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Notes on the Shrines of the Tewa and Other  
Pueblo Indians of New Mexico

*By*

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# NOTES ON THE SHRINES OF THE TEWA AND OTHER PUEBLO INDIANS OF NEW MEXICO

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## INTRODUCTION

THE Pueblo Indians guard with great tenacity the secrets of their shrines. Even when the locations have been found, they will deny their existence, plead ignorance of their meaning, or refuse to discuss the subject in any form. With full appreciation of the difficulties attending such investigations, I submit these notes in the hope that they may prove of value to students of the religious rites of a people who from pre-Columbian times have dwelt in permanent pueblos in the arid Southwest. The data here presented were gathered in the field, and are not based on any preconceived theory.

It is a well-known fact that the religious beliefs of the cliff-dwellers, more or less modified, have been handed down to a later people, who still claim the ruins of their strongholds as ancestral sites. I have found no strong superficial lines of demarcation between the older and the more modern shrines, therefore both are included in this record.

The geographic location of all the shrines described herein, with one exception, is shown on the accompanying map (pl. 1)<sup>1</sup> of a portion of the Jemez plateau of New Mexico, around which are clustered the pueblo sites of these pre-Columbian people. The orientation of the shrines plays an important part, and for a proper consideration their true geographic situation in relation to the Pueblos using them must appear.

Tewa cosmography recognizes seven regions. These, named in the order given by a medicine-man of K'hapo (Santa Clara pueblo), together with their respective color symbols, are as follow:

<i>Region</i>	<i>Name</i>	<i>Color Symbol</i>
North	Pin-piye	Blue
West	San-piye	Yellow
South	Acon-piye	Red
East	Tan-piye	White
Zenith	Macoba	Speckled
Nadir	Namu	Black
Center of all	Opa-pinga	All colors

Each region has a shrine, none of which has been definitely located, so far as I am informed, excepting the one last named, although the shrine of the west is thought to be on Mount Pelado and that of the east in the Sangre de Cristo mountains.

### THE WORLD-CENTER SHRINE

On September 17, 1911, having occasion to ascend a peak of the Jemez mountains, I found at the center of its rocky, oblong crest, which extends a hun-

<sup>1</sup> See also the index to the map at the close of the article.



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dred yards north and south, a mound of stones. South of this cairn is a stone inclosure, in which were many sacrificial offerings. Later investigation identified the shrine as that of the World Center of the Tewa and other Pueblo Indians.

#### THE PEAK

The peak referred to is called *Tsikomó* by the Tewa (pl. 1, no. 1). Three interpretations of the name were obtained: (1) "the place of much rock"; (2) "the place high up"; (3) "the place of worship". The first is believed to be the true meaning. The elevation of the peak, one of the loftiest of the Jemez mountains, is 11,400 feet above sea-level and 6,000 feet above the Rio Grande. The view from the summit is superb. To the north, south, and west roll the green swells of the Jemez range; to the east spreads the Jemez plateau and the valley of the Rio Grande del Norte so rich in ancient ruins. The lower half of the mountain-slope is densely timbered with aspen, piñon, and spruce; beyond is open country, thickly carpeted with high grass, in which many stones are hidden. The mountain-crest is bare of grass or timber, save a group of four piñon trees fifty feet below, on the southern slope. From the base of the mountain flow eastward the waters of Rio Oso and Santa Clara creek—the first to the Rio Chama, the other to the Rio Grande. To the west of the mountain, several miles removed, are the headwaters of the Rio San Antonio, a tributary of the Rio Jemez. On the northeastern slope of the peak, 500 feet below the crest, is the sacred spring called *Mahahi* (pl. 1, no. 128), and from its base flow northward the streams of Polvadera and Vallecito, by great ruined pueblos, to the waters of the Rio Chama.



FIG. 1.—The World-center shrine of the Tewa, on Mount *Tsikomó*, the highest peak of the Jemez mountains. The cairn occupies the exact center of the mountain crest and symbolizes the center of all the regions

## THE MOUND

This structure, 10 feet in diameter at the base and 5 feet high, is built of loosely laid, unshaped stones, gathered from the locality. From its center protrudes a spruce-pole, without bark, 6 inches in diameter at its butt and 8 feet in length, tapering to a point (fig. 1). Occupying the exact center of the mountain crest, this mound or cairn symbolizes the center of all the regions and is called *Tsiyi*. From the mound, S. 10° W., 43 yards distant, is the shrine, five feet below the mound level.

## THE INCLOSURE

The inclosure consists of unworked stones, loosely placed in the form of an ellipsis with a meridional diameter of 11 feet and a latitudinal diameter of 15 feet. It is called *Kwan-po*. The eastern end is broken by seven exits which spread out like the fingers of a hand. These exits are symbolic "rain-roads", and are not used by the cacique in performing his ceremonies. Each pueblo using the shrine has its own rain-road, oriented to point in its direction. These roads are known as *awu-mu-waya*. Referring to the diagram (fig. 2), rain-roads B and C are sharply defined by rows of stone; they are 12 to 18 inches deep, 1½ to 2 feet wide, and extend 60 feet to the rim of the mountain crest. Road D is outlined

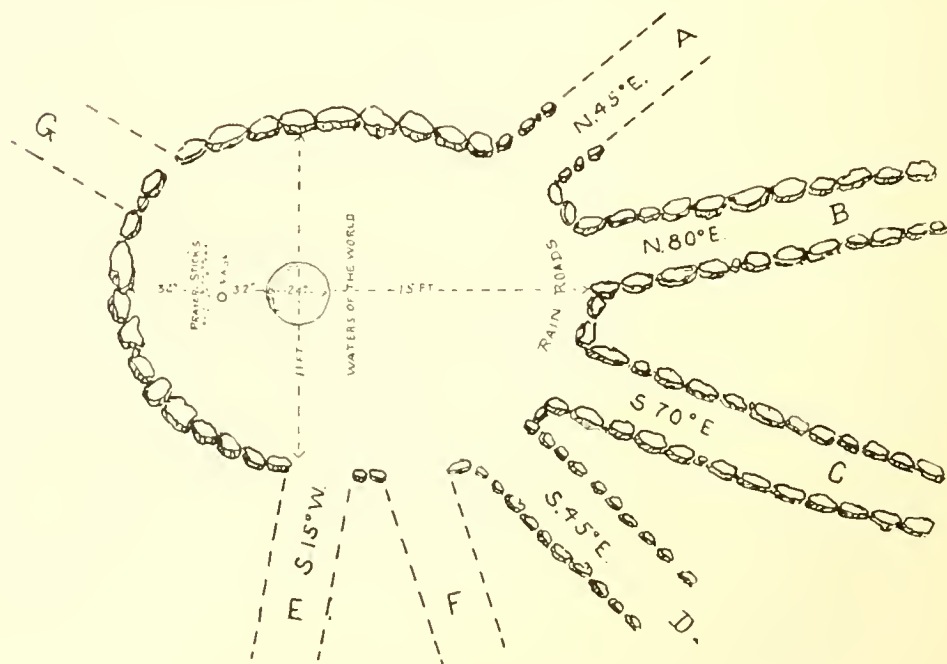


FIG. 2.—Diagram of the "World Center" Shrine

with small stones and extends to the edge of the crest. Roads A and E are very indistinct, requiring close inspection to trace them, while roads F and G could not be located. Judging from the direction these roads point, they may be identified as follows: A Taos; B, San Juan; C, Santa Clara; D, San Ildefonso; E, Jemez; F, Cochiti; G, Navaho.

## THE DEPRESSION

The floor of the inclosure is of hard-packed earth and slopes gently toward the center, terminating in a saucer-like depression, 24 inches in diameter and 3 inches deep. This depression, symbolic of the Waters of the World, is called *Nompo* by the San Ildefonso Tewa, and *Mansipu* by those of Santa Clara.

## THE ALTAR

To the west of the depression lies the altar, consisting of a vase behind which are rows of prayer-sticks. The latter lie midway between the depression and the inclosure wall, the vase being 4 inches east of the line of prayer-sticks.

## THE VASE.—

The vase (fig. 3) is of polished black ware, without ornamentation, and resembles the well-known pottery of Santa Clara pueblo. It measures 106 mm. in height, and the diameter of its concave base is 50 mm. Its diameter, at one-sixth its height from the bottom, bulges to 68 mm. and then tapers cone-like to the top, where it is 33 mm. in diameter and 4 mm. thick. The interior depth of the vase is 87 mm., and its capacity is 13.1 cc. From opposite sides of the vase project two ears, 40 mm. long and 15 mm. high, each doubly perforated. In these perfora-



FIG. 3.—The sacred vase used at the "World Center" Shrine. It is filled with water from the Sacred Spring *Mahahi*, and placed in front of the prayer-sticks

tions, 5 mm. in diameter, are tied white cotton strings the size of common wrapping twine, to which fragments of feather-down, like the *nákwas* or prayer-feathers of the Hopi, still adhere.

The vase was set in the ground about half its height and so oriented as to face east; i. e., the projecting ears being pointed north and south. It was empty when found, but examination showed a substance like meal adhering to the bottom, probably the remains of prayer-meal, or perhaps sediment precipitated by the evaporation of water.

PRAYER-STICKS.—The prayer-sticks (pl. II) group themselves into two general classes: (1) Sticks of uniform size, set in the earth and having a determinable position, which, for convenience of description, may be called primary

prayer-sticks, the types of which are designated by letters A to E inclusive (fig. 4); (2) sticks of irregular size, not set in the earth, and apparently without fixed or determinable positions, and, with the exception of two types, made of herbs instead of twigs. These may be classed as secondary prayer-offerings and are designated as F to N inclusive.

The primary sticks, with the exception of three specimens, are twigs of willow (*Salix* sp.), with smooth, reddish bark. Two specimens are made of cottonwood (*Populus wislizeni*), and one is of box elder (*Negundo interius*). The meaning of this variation in the wood is unknown. Types G and N of the secondary prayer-offerings also are willow.

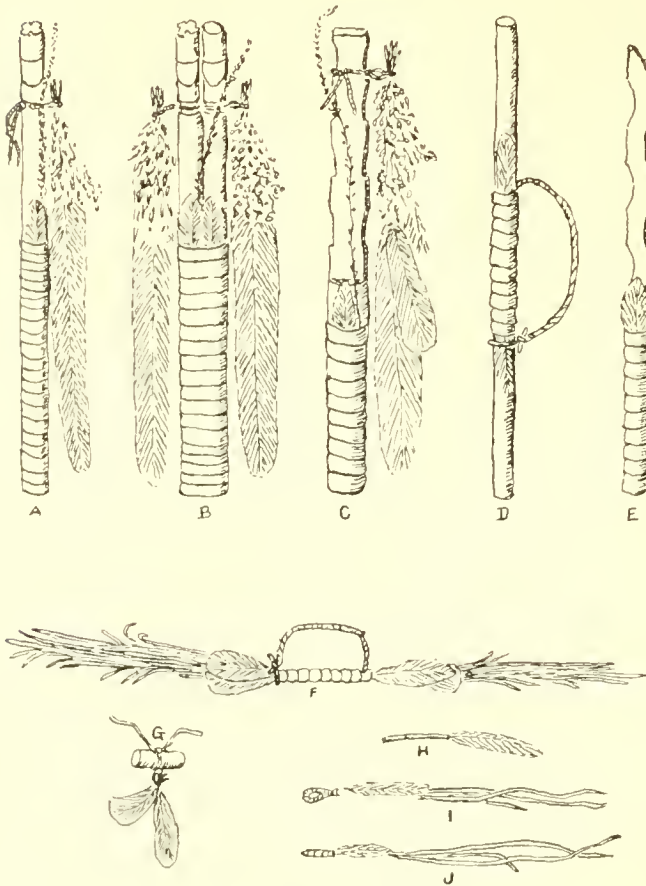


FIG. 4. Types of prayer-sticks

With the exception of type N, the bark remains on the sticks, except when notching and shaping necessitated its removal; but wherever decorated the wood alone is painted, the paint never being applied to the bark.<sup>1</sup>

*Pigments.*—The pigments used in painting, which no doubt were ceremonially prepared, are green and orange (yellow). The former color largely predominates, but is often indicated only by specks, while the orange (yellow) remains apparently as fresh as when applied. The same colors appear in the feathers and the herbs. The flowers selected are yellow, as are also the water-plant used as a tape, and the reeds; the sedge is green. In the color of the feathers, green and blue predominate, but in place of yellow we find brown used instead. White and gray are also in favor.

