Growth, 43 ; cross-shaped figures, 125.

heaps of, in harvest-time, interlaced horizontal and vertical lines, 200.

BEANS : ray-like rows of beads on a chair, 74 ; red dots on a disk, 46.

plant, irregular lines with side lines and interspersed dots on a disk, 46 ; a black line with irregular short lines on the face of Grandmother Growth, 44 ; with flowers, a blue zigzag line on the rim of a stone disk, 47 ; with roots and fruit, coils and strings of beads, 74.

SQUASH-VINE : zigzag line of white beads, 74 ; a green and red band forming an angle, 147 ; zigzag lines with short lines emanating from them at irregular intervals, 203 ; with squashes and flowers, a zigzag line interspersed with dots, bordered by a barbed line, 200.

HI'KULI : the middle section of the rearshaft of

an arrow, painted green, 91 ; cross-like figures, 114 ; figures in red and blue, 144 ; white, tree-like figures on a red background, 145 ; triangular figures, some of them red, 126, 142 ; short lines (barbs) emanating from a circle around a cross, 35 ; growing on the ground, dark-blue diamond-shaped figures crossed by dark-blue lines, 102.

HAPANI-VINE : a triple row of curved lines, the outer barbed, connected with cross-bars, 200.

flowers of, an irregular hexagonal star surrounded by an irregular circle, 202.

FLOWERS : wads of various-colored wool on the mat of Mother East-Water, 140 ; outlines of diamond-shaped figures in various colors on a back-shield, 152.

toto', star-like figures, 171, 202.

rutu'li iwia'kami, octagonal stars inside of a barbed ring, 202.

TREES SPROUTING : serpentine and straight lines, 202.

BAMBOO reed (haka) : barbed lines, 202.

roots of, S-shaped barbed figures, 202.

SCORPION : figure of a scorpion, 55 ; constellation, 57 ; arrow of the sun, 39.

CATERPILLARS : S-shaped barbed figures, 200.

SERPENTS : curved lines, 142 ; zigzag lines on serpent sticks, 193 ; curved zigzag lines, 202.

Kōwivyo', zigzag line in blue and yellow, 198. fire-serpent, serpentine line on nose and chin in facial painting, 198.

Yoa'wimeka, a corncob on top of the representation of the white rock near San Blas, 80.

BUTTERFLY : markings on serpent sticks and combs, 193, 194.

INSECTS, small red and black, appearing during the wet season : cross-like figures, 118, 126.

SNARE for catching deer : a ring over the head of a serpent, 41.

GODS : carved or painted representations of human figures, 198 ; the Corn Mother, a rock crystal, 63 ; deer god of the south, deer with antlers, 33.

HEART :

of a god or person represented, diamond-shaped, square, or round markings in the middle of a human figure, 59 ; of Elder Brother, daubs of beeswax set with variously colored beads, 204.

of a child, a string of red beads in a coil on a diminutive stone disk, 34.

of the royal eagle, a cross painted on a bird, and surrounded by a circle, 29.

of the scorpion, a large red dot, 57.

SPARKS of Grandfather Fire : upper and lower sections of an arrow, painted dark blue, 91.

LINKING OF HANDS : two 'overlapping scrolls ('freno'), 200.

NATIVE BEER : a white space on a back-shield, 147.

FACIAL PAINTING of the Sun : his rays, 137.

BED of the gods : longitudinal parallel lines with cross-lines, 33, 198.

PLUMES : barbed curves, 32, 198 ; handles of shaman's plumes, 177.

WING AND TAIL FEATHERS : longitudinal parallel lines, 198.

CANDLES : rows of short vertical lines resting on a horizontal line, 198, 200 ; descending lines with short cross-lines in the upper part, on a back-shield, 198.

A CAVE : an irregular figure painted blue, 41.

DRINKING-GOURD of a god : a cavity in the centre of his disk, 28.

GOD-HOUSES : irregular figures composed of curved and barbed lines, 202.

MONEY : red crosses, 37, 39.

RATTLE of the rattlesnake : zigzag line (on serpent sticks and tobacco-gourds), 193, 194.

ROYAL EAGLE :

wing and tail feathers of, slanting parallel lines, 27.

spread wings of, four parallel lines, 33.

plumes of, curved barbed lines, 202.

HAWK-FEATHERS : short blue radial lines surrounding circular figures representing the sun, 38.

SHAMAN : shamanistic powers of the sun, plumes and 'eyes,' 121, 154.

ERRATA.

p. 10, 11th line, 'Lajas' should read 'Latas.'

p. 22, 5th line, 'Grandfather Fire' should read 'Father Sun.'

p. 79, 9th line from bottom, 'mules' should read 'keeping mules.'

p. 116, 9th line from bottom, 'except two' should read 'except two animals.'

p. 134, 7th line from bottom, 'all colors of corn' should read 'corn of all colors.'

p. 183, 6th line, 'left foot' should read 'right foot.'