<sup>1</sup> The writer believes that wherever paint is lacking from the wood, it has been obliterated by the elements.





PRAYER-STICKS FROM THE WORLD-CENTER SHRINE



*Feathers.*—Feathers are employed in the construction of all the prayer-sticks with the exception of those designated as K, L, and N, and it would seem probable that these have lost their feathers. The feathers were carefully selected as to color, shape, and size, and were obtained from different birds. They appear in the greatest variety in the flower plumes attached to types A, B, and C.

1. The most conspicuous feather is long and narrow, with a rounded tip, 20 to 30 cm. long by 2 cm. wide. Its color varies from black to greenish-blue, known as peacock blue. This feather is the longest, and, in the flower-plumes, occupies the position next to the stick.

2. The second feather, which appears to be that of a turkey, varies from brown to black, and has a square head. It measures about 20 cm. in length by 4 cm. in width. Its tip is usually white or light-brown.

3. The third is colored blue, green, and black, usually with a white angular spotted tip.

4. The fourth is a plumule of rusty-brown, 12 cm. long. Its width is indefinite, owing to the fact that the barbs hang free.

5. The fifth feather is only 7 cm. long by 4 mm. wide, and is greenish in color.

6. The sixth feather, colored gray and white, is 10 cm. long by 2 cm. wide. It is used with prayer-sticks of types D and E.

7. The seventh, attached to prayer-sticks G, resembles a breast-feather of a turkey; it is 6 to 8 cm. long by 2 cm. wide. The rachis of the feather is somewhat curled.

8. The eighth feather is small and is dark-gray in color; it is 5 to 8 cm. long and the width about one-tenth the length. The larger ones are found in type H, and the smaller in types I and J.

9. The ninth variety of feather is about 20 cm. long and 4 to 5 cm. wide. It is rusty-brown in color, with rounded tips, and its barbs are somewhat loose. This type is thought to be merely a variation of type 4 which it replaces.

10. The tenth kind of feather is dark-gray and small, being only 2 or 3 cm. long.

*Flower-plume.*—The flower-plume is usually made up of the first five feather-types in the order given, on top of which is a spray of *Solidago* (goldenrod) and of *Gutierrezia eathanica*, with a few strands of a thread-like plant resembling corn silk. Around the stems of the flowers and the quills of the feathers is bound an aboriginal cord of native cotton, resembling ordinary white wrapping twine, leaving two long, loose strands. These strands, brought together, are knotted about 1 cm. from the plume. The strands are then separated and passed on either side of the prayer-stick, and tied around its neck, leaving the plume to swing free. From the final knot, which is sometimes a bow, swing from two to five loose strands of the cord. These plumes are attached only to prayer-sticks of types A, B, and C.

*Wrappings.*—Each primary prayer-stick and type F of the secondary variety is neatly wrapped with a band, 10 mm. wide, made of an unidentified water plant having the appearance of shredded corn-husk. It binds a feather to opposite sides of the prayer-stick, leaving the tip protruding from the wrapping. In types A, B, and C a spray of drop-seed grass (*Sporobolus*), which passes along the front of the stick and extends several centimeters beyond its top, is bound with the wrappers. This band or tape is called *oo-o-ool*.

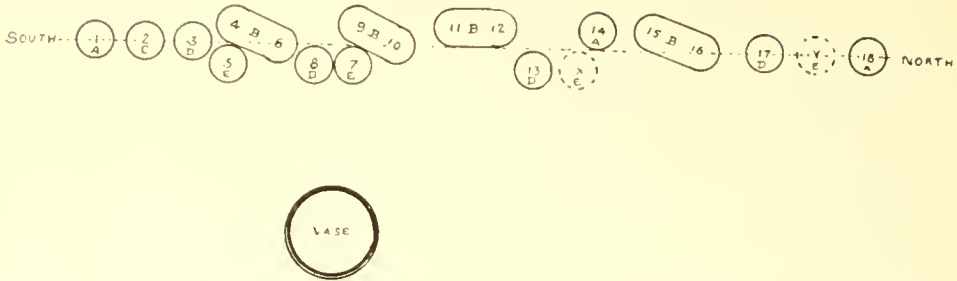


FIG. 5. Diagram showing position of prayer-sticks in the shrine

**PRIMARY PRAYER-STICKS.**—The twenty primary prayer-sticks,<sup>1</sup> known by the generic term of *pe*, were planted vertically 3 or 4 cm. in the ground, forming a row extending north and south. Before removing them, each was numbered on the crown from south to north to correspond with a sketch diagram. Thus the exact position and orientation of each prayer-stick was recorded.

The prayer-sticks were so placed in the shrine as to face the east; therefore the term "face" or "front" of a stick refers to the side which faced the east, and the back is the opposite side. The remaining two sides are designated north and south. The two ends of the stick are referred to as the "crown" and the "base", the "body" being that part lying between those two points. The relative position of the vase and the numbered prayer-sticks is shown in figure 5.

In length, the primary sticks measure from 190 mm. to 200 mm. (a hand's length), and in width at the base from 10 to 15 mm.

**Type A.**—Type A began and closed the row of prayer-sticks, while the third specimen occupied a position near the center. Their numbers on the diagram (fig. 5) are 1, 14, and 18. Two of the specimen are made of willow twigs, and one of cottonwood. The bark remained on the stick except where its shaping necessitated its removal. In the edge of the crown are cut four notches that marked the four cardinal points. A centimeter below the crown, a face is formed by notching the stick to a depth of 2 mm., then tapering to the surface to form a flat blaze 1 cm. in length. For a neck the stick is girdled 4 mm. below the face, by removing the bark for a width of 2 mm. All the exposed wood had been colored green, but much of the paint had been removed by weathering. For two-thirds of its length from the base, the prayer-stick is wrapped with a water-plant tape, binding to it, on front and back, two feathers of type 2, which extend beyond the edge of the tape. A spray of *Sporobolus*, held by the same binding, extends along the front exceeding the length of the stick. Attached to the neck with white cotton cord is the flower plume. In specimen No. 1 (fig. 5), feather No. 2 of the plume is wanting, and in No. 14 feather No. 1 has a long white spot. This type of prayer-stick, which is called *o-u-pe*, is identified by Dr J. Walter Fewkes of the Bureau of American Ethnology as representing the single rain-cloud, "male".

**Type B.**—Each of the four specimens of this type is composed of two sticks, "male" and "female", and may be identified as a double rain-cloud prayer-stick. The location of the specimens are shown by numbers 4-6, 9-12, and 15-16 (fig. 5), the first number being the male and the second the female stick.

<sup>1</sup> Only eighteen of the prayer-sticks whose original location is shown on the diagram (fig. 5) are numbered. The unnumbered sticks are designated as x and y.

The latter occupies the position on the north of the male stick, from which it differs only in having a plain crown instead of one with the quarter-notching. The two sticks are bound together, side by side, with a water-plant tape extending along the lower two-thirds of the bodies. The tape serves also to bind to front and back a feather of type 2. These broad feathers cover both sticks, a single feather across the back and two across the front, the tips of which, pointing upward, extend beyond the tape. Extending along the front, bound by the same tape is a single sprig of an herb of the genus *Sporobolus*. The sticks are twigs of willow (*Salix* sp.), excepting those of specimen 4-6 which are cottonwood (*Populus wislizeni*), and specimen 15-16 which are made of box elder (*Negundo interius*). A flower plume is bound to the neck of each stick with cotton cord. In specimen 4-6 feather No. 3 of the plume of the female stick is light blue and white. In the plume of the female stick (specimen 9-10), feather No. 3 is missing and in specimen 11-12 the plume of the male stick lacks feather No. 5, while the plume of the female has two feathers of that type. The coloring and notching (excepting the lack of the crown notching in the female) are in every way like type A. This type is known by the name of *we'-ge*, and is oriented to face the sunrise at winter solstice, excepting specimen 11-12 which faced east.

Type C.—This type, of which there is but one specimen in the collection, resembles a sun prayer-stick and occupies position No. 2 of the diagram (fig. 5). It is 196 mm. long, with a base 17 mm. in diameter. Measuring from the base the wrapping extends 70 mm.; at 90 mm. the front and back are flattened to a depth of 4 mm., leaving the thickness 9 mm. at that point. At 100 mm. the side notching begins on the north and south sides of the stick. These notches, four on each side, are cut 2 mm. deep at the base and blazed to a length of 15 mm. The distances between the notches become smaller as the top is approached, the lowest space measuring 14 mm., and the following spaces are 9, 5, and 2 mm. respectively. A feather of type 2 is bound with water-plant tape to front and back, with a spike of *Sporobolus* along the front, projecting beyond the crown of the stick. At the top notch, the flower plume is attached to the north side, with the final knotting of the cord on the front. Adhering to the plume is a "feather dart" (type H). All the wood that is free from bark is painted, except the base. The principal color is orange, with a green streak along the southeastern and the northwestern edges. This prayer-stick is called *ma'-wa-ke*.

Type D.—This type occupies positions 3, 8, 13, and 17. It is formed by removing the bark from each end of the twig for about one-third its length, leaving the middle third covered with the bark. Two white feathers (type 6) are placed along the face<sup>1</sup> of the bark-covered part of the stick, with quills opposite and their tips extending along the blazed part, although they do not reach the extremities of the stick. These feathers are held in place by the wrapping at the center where the bark is not removed. When the end of the wrapping is reached, the tape is fastened by passing it under the last round to form a tie; it is then twisted into a cord the end of which is knotted around the stick at the point where the wrapping began. This forms a loop-like handle having a radius of 3 or 4 cm. In specimens 8 and 13 the tape is wrapped upward so as to bring the tie-end of the handle at the base of the wrapping. In sticks 3 and 17 the wrapping is down-

<sup>1</sup> In specimen No. 8 the feather appeared to be on the northern side.

ward, the knotted end of the handle being at the top. No. 13 varies by having the wood trimmed to taper at the ends, making the middle part more pronounced. Specks of green pigment adhere to all the sticks, indicating that all the exposed parts of the wood, including the ends, were originally green in color. The name of this type is *wa'-da-pe*, and it is identified as the chief's prayer-stick.

Type E.—Only two of the four specimens of this type, which is identified as the warrior's prayer-stick, were noted in place, and these occupied positions 5 and 7, which, as will be seen by the diagram (fig. 5), follow the sticks numbered 3 and 8. It will also be noted that the diagram shows a break after sticks 13 and 17, which suggests that they were followed by sticks X and Y, as indicated in the diagram by the broken circles. The close relationship between the chief's and the warrior's prayer-sticks is further indicated by their having similar feathers. Bark remains on the stick for about a quarter of its length from the base, where the flattening of the sides begins, the facet sloping until the thickness of the stick is 6 or 7 mm. at about one-third its length, and continues with uniform thickness to the top. At about 80 mm. the notching begins on the back. This is an arc of a circle, the chord of which measures 18 to 20 mm., the dip being 3 to 4 mm. or one-third the width of the stick where the notch is made. The beginning of the front notching is opposite the end of the first back notch. The notching is uniform, and alternates between the back and front, three notches each, to the top, the last notch being on the front face. Opposite the end of the last notch, the back curves forward uniformly with the upper half of the curve of the notch, so that the top end of the stick is reduced to 3 or 4 mm. The bark is not removed either front or back opposite the notches. The decorated end of the stick is wrapped with water-plant tape, binding on each side a white or gray feather of type 6, the tips of which extend half its length. The coloring is green and orange, but as the arrangement differs each specimen will be separately described. In specimen 5 the front notches are green, back notches orange, north side orange; on the south side the front half is green and the back half is orange. Specimen 7 has the front notches orange and back notches green. The two sides have the front half orange and the back half green. In number X the front notches are orange and back notches green and orange (green being next to the green side and orange next to the orange side, but green predominating). The north side is green and the south side is orange. Specimen Y has the front notches orange and back notches green and orange, the green appearing to overlap the orange; on the north side the front half is green and the back half is orange; on the south the front half is orange and the back half green.<sup>1</sup> The top and base always have the same color as the back notches. In stick Y the side under the wrapping is slightly flattened and free from bark, the coloring of the side extending to the base end of the stick. This type is known as *go'-wa-ne*.

SECONDARY PRAYER-STICKS. —The positions of the secondary prayer-sticks were not noted. On the occasion of the visit the mountain crest was swept by the prevalent strong west wind, and light, unattached offerings would doubtless be blown away notwithstanding the sheltering inclosure.

Of the forty-three minor prayer-sticks there are apparently nine types,

<sup>1</sup> Where the back notching appears green and orange, it is possible that the presence of the orange is due to accidental running of the color. In all types the green has been almost wholly obliterated by the elements, while the orange remains bright and strong.



TONYO, THE SACRED MESA OF THE SAN ILDEFONSO INDIANS. MORE THAN THREE HUNDRED YEARS AGO THEY FLED TO ITS SUMMIT FOR PROTECTION FROM SPANISH INVADERS, WHOM THEY SUCCESSFULLY RESISTED





which, as stated, are designated by letters F to N. The last four may be simply imperfect specimens.

Type F.—The four specimens of this type are blades of sedge (*Cyperus*), and feathers. Two bunches of sedge are placed with ends overlapping, on one side of which two pairs of turkey-tail feathers (type 2) with tips projecting, in opposite directions, about 5 cm. beyond the ends of the water-plant tape binding. This binding extends 6 cm. along the center and is finished with a loop-like handle, in every respect like the binding of type D of the primary prayer-sticks, suggesting some special relationship between the two types. This type, the entire length of which is 30 cm., is called *ma'-wa-pe*.

Type G.—There are nine specimens of type G, eight of which are made of willow twigs, and one of cottonwood. They measure 28 mm. in length, with diameters varying from 9 to 16 mm. The bark is not removed. Two gray feathers of type 7, with curled rachises, placed back to back, form a plume that is attached to the middle of the stick with a white cotton cord, knotted as described in the flower plume, allowing the feathers to hang free from the stick. In five of the specimens the cord passes but once around the stick; in two it passes twice around, and in another three times around. In all instances the final knots are without bows or loops, the two loose ends of the string hanging free. The two end faces of the stick are painted green. This type is known as *we'wa-wive*.

Type H.—This type is not identified, but the thirteen specimens<sup>1</sup> resemble dart sticks with attached feathers. These sticks are reeds, resembling wheat straw, 40 mm. in length, having a joint about one-third their length from the base. The top is burnt off instead of cut, and has inserted a gray feather of type 8. It is called *ati-kani*.

Types I and J.—There are two specimens of type I and four of type J, each made of from three to six blades of sedge. The base or butt-ends of I are wrapped with the same herb and folded back to form an eye-loop 5 by 10 mm. in size; above this loop is bound a gray feather of type 8, measuring 6 or 8 mm. in length. The form J is the same as I, except that the butt-end is not folded back to form an eye-loop, suggesting that types J and I may be male and female expressions respectively of the same symbol. These types are known as *awa-pe*.

Types K and L.—There are four specimens of K and two of L. K is the same as type I, and L the same as J, excepting that neither K nor L has attached feathers. It is possible they are but imperfect specimens of the former types from which the feathers have been lost.

Type M.—The five specimens of this type resemble unattached flower plumes, as previously described; there is, however, a variance as to feathers. One of the specimens has feathers of types 2, 3, and 9, with six minute feathers of type 10. Another specimen is composed of feather-types 3, 4, and 5.

Type N.—This type, of which there is but one specimen, is merely a twig, of the size of type G, from which it differs in the absence of bark, paint, and attached plume.

Miscellaneous Fragments.—Among the miscellaneous fragments are four feathers and an equal number of pieces of water-plant tape, three of the latter having knots indicating that they had been used for binding.

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<sup>1</sup>Two specimens were found adhering to primary prayer-sticks.

Evidence that sacred meal had been applied liberally to all the prayer-sticks appears from the matted condition of many feathers and the adherence of loose feathers and small offerings to the primary sticks.

#### LOCATION

The shrine is situated on public land in the northeast quarter of the southeast quarter of section 34, T. 21 N., R. 6 E., of the New Mexico principal meridian and base; latitude  $36^{\circ} 01' N.$ ; longitude  $106^{\circ} 22' W.$  The peak is the dominating feature of the western sky-line from all the Tewa pueblos of New Mexico, and from prehistoric sites as well. All have been located by accurate surveys and appear on the accompanying map.<sup>1</sup> The peak may be in sight of Jemez pueblo, which lies 30 miles or more to the southwest of the shrine, but it is quite certain, from the topography of the country, that the ancient trail from Jemez to the Tewa pueblos passed through the Valle Santa Rosa gap and down Santa Clara creek, skirting the southern foot of this peak (pl. 1).

The ruins nearest the shrine, known as Group I, consist of forty cavate cliff-rooms above which are what appear to be the foundation walls of a quadrangular community building. To the west of this structure are a cairn and a small stone inclosure, probably simple shrines. The group occupies the upper ledge on the northern side of Santa Clara creek, and more than 800 feet above it. From these ruins the shrine is of easy access; it bears S.  $85^{\circ} W.$ ,  $5\frac{1}{2}$  miles distant.

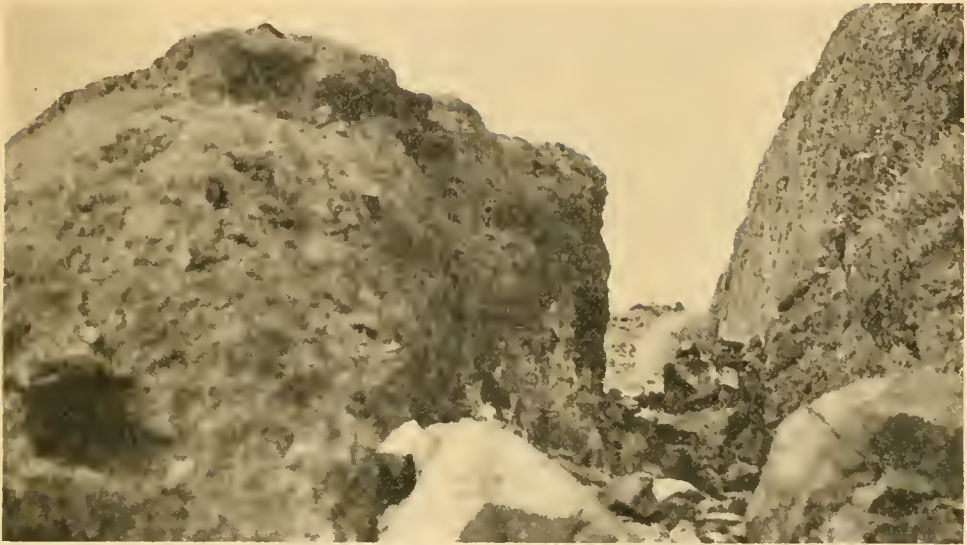
Archeologically the shrine belongs to the Puyé section of the Jemez plateau.<sup>2</sup> From the crest of the high peak, some ten miles distant, it overlooks one of the most remarkable centralizations of prehistoric habitations to be found within the United States. Clustered around the great community house of Puyé<sup>3</sup> are thirteen ruin groups having four community houses, four major pueblos, 105 minor pueblos, and 1,468 cavate cliff-rooms. These groups were designated A to M, inclusive, at the time of the survey. Their locations appear on the map (pl. 1). The community house of Puyé is in group G; Chipiwí in group A; and Shuffiné in group D. Groups K, J, and I were discovered by the writer.

The Tewa Indians of K'hapo, "Where the wild-rose grows by the water" (Santa Clara), claim the Puyé ruins as those of their ancestral home, and while it is probable that they may have once occupied them, it seems doubtful that they originated them. Santa Clara creek, flowing through this ancient community, with its abundance of pure water, at present the only supply, has its source at the foot of the world-center shrine peak; and the reservoirs of the community have their openings to face the "rain-roads", while at right angles with the bear-

<sup>1</sup> The bearing and distance of the shrine from the various Tewa pueblos are as follows: *Oke* (San Juan), N.  $82^{\circ} W.$  22 miles; *K'hapo* (Santa Clara), N.  $81^{\circ} W.$  21 miles; *Powhoge* (San Ildefonso), N.  $63^{\circ} W.$  21 miles; *Nambé*, N.  $70^{\circ} W.$  26 miles; *Tesuque*, N.  $58^{\circ} W.$  27 miles. Hano is a Tewa pueblo in Arizona. Prior to the eighteenth century the ancestors of the Hano people occupied an ancient pueblo on the Rio Grande.

<sup>2</sup> See *Bulletin 32, Bureau of American Ethnology*.

<sup>3</sup> This quadrangular, court-inclosing building measures N.  $6^{\circ} E.$ , 282 feet, by N.  $87^{\circ} E.$ , 304 feet. It had 527 rooms on the ground floor. The débris indicates a three- or four-story building containing probably 1,500 rooms.



1. THE ONLY TRAIL UP TONYO MOUNTAIN, NEAR THE CREST, PASSES THROUGH A NATURAL GATEWAY THAT STILL SHOWS EVIDENCE OF FORTIFICATION. THE NICHE IN THE CLIFF, ON THE LEFT, IS A SHRINE IN WHICH WAS A CACTUS OFFERING



2. SHRINE C, A PINK-GRAY BOWLDER MARKED WITH NINE SMALL AND TWO LARGE SAUCER-SHAPE HOLES. NORTH OF THE BOWLDER IS A SEMICIRCULAR WALL, 2 FEET HIGH, BUILT OF ROUGH STONES, WITH THE OPENING FACING NORTH



ing of this shrine are roughly oriented the many pueblo ruins that dot the high mesa.<sup>1</sup>

It seems highly probable that this peak, which gave the inhabitants their only water, was a shrine in prehistoric times and subtly influenced their lives.

#### USES OF THE SHRINE

The full meaning of the World-center shrine is yet to be determined. It is probable that many fraternities made offerings there, differing in accordance with their respective rituals. The late Mrs Matilda Coxe Stevenson, the distinguished ethnologist, identified the particular offerings above described as that of the Bow Fraternity, and that type B of the prayer-sticks represented the Elder and the Younger Brother. The Indians whom I consulted, leading men from two pueblos, who are my friends, stated that type B of the prayer-sticks represents man and woman, but further than this they did not know their significance.<sup>2</sup> Type C they thought was a ladder. In type F the chief of the pueblo carried his official paraphernalia. Type H they called a "fan". Type G had no Spanish or English name that they could give; they were used "to play with" in their dances, and they were very careful not to spoil them. Types I and J they used as "stringers" in their dances.<sup>3</sup>

<sup>1</sup> In this connection it is interesting to note that the community building of Ruin Group I bears N. 13° W., 30 feet, and is one of the few instances of a northwesterly bearing. The bearing of the shrine at this point is south of west instead of north of west as in the case of all other groups. The mean bearings of the meridional pueblo walls, based on the results of thirty-five instrumental tests, was N. 14° E., the details of which appear in the writer's official report on the Pajarito Park, New Mexico, dated June 22, 1912, on file in the General Land Office. The bearing of the shrine from the Puyé community house is N. 75° W.