PLATE I.

FIG. 1. TEMPLE AND GOD-HOUSES AT SANTA CATARINA.

FIG. 2. GOD-HOUSES AT TEAKA'TA.

Symbolism of the Huichol Indians.

PLATE II.

EXPLANATION OF PLATE II.

Fig. 1.

Fig. 1. Upper Side of Disk of Father Sun (Tayau'): *a*, The sun; *b*, Grains of corn; *c*, Money; *d*, Clouds; *e*, Hills planted with corn, and crosses signifying money; *f*, Sky in the daytime; *g*, Stars; *h*, Clouds. Cat. No. 1877.

Fig. 3.

Fig. 3. Upper Side of Disk of Setting Sun (Sakaimo'ka): *a*, Front-shield of Setting Sun; *b*, Plumes; *c*, Tail-feathers of a large wader; *d*, Water-bugs; *e*, Votive bowls; *f*, Earth with corn-plants. Cat. No. 1877.

Fig. 2.

Fig. 2. Lower Side of Disk of Father Sun (Tayau'): *a*, Sun at noon; *b*, Sun in the east, with fringe of hawk-plumes; *c*, Sun in the south, with fringe of hawk-plumes; *d*, Sun in the north, with fringe of hawk-plumes; *e*, Sun in the west, with fringe of hawk-plumes; *f*, Male red-tailed hawk; *g*, Female red-tailed hawk; *h*, Morning star; *i*, Male scorpion; *j*, Female scorpion; *k*, Tail-feathers of red-tailed hawk; *l*, Breast-feathers of red-tailed hawk; *m*, Money; *n*, Swallow; *o*, *p*, A bird, and tree on which the bird will alight; *q*, Cardinal-bird; *r*, Lightning; *s*, Rain; *t*, *u*, *v*, The serpent Tate' Ipou, coiled and creeping. Cat. No. 1876.

Fig. 4.

Fig. 4. Lower Side of Disk of Setting Sun (Sakaimo'ka): *a*, Parrot; *b*, Caves at Mesa del Nayarit; *c*, Serpent; *d*, Serpent representing the sky; *e*, Grains of corn; *f*, Water-serpent; *g*, Root of squash-plant; *h*, Root of bean-plant. Cat. No. 1877.

Symbolism of the Huichol Indians.

PLATE III.

EXPLANATION OF PLATE III.

FIGS. 1-8. Ceremonial arrows of the Huichols, Santa Catarina.

1. Arrow of Grandfather Fire. Cat. No. $\frac{6}{1881}$.
2. Arrow of Father Sun ('Tayau'). Cat. No. $\frac{6}{1887}$.
3. Arrow of the Setting Sun. Cat. No. $\frac{6}{1882}$.
4. Arrow of Elder Brother. Cat. No. $\frac{6}{1883}$.
5. Arrow of the Corn Mother. Cat. No. $\frac{6}{1244}$.
6. Arrow of Mother East-Water, with spots of various colors, which indicate flowers.
Cat. No. $\frac{6}{1885}$.
7. Arrow of Mother West-Water. Cat. No. $\frac{6}{1884}$.
8. Arrow of Haita'neka. Cat. No. $\frac{6}{1886}$.

FIGS. 9-13. Ceremonial arrows of the Cora, from a cave near Mesa del Nayarit, as interpreted by a Huichol shaman.

9. Arrow of Grandfather Fire. Upper and lower sections represent sparks of Grandfather Fire; middle section, wristlet of Grandfather Fire. Cat. No. $\frac{6}{1756}$.
10. Arrow of Father Sun ('Tayau'). Upper and lower sections represent blood of the deer and prayer for life; middle section, hi'kuli. Cat. No. $\frac{6}{1752}$.
11. Arrow of Setting Sun. All sections represent west; middle section, also a wristlet of the god. Cat. No. $\frac{6}{1754}$.
12. Arrow of Elder Brother. Upper section represents blood of the deer; the two lower sections, hi'kuli. Cat. No. $\frac{6}{1755}$.
13. Arrow of Mother West-Water. Upper section represents east; middle section, middle region; lower section, west. Cat. No. $\frac{6}{1753}$.

Symbolism of the Huichol Indians.

PLATE IV.

EXPLANATION OF PLATE IV.

Ceremonial Arrows with Attached Cakes, from Santa Catarina.

FIG. 1. Arrow and Cakes of Grandfather Fire. Cat. No. $\frac{65}{1764}$.

FIG. 2. Arrow and Cakes of the Sun (Tayau'). Cat. No. $\frac{65}{1765}$.

FIG. 3. Arrow and Cakes of Elder Brother. Cat. No. $\frac{65}{1762}$.

FIG. 4. Arrow and Cakes of the Corn Mother. Cat. No. $\frac{65}{1761}$.

FIG. 5. Arrow and Cakes of Mother East-Water. Cat. No. $\frac{65}{1760}$.

Symbolism of the Huichol Indians.