<sup>2</sup> The following account by a San Juan Indian, while not substantiated by later investigations, is not without interest:

"The shrine is used by the Indians of Jemez, Cochiti, San Ildefonso, Santa Clara, San Juan, and Taos, each pueblo having a separate trail leading into the shrine inclosure. These trails radiate from the eastern entrance toward their respective pueblos. When a runner from a pueblo enters the shrine, he deposits a powder [doubtless sacred meal] in the trail by which he enters. This designates the pueblo whence he came."

It is said that before a dance, feast, or other ceremony, each pueblo sends a runner to the shrine to obtain signs or messages or to learn whether any pueblo is in distress. A sacred vase is hidden near the shrine. When the runner deposits his prayer-sticks, the vase, filled with sacred water, is placed in front of them. Into this water the runner dips his fingers and performs certain rites. These details were obtained by Mr James Leese, a forest ranger, from a Tewa Indian of San Juan pueblo, who seemed in great fear lest it become known that he had divulged the information. Mr Leese used this peak as a fire outlook from August 23 to September 30, 1911, during which time he was constantly watched by the Indians.

While he was there the shrine was visited by twelve or fifteen Indians from Taos, San Juan, Santa Clara, and Jemez. Some of these, at least, were runners, but whether all were, Mr Leese did not know. All the visiting Indians denied any knowledge of the shrine, and gave various reasons for their presence on the peak.

The author questioned a Tewa living at the foot of the shrine peak as to what was on the summit. To this he replied "grass". Being pressed further, he said, "You can see everywhere." On being told of the shrine and asked to explain it, he became embarrassed and refused to talk further.

<sup>3</sup> Many of the details and illustrations presented in this paper were incorporated by the writer in an article entitled "A World-quarter Shrine of the Tewa Indians", published in *Records of the Past*, vol. XI, part IV, Washington, 1912. Owing to several important omissions and some serious typographical errors, an accurate and more extended record is deemed advisable, especially because the shrine offerings have since become seriously damaged.

The dates on which the different pueblos used the shrine would not be divulged, but that there is close relationship between the shrine and their annual festal days<sup>1</sup> was admitted. Further evidence of this relationship was obtained at Tesuque pueblo on the occasion of its Buffalo dance, November 12, 1913. In the center of the court, where the dance was performed, there was planted a spruce tree, six feet in height, that seemed the focal point of the dance. The tip of the tree was adorned with a spray of drop-seed grass (*Sporobolus*) and a feather of type 5, attached with white cotton cord. How sacred this fetish is held was shown by the following incident: Thinking the ceremony finished, the writer cut off the decorated tree-tip, and placed it among his wraps. When missed by an Indian woman, a long search was made for the object, and had it been discovered in the writer's possession the outcome would probably have been unpleas-

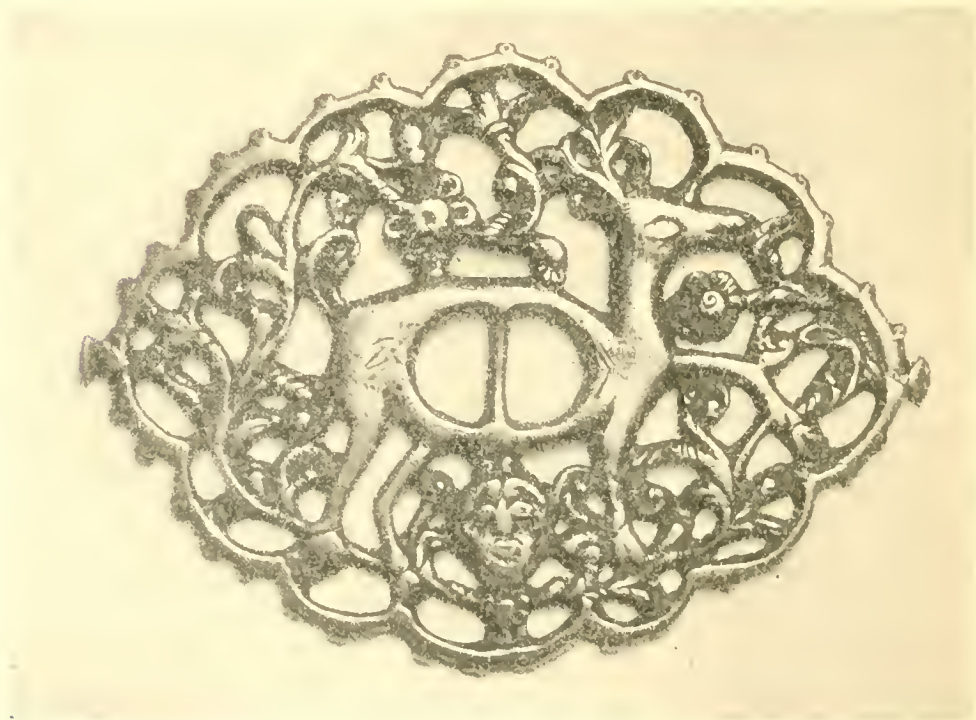


FIG. 6.—The silver ornament taken from a shrine on Sierra de la Bola

The annual festal days of the pueblos, and their approximate population, are as follows:

Acoma	400	September 1.	San Ildefonso	300	January 23.
Cochiti	500	July 11.	San Juan	500	June 24.
Isleta	1000	August 28.	Santa Ana	120	August 30.
Jemez	500	November 12.	Santa Clara	300	August 12.
Laguna	500	September 19.	Santo Domingo	900	August 4.
Nambé	180	October 4.	Sia	100	August 15.
Pojuaque	50	December 12.	Taos	500	September 30.
Picuris	200	August 10.	Tesuque	150	November 12.
Sandia	40	June 13.	Zuñi	1600	November moon.
San Felipe	600	May 1.			



1. SHRINE OF THE LITTLE WAR GODS



2. THE GATEWAY OF PUYÉ IS A NATURAL ARCH, 8 FEET HIGH AND 4 FEET WIDE, AT THE EASTERN END OF THE POTRERO THROUGH WHICH PASSES A TRAIL WORN SIX INCHES DEEP IN THE TUFA. THE TEWA INDIANS CALL IT PÓPAWI





ant, if not serious. Two months later, when the Buffalo dance was performed at San Ildefonso (January 23, 1914), in the court was what appeared to be the identical tree used at Tesuque. The tip having been cut off, there were no decorations.

## LA SIERRA DE LA BOLA SHRINE

From Tsikomó mountain S. 25° W., 16 miles distant, is a peak known as La Sierra de la Bola. It is in the southwest corner of a private land claim known as Baca Location No. 1, and in altitude is 11,400 feet above mean sea-level.

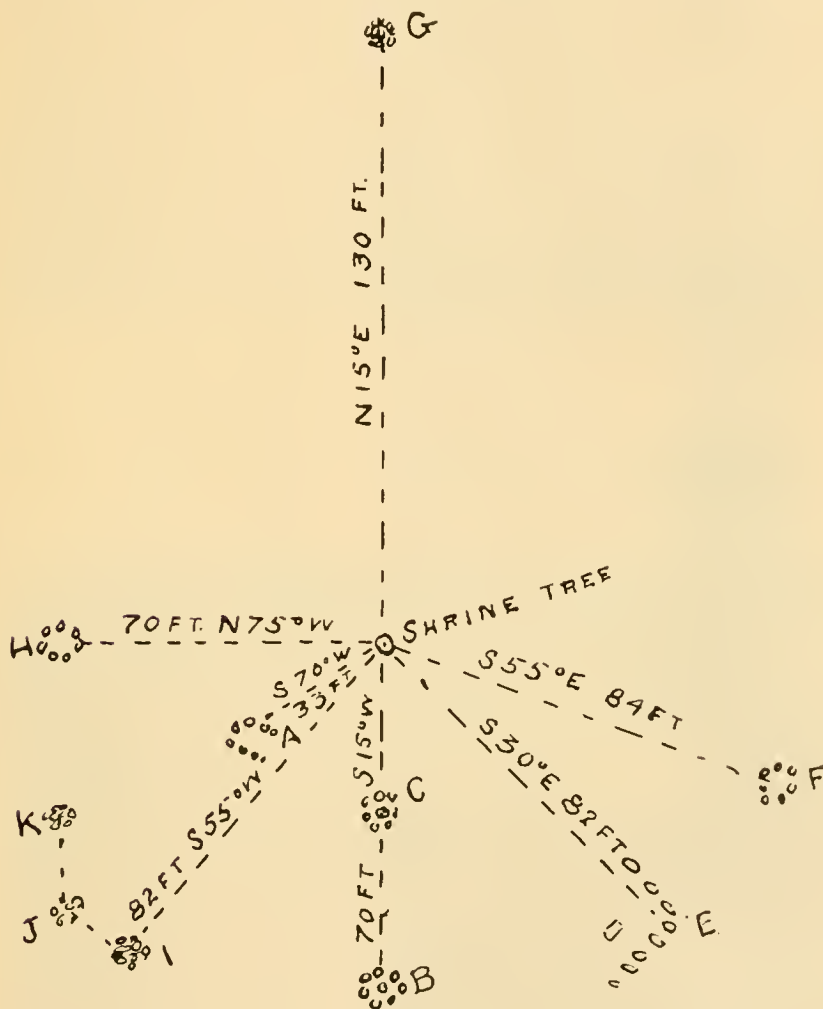


FIG. 7.—Plan of La Sierra de la Bola Shrine. (A, Niche 2 feet in diameter, 1½ feet high, with opening facing southward. B, Rectangular shrine where silver ornament was found. All other points are mounds of stone, 1½ to 2 feet in diameter. J and K were indistinct.)

At its base, on the south, flows the Rio Jemez, and on the west the Rio San Antonio. Near the mountain lives José Armenta. On November 23, 1912, I stopped at his house and found his wife wearing a peculiar silver ornament as

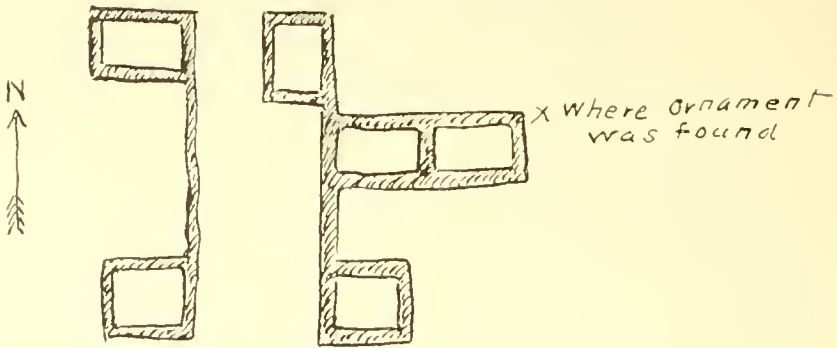


FIG. 8.—Armenta's sketch of shrine where the silver ornament was found

a belt-buckle. On inquiry I was informed that on top of the mountain was a rectangular construction of loose stones, like the ground-plan of a house, at the

eastern end of which the ornament (fig. 6) was found. José stated that he had climbed the peak in the summer of 1905, in search of horses, and had seen the ornament protruding from beneath a rock. He had never been up there again, and knew of no one to visit the place except Indians from the pueblos of Jemez, Sia, Santo Domingo, Sandia, Cochití, San Hdefonso, Santa Clara, and San Juan, who went to the summit of the peak every year during August.

I climbed the peak. Its base is timbered with spruce, aspen, and piñon; the upper part is practically timberless, but grassy like Tsikomó.

The crest of the mountain, 100 yards long, bears N. 55° E. At the eastern end is a mound of stone 10 feet in basal diameter and 4 feet high. From this point Tsikomó is in plain view. At the western end grows a spruce tree (fig. 9), 12 inches in diameter and 20 feet high, encircling which are eight small mounds of stone, and one stone niche with its opening southeast. In the



FIG. 9.—A spruce tree, 20 feet high, is the nucleus around which cluster the various units of the Shrine on La Sierra de la Bola



1. THE SNAKE SHRINE, TÓWAPO



2. PARALLEL STONE ROWS—AN ARCHEOLOGICAL PUZZLE





FIG. 10.—The shrine from which the silver ornament was taken. Note the broken metate

niche, which is 24 inches in diameter and 18 inches high, was a charred fragment of blue and yellow paper, also some charred twigs. The bearings of these cairns from the spruce tree, which appears to be the radial point of the shrine, are noted on the accompanying diagram (fig. 7).

From this tree S. 30° E., 82 feet, I found the structure (fig. 8) described by Armenta, but deep snow prevented me from verifying his sketch. At what seemed to be the corner where he said he had found the ornament, was a broken metate, 18 inches long. An excavation, four feet deep and three feet in diameter, had been made by someone with a sharpened pole (fig. 10).



FIG. 12a.—Decoration on a prehistoric Aztec vase. (From Lumholtz, *Unknown Mexico*.)



FIG. 11.—Silver disc found by A. B. Craycraft in an ancient grave at the community house of Tsankiwi, together with a human skeleton. (Exact size.)



FIG. 12.—Mural painting from a Toltec house. (After Charnay.)

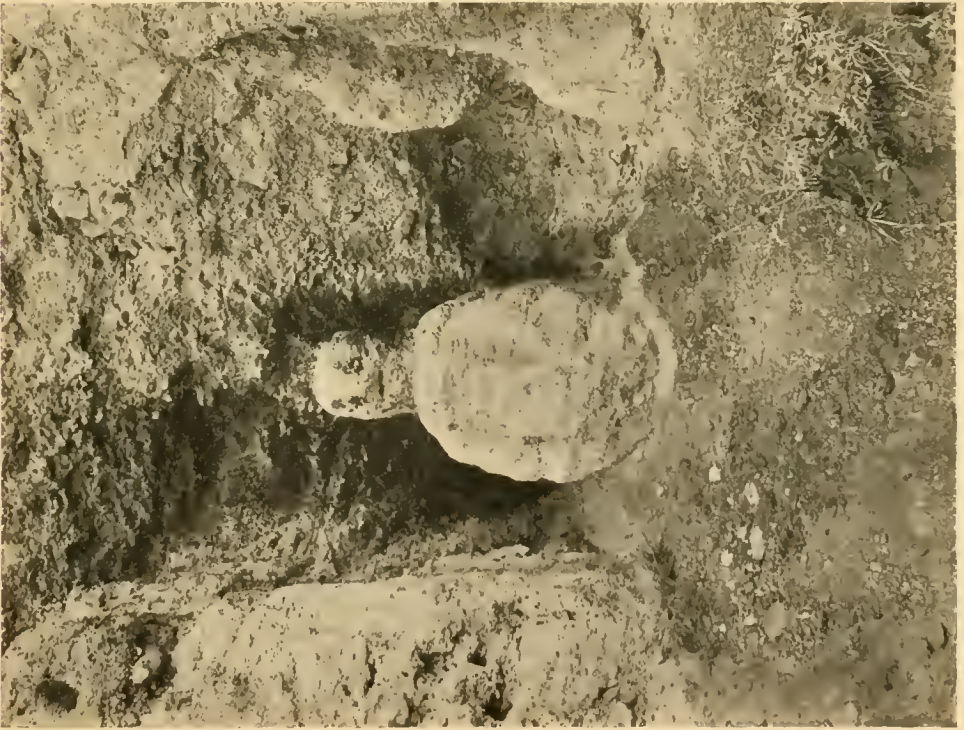


FIG. 13.—Spanish iron stirrups used in New Mexico in 1693 by an officer in the army of the reconquest led by Don Diego de Vargas. The stirrups are 19 in. long by 13½ in. wide, and weigh 13 pounds 6 ounces. The white spots on one of the stirrups are remnants of gold and silver plating. (Courtesy of Hon. L. Bradford Prince.)

The ornament is a heavy silver casting 1,175 mm. long, 850 mm. wide, and 3 mm. thick, ornamented with a deer in the center, surrounded by floral scrolls, with a human image at the base (fig. 6).<sup>1</sup> Ventura, the wise man of Taos pueblo, pronounced the design as clearly Indian, but was unable to account for the workmanship. If Indian at all, it is certainly not that of any local tribe. The late Mrs Matilda Coxe Stevenson, an authority on the Zuni Indians, said the design was similar to that of Zuni. If compared with certain designs of the Toltecs illustrated by Charnay (fig. 12), and those of the prehistoric Aztecs as described by Lumholtz (fig. 12, *a*), a surprising similarity will be noted.

That the ornament was placed in the shrine by Indians, there appears to be no reason for doubt. The excavation at the point from which it was taken suggests that it had been missed, and was being searched for. If placed in the shrine in historic times it may have been obtained from early Spanish explorers. The ornamentation in vogue at that period is shown by the iron stirrups used in New

<sup>1</sup>Some years ago Mr A. B. Craycraft found in a grave at Tsankiwi (pl. 1, no. 40) a perforated silver disc, without ornamentation. In size it resembles a twenty-five cent piece, except thinner. On either side of the perforation the medal is notched (fig. 11).



TWO SHRINES OF OTOWI-TAKE. THE FORM OF HUMAN EFFIGIES CARVED IN THE TIFA CLIFF-ROCK





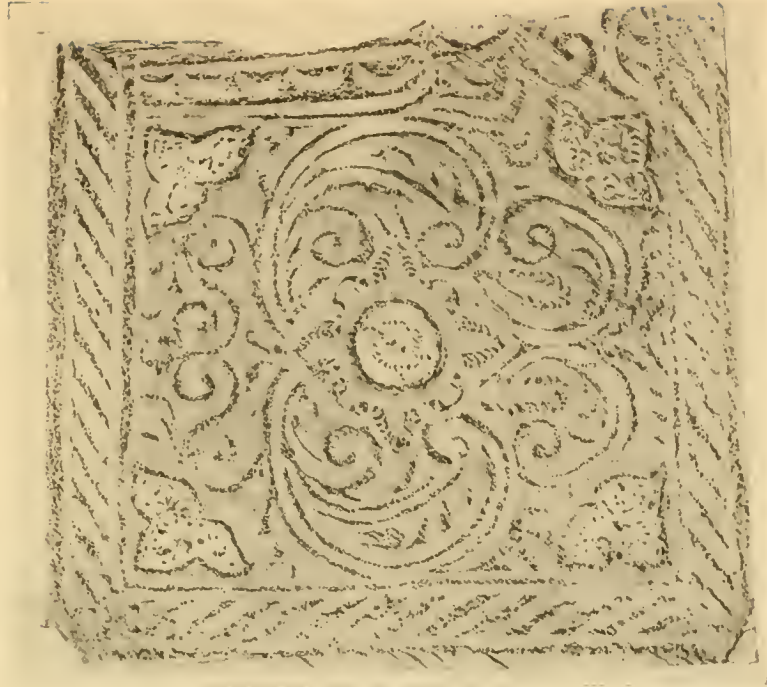


FIG. 13a.—A unit of the ornamentation of the stirrup (fig. 13). Three-fourths size



FIG. 14.—The niche or altar from which a stone image of human form was taken

Mexico in 1693 by an officer of the army of reconquest led by Don Diego de Vargas (figs. 13, 13 *a*).

This mountain with its shrine is in view from the prehistoric Pueblo del Aguila, from which it bears a little east of due north. The peak is called Jemez by the Indians.

#### THE RAIN-GOD SHRINE

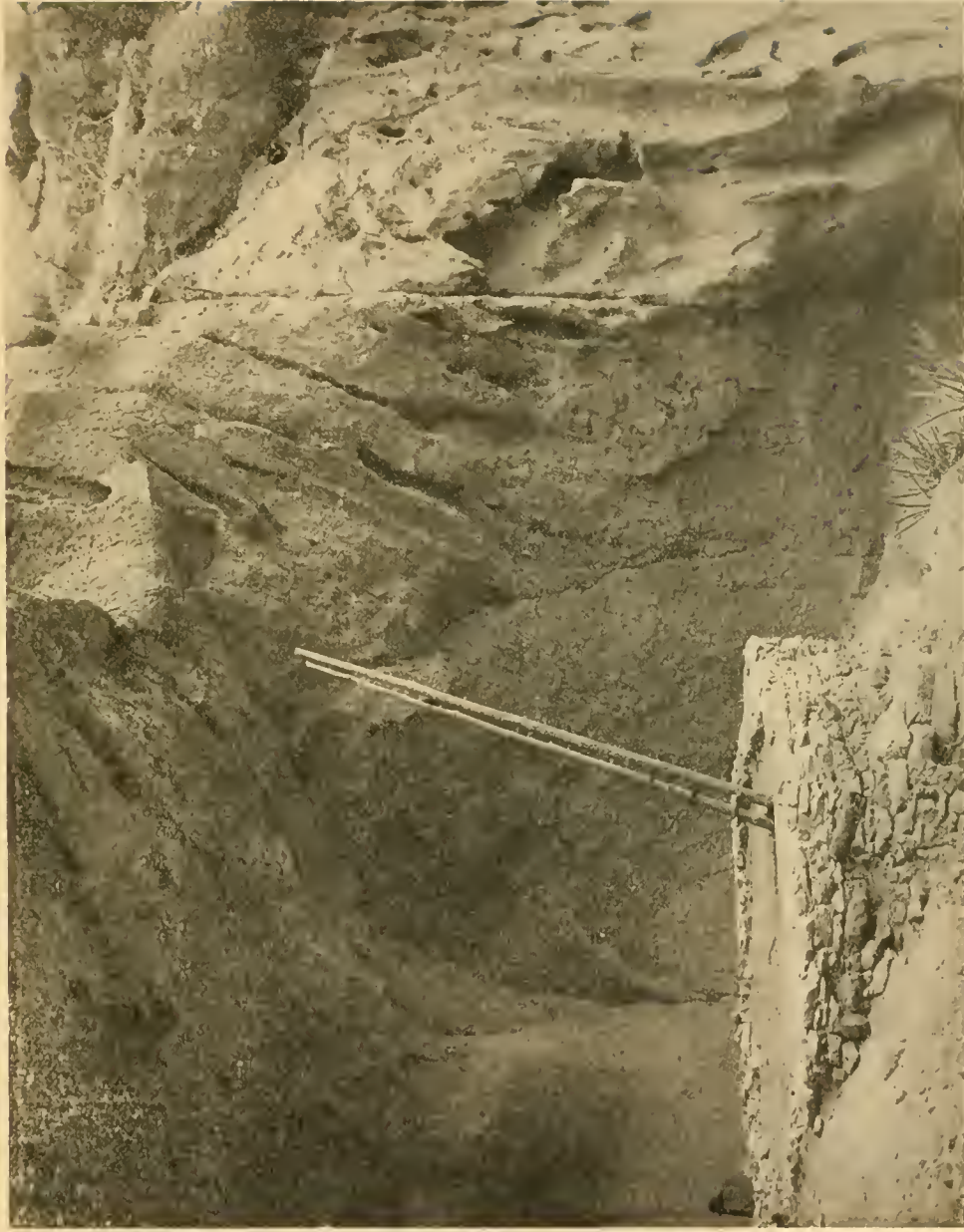
At its headwaters the Rio Gallina, a tributary of the Rio Mimbres, branches to the east and west of an unnamed peak (fig. 15) which rises 1,300 feet above the valley. It is situated a quarter of a mile northeast of the corner of sections 2, 3, 34, and 35, Ts. 16 and 17 S., R. 10 W., New Mexico Meridian. On November 4, 1915, while surveying the township line, I visited the crest of this peak, which is sharp-ridged and extends 100 feet to the northwest. At its southeastern end is a hemicycle, 10x10 feet, constructed of loose stones, with the opening facing

S. 65 E. In the center of the encircling wall, and forming a part of it, a niche was built, extending 18 inches back in the wall, with an opening 12 inches high by 8 inches wide (fig. 14). On raking out the debris of a wood-rat's nest, I found a human image of stone, rudely fashioned, measuring 8x6x1 inches. Holes suggesting eyes and mouth had been formed in it, with a slight notching below the mouth for a neck (fig. 16). The crest of the mountain is almost timberless, making conspicuous the two junipers, 10 inches in diameter, to the northwest and southwest of the shrine 10 and 30 feet respectively.

Where the river branches is an ancient pueblo 450 feet square; the buried walls inclose a court opening to the east. To the northeast, on a small hillock, a large kiva overlooks the ruin. From this ruin the peak and shrine, which are in plain view, bear N. 13° E. 1 mile distant. This bearing is also the meridional bearing of the pueblo. The walls, except those of an apparently newer



FIG. 15 The peak of the mountain on which is the Stone Image Shrine rises 1,300 feet above the valley in which lies a large prehistoric ruin



THE CEREMONIAL CAVE. IN THE FOREGROUND IS THE KIVA SUNK EIGHT FEET IN THE SOLID ROCK, THE ENTRANCE TO WHICH IS BY MEANS OF THE LADDER PROTRUDING FROM THE HATCHWAY

A. B. Crarycraft. Photo



building at the southeastern corner, are almost completely covered with earth, and potsherds are found only on excavating to a depth of three or four feet. Fragments of the usual coiled ware were found; the decorated ware showed geometric designs in black on white or reddish-brown body.<sup>1</sup> An ancient trail (fig. 17, C) appeared to connect the ruin with the shrine.

Minor shrines were found on peaks E, F, and possibly G (fig. 17). On the crest of Peak E was a single juniper, 20 inches in diameter, from which a trail, two feet wide, formed by a double row of stones, extended N. 32° W. 6 feet, in the direction of the major shrine at B (fig. 17).<sup>2</sup> On Peak F is a large mound, the stones of which were somewhat scattered, as though disturbed by a relic hunter.

Along the valley of the river are a number of lesser ruins, differing but little from the one just described.

#### THE SHRINES OF TONYO

Tonyo (pl. III) is the sacred mesa of the San Ildefonso Indians. More than three hundred years ago they fled to its summit for protection from the Spanish invaders, whom they successfully resisted. It lies two miles north of San Ildefonso, rises 800 feet above the pueblo, and terminates in a comparatively level summit with an area of about twenty acres. There are nine shrines on the mesa (figs. 18 and 19), as follows:

*Shrine A.*—The only means of reaching the mountain-crest is a narrow and difficult trail. Near the top the trail passes through a natural gateway, still flanked by a defensive wall. This gateway faces south and overlooks the pueblo. To the west of this passage is an altar formed of a niche in the cliff-rock, with a cactus (*Opuntia arborescens*) below it (pl. IV, 1).

*Shrine B.*—At the end of the trail where the summit is reached, are four inclosures, the largest not more than 18 inches square, formed of loose, unshaped



FIG. 16.—Image from the Rain-god Shrine. (8 x 6 x 1 in.)

<sup>1</sup> At the ruin I obtained a granitoid rock, 24 x 16 x 6 inches, cut out in the center to form an oval bowl; at another point a mano with side grooves for the fingers.

<sup>2</sup> A metate and a mano were found near the shrine of Peak E, hidden in a crevasse in the rocks.

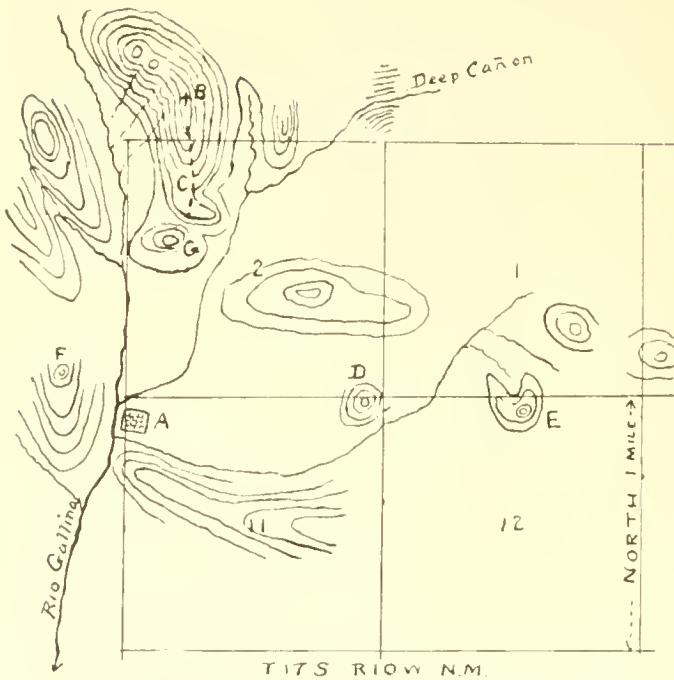


FIG. 17. Location of the Rain-god Shrine (B), Ruin A, and main shrine on E, F, and G. An ancient trail (C) leads down from the shrine at B

stones. In numbers 1 and 3 of these miniature rooms were offerings of colored pebbles, seemingly selected to correspond with the six regions. In the fourth room was a twig of the cactus *Opuntia arborescens*, which formed the offering (fig. 19, a).

*Shrine C.*—A wall of loose stones forms a hemicycle, 5 feet in diameter, with the opening facing north. Five feet back of the hemicycle is a smooth boulder, pink-gray in color, 30x30x28 inches in size. This stone appears to be foreign to the locality. The top is marked with two large holes and nine

small ones, arranged as shown in the diagram (pl. iv, 2, and fig. 19, b).<sup>1</sup>

*Shrine D.*—A circle, 3 feet in diameter, constructed of loose, unshaped stone.

*Shrine E.*—A rectangular inclosure, like the foundation walls of a house, with its eastern side bearing N. 30° E. 15 feet and a latitudinal length of 18 feet. In the northeastern corner of this inclosure is a depression 3 feet in diameter and 1 foot deep. At the northeastern and southeastern corners of this structure branches of the cactus *Opuntia arborescens* had been placed, apparently as offerings (fig. 19, c).

*Shrine F.*—In this shrine the stones, which appear to have been carefully selected but are unworked, are laid to form a circular pavement 40 inches in diameter, flush with the ground.

*Shrine G.* To form this shrine, unworked stones, gathered in the vicinity, were laid on top of the ground, with edges touching, inclosing a circular area 5 feet in diameter. This is one of the most common types of simple shrines and is found throughout the Southwest.

*Shrine H.*—In the cliff on the northern side of the mountain, fifty feet or more below the summit, is a cave shrine called *Tonvo-foi*, meaning "Tonyo (the name of the mountain, 'spotted') hole." It was not located by the writer. As described by the Indians, it is a narrow, U-shaped passage with a double opening, extending about 20 feet back in the hill. From what was learned it is a natural

<sup>1</sup> On the crest of a hillock southeast of Tesuque pueblo is a stone of similar texture and color, 24x14x12 inches in size, marked with six saucer-like holes two inches in diameter by a quarter of an inch deep, seemingly of haphazard arrangement. On the occasion of their Buffalo Dance, November 12, 1913, an offering of white breath-feathers or prayer-plumes was made at this shrine.



*A. B. Craycraft, Photo.*

A PICTURESQUE SHRINE IS CEREMONIAL CHAMBER B. OCCUPYING AN ALMOST INACCESSIBLE NICHE IN THE NORTH CLIFF, 200 FEET ABOVE THE RITO DE LOS FRIJOLES, IT SEEMS THE COUNTERPART OF THE CEREMONIAL CAVE, SOME TWO MILES TO THE NORTHWEST, WITH THE GREAT CIRCULAR COMMUNITY HOUSE OF TYUONYI MIDWAY BETWEEN THEM





cavity. Nothing was divulged as to its use further than to admit that it is a shrine. Its approximate location is shown in figure 18.

*Shrine I.*—Centrally situated on the Tonyo mesa is a single juniper tree, 8 inches in diameter, about which the other shrines seem to group similar to the Sierra de la Bola shrine. It is the opinion of the writer that the tree's location is not accidental, and that it is symbolically connected with the other shrines. No definite information supporting this view has been obtained.

*Pits of Tonyo.*—There are a number of pits on the mesa, 15 or 20 feet in diameter, supposedly ancient pit-dwellings.

#### SHRINES OF OKUO TUWANYO

A quarter of a mile southeast of San Ildefonso is a cone-shaped hillock, 100 feet high, known as *Okuo Tuwanyo*, and in Spanish as *La Lomita Alta*.

Here were found three shrines that contained feather-offerings on the occasion of the Buffalo Dance of San Ildefonso performed January 22, 1914. A trail, leading to the pueblo from the southeast, crosses the crest of the hill, along which the buffalo, deer, and antelope dancers approached the pueblo. The three shrines are known as the Cloud shrine, the Lightning shrine, and the Rain shrine.

(1) *Okuwa*, the Cloud shrine, occupies the crest of the hill and consists of a single boulder, measuring 6x6x6 inches above ground, surrounded by smaller stones. On the occasion of the dance it was decorated with several fluffy feathers, seemingly those of a turkey.

(2) *Pona Taja*, the Lightning shrine, was situated at the base of the hill, to the east of the Cloud shrine. It consisted of a juniper bush, seven feet high, in which were many feathers, as though a turkey had been plucked there.

(3) *Aki-a*, the Rain shrine, situated at the base of the hill, north by east from the Cloud shrine, consisted of a juniper bush, seven feet high, in which was a

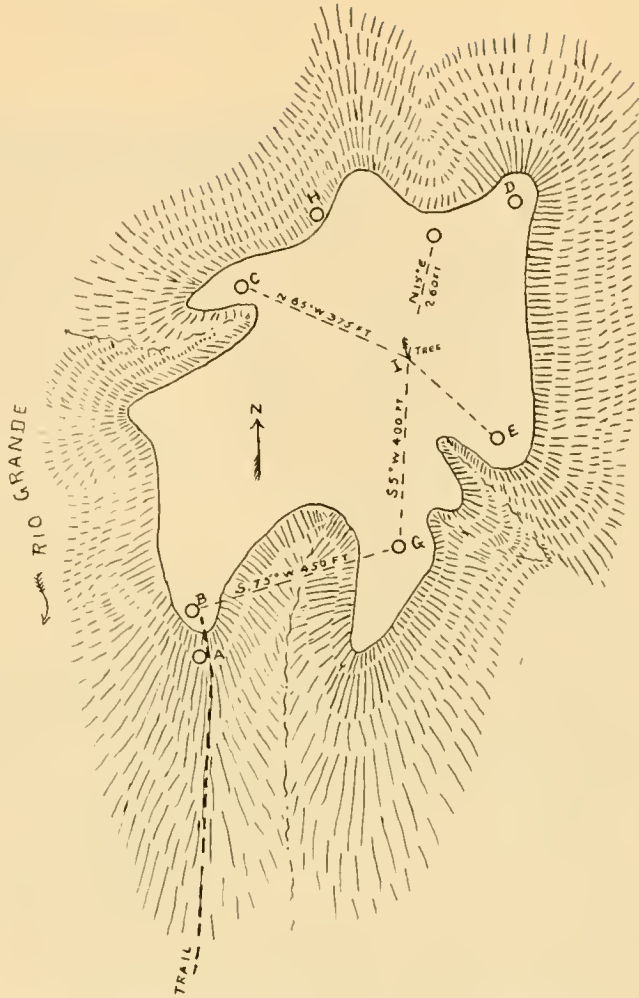


FIG. 18.—Sketch-map showing the situation of the Shrines of Tonyo



of the winter sun. There were no offerings here on the occasion of the Buffalo dance, but the participants crossed the crest of this hill instead of Okuo Tuwanyo, as they were supposed to do.

#### SHRINE OF OVOAHWI PEAK

Every hillock within the area of two leagues square that forms the San Ildefonso land grant has a shrine, usually a mound of stone, on its crest. The Black Mesa,<sup>1</sup> which is crossed by the southern boundary of this grant, has

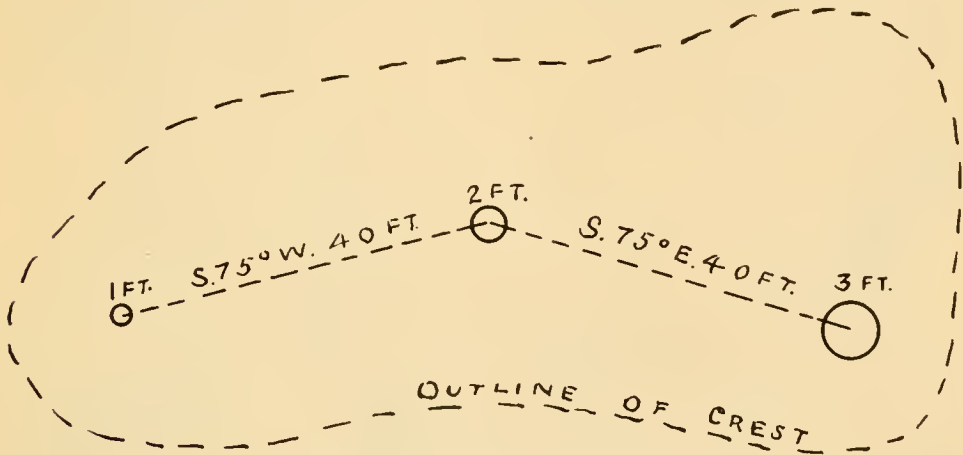


FIG. 20.—Diagram of shrines of Hillock B

several simple shrines. At its western edge the mesa rises to a sharp peak that towers a thousand feet above the Rio Grande. On this peak, known to the Indians as *Ovoahwi*, is a semicircle of stones, with opening facing the World-center shrine. As an offering it contained a branch of cactus (*Opuntia arborescens*). On the occasion of my visit I was accompanied by a medicine-man of San Ildefonso, who, though my friend, hurried by, and declined to furnish any information as to the meaning of the shrine (pl. 1, no. 25).

#### SHRINE OF THE LITTLE WAR GODS

Just east of Jemez pueblo a cone-shaped hillock rises a hundred feet above the town. On its crest is a mound formed of fragments of fossil trees from an inch to twelve inches or more in diameter (pl. v, 1). Here were found, on October 12, 1911, a prayer-stick, with plumes attached, similar in size and length to the major prayer-sticks of the World-center shrine, and two miniature bows about 8 inches in length. Some of the smaller fragments of fossil wood had been stained red. This shrine (pl. 1, no. 129) has been identified as that of the Little War Gods.

#### SHRINES OF PUYÉ

*Gateway Shrine.*—At the extreme eastern end of the Puyé potrero (pl. 1, no. 14) is a natural arch or gateway. Through this opening, which faces south-

<sup>1</sup> Many writers have confused Tonyo with the Black Mesa, referring to the latter as the sacred mountain of San Ildefonso. The Black Mesa, which is very much the larger, is five miles south of Tonyo, the sacred mountain.

east and is four feet wide by eight feet high, passes a trail worn six inches deep in the tufa, though the configuration of the surrounding area does not necessitate such use (pl. v, 2). To the southwest of this opening is a cliff-room so unusually elaborate as to suggest some ceremonial use, if not a kiva (fig. 21).

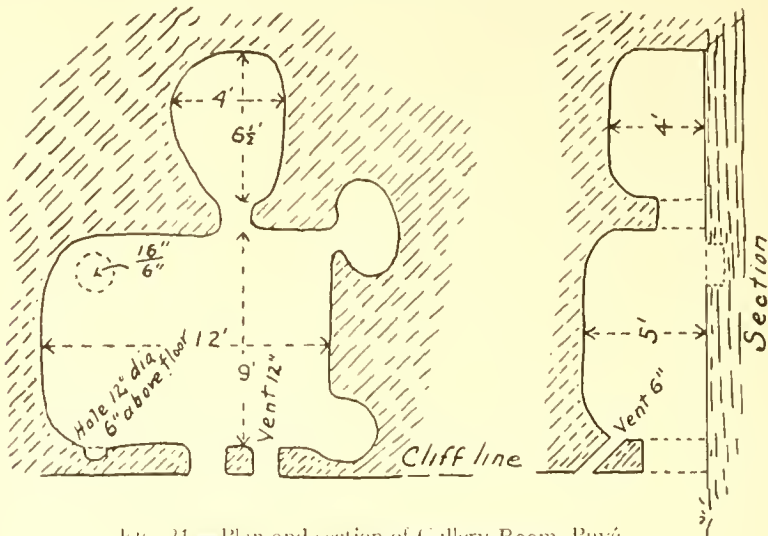


FIG. 21.—Plan and section of Gallery Room, Puyé

Between this room and the arch, an ancient stairway crosses the projecting cliff-nose and descends at a cliff-room in the northern wall (fig. 22). Just what part this archway may have played in Puyé life is unknown. The Tewa Indians call it *Póparwi*, meaning "a hole forming a passageway through a rock."

At the time of my discovery, August 14, 1909, of the great natural arch in southern Utah, now a national monument known as The Rainbow Natural Bridge, it was learned that the Navaho regarded this formation as the symbol of the rainbow, or sun's path, and it is said that a person having passed under it was not permitted to return without uttering a certain prayer, under pain of death.<sup>1</sup>

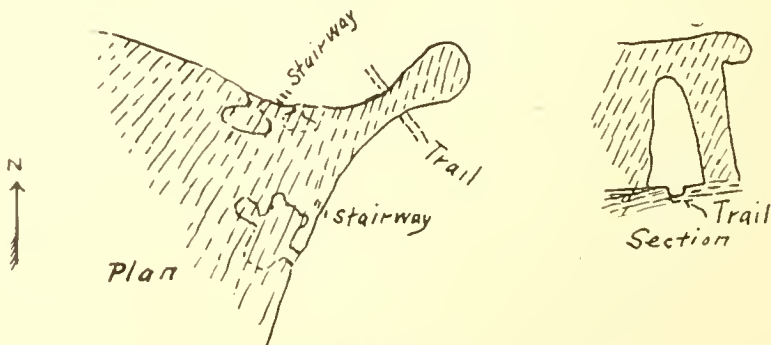


FIG. 22.—Gateway of Puyé

<sup>1</sup> See field-notes of the Rainbow Natural Bridge (national monument), survey by William B. Douglass, examiner of surveys, August and October, 1909, on file in General Land Office. The existence of the bridge and its location, based on information received from the Indians, was reported by the writer October 7, 1908.



*A. B. Craycraft, Photo.*

THE SHRINE OF THE STONE LIONS. THE ENCIRCLING WALL WAS LABORIOUSLY CONSTRUCTED OF GREAT STONES WITH AN EXIT FACING  
SOUTHWEST



*Snake Shrine.*—North of the natural gateway, on the southern slope of a small potrero, is an elaborately carved rock, 20 by 10 by 4 feet in size, known to the Tewa as *Tówaḡo*, meaning "Snake shrine" (pl. I, no. 14, group G). The accompanying illustration (pl. VI, 1) shows as much as can be said of this shrine at present.

*Double Stone-row.*—In the valley below Puyé community house, six or seven hundred feet south of the principal passage or stairway, is a double row of unworked stones, loosely laid in pairs to outline a passage four feet wide; the spacing between the pairs of stones is about fifteen feet. This row, 220 feet long, slightly curved toward the north, has a mean bearing of N. 80° W., closely approximating the bearing of the World-center shrine (pl. VI, 2). The men shown in the illustration are standing at the western end of the row, while the high peak seen in the background is Tsikomó, the shrine peak. The writer has seen nothing resembling this antiquity heretofore. One might expect it to be part of an irrigating system, but no evidence of a ditch was observed. Again it may be some unusual form of shrine.

#### SHRINES OF OTOWI

Two interesting shrines, of which little is known, take the form of human figures carved in the face of the tufa cliff. They face southeast, and occupy separate cañons from two to three miles northwest of the ruins of the Otowi community house (see pl. VII; also pl. I, nos. 30-31).

#### SHRINES OF TYUONYI

*Stone Corral.*—N. 11½° W. 1,830 feet from the community house of Tyuonyi, and 830 feet above it, is a stone inclosure resembling that which encircles the Stone Lions, to be described. It occupies a projecting point of the cañon rim overlooking the community house (fig. 23), and the diameter of its interior circumference is 22 feet. This inclosure was laboriously constructed of large, unshaped stones, with the entrance facing southeast. At the time of its discovery by the writer, July 28, 1911, there were neither images nor offerings within the structure (pl. I, no. 61)

*Ceremonial Cave.*—The Ceremonial Cave is a natural recess in the northern wall of Rito de los Frijoles cañon, three-quarters of a mile northwest of the community house (pl. I, no. 62). It measures 99 feet in width at its opening and extends back in the form of a hemicycle to a depth of 48 feet, facing S. 50° W. (fig. 24). The cave is 140 feet above the stream, and in aboriginal times was

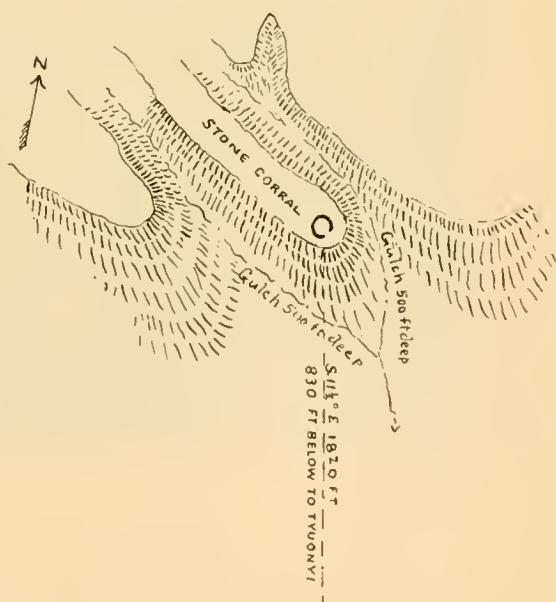


FIG. 23.—Plan of the Stone Corral

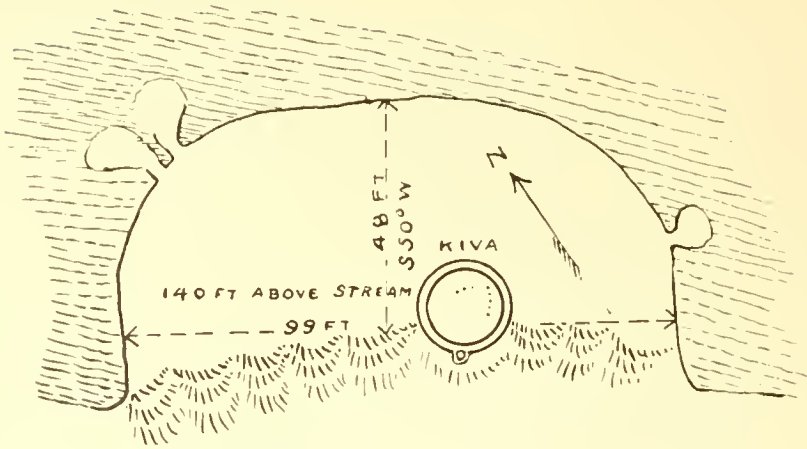


FIG. 24. —Plan of the Ceremonial Cave

reached by a stairway cut in the almost vertical face of the cliff. At the front edge of its floor, 13 feet southeast of center, is sunk a circular kiva (pl. VIII), 11 feet in diameter and 8 feet deep, with inner edge of the roof level with the floor of the cave, through which is a hatchway entrance 2 feet square. Projecting S. 50° W. from the kiva floor, a tunnel passes through the wall and connects with a circular vertical shaft, built chimney-like against the outer kiva wall, terminating at the roof level. Whether these openings, of which this is a type, are for ventilation, a ceremonial entrance, or both, is still a matter of discussion. At the floor level, on opposite sides of the kiva, at quarter-points from the "ceremonial entrance", are niches, with a base of 12 inches and with a cylindrical top 10 inches high. The northwestern niche extends back in the wall to a depth of 18 inches and the southeast niche to a depth of 12 inches. About 4 feet east of the center of the kiva two rows of holes sunk in the floor form an angle of slightly less than 90°. Seven holes form the line bearing southwest, and six holes the line bearing northwest. The dropping out of one hole in the northwest line forms an opening at the point of the angle (fig. 25).

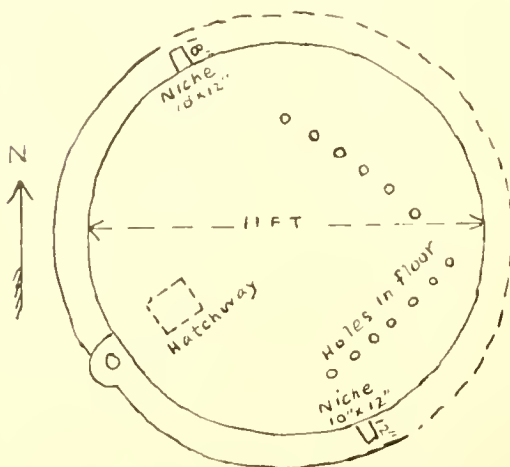


FIG. 25. —Plan of Kiva in the Ceremonial Cave

*Concentric Pavement.*—A puzzling archeological feature is a pavement constructed of shaped tufa blocks laid in concentric circles, and having a diameter of about 20 feet. It is level with the ground, and without evidence of any inclosing wall (pl. I, no. 64). It occupies a site near the left bank of the Rito de los Frijoles, S. 48° E. 1,230 feet from the Tyuonyi community house. Between the pavement and Tyuonyi the great kiva bears N. 32° W. 740 feet distant. An unusual feature of this great kiva, 42 feet in diameter, is its two





*A. B. Craycraft, Photo.*

THE PAINTED CAVE



“ceremonial entrances,” one on the western and one on the eastern side, approximately facing the community house and the pavement. Some investigators have suggested that the construction may have been a threshing floor, but the unpaved earth is known to be preferable for that purpose. Another thinks it may be the floor of a superficial kiva the walls of which have been removed, but offers no solution for the removal of the walls. The writer offers the suggestion that the pavement

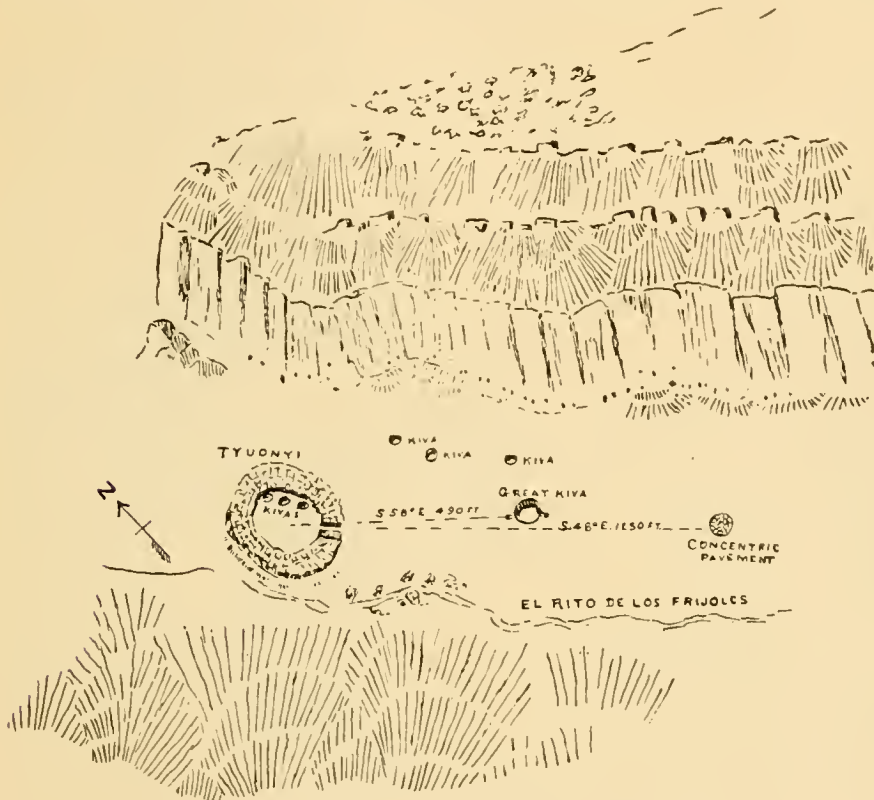


FIG. 26.—Plan showing location of the Concentric Pavement

is a shrine differing only from the usual shrine of this type in being of greater diameter and of more careful construction. Its relation to the community house and the great kiva (fig. 26) seems to lend support to this view.

#### SHRINES OF YAPASHI

*Shrines of the Stone Lions.*—Forming a triangle with the prehistoric pueblo of Yapashi, the sides of which are a quarter of a mile in length, are two shrines, one of which is commonly known as the Stone Lions (pl. x), while the other, unnamed, may be designated the Shrine of the Stone Altar. The Shrine of *Mokatsh Zaitsh* (“Where the mountain-lions lie extended”) has been fully described by the noted archeologist A. F. Bandelier, but for the sake of comparison I give my own measurements. West of the ruined pueblo of Yapashi is a circular inclosure, 23 feet in diameter, formed of large unshaped stones, loosely placed to form a wall 4 feet high. From this inclosure an arm, seen in the

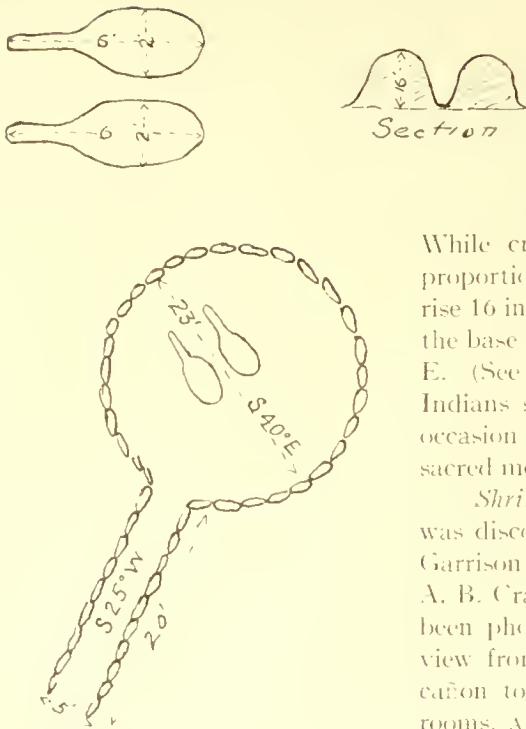


FIG. 27. Plan of the Shrine of Mokatsch Zaitsh ("Where the mountain-lions lie extended")

foreground of plate XI, formed of similar stones, 5 feet in width, projects S. 25° W. 20 feet in length. To the west of the center of this inclosure there has been carved in the outcropping tufa rock two life-size effigies of crouching panthers.

While crude, these figures are of graceful proportions and are readily identified. They rise 16 inches high, and are each 2 feet wide at the base and 6 feet long. They face S. 40° E. (See fig. 27.) The Tewa and other Pueblo Indians still make use of this shrine, and on occasion of a visit sprinkle the fetish with sacred meal (pl. I, no. 70).

*Shrine of the Stone Altar.*—This shrine was discovered some years ago by Professor Garrison of Butler College, Indiana, and Mr A. B. Craycraft of Santa Fe, but it has never been photographed nor described. In plain view from the Stone Lions, across a deep cañon to the northeast, two communicating rooms, A and B, facing southwest, are carved high in the tufa cliff, as shown in the approximate plan (fig. 28) drawn from memory. A crude stairway of sixteen hand- and footholds leads up to the door of room A, on

the left, and a similar stairway passes down from the door of room B on the right. Between the two stairways, at the cliff's base, rises a column of stone, 3 feet high and 2 feet thick, in the top of which is carved a basin more than a foot in diameter and half of that in depth. The larger room has a banquette extending around the sides and back, but not across its front. This bench, next to room

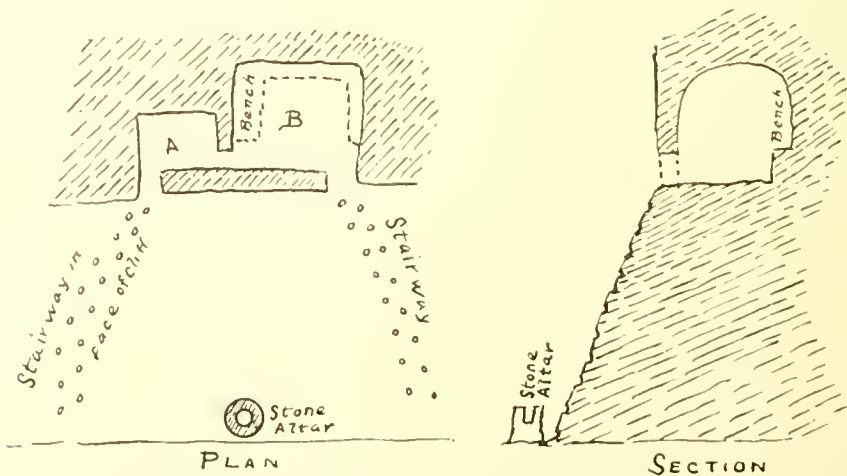


FIG. 28. —Diagram of the Shrine of the Stone Altar



A. B. Craycraft, Photo

CONE DWELLINGS OF OTOWI



A, is perhaps two feet in width, or double the width of that portion extending along the other walls. Above this banquette many pictographs are etched in the smoke-stained walls and ceiling (pl. I, no. 130).

#### LA CUEVA PINTADA

The shrine of La Cueva Pintada, "The Painted Cave", known to the Keres Indians as *Tzekiatatanyi*, is a cavity in the northeastern wall of Capulin cañon. The opening measures 56 feet and the depth 46 feet. It is 50 feet above the base of the cliff. A primitive stair of hand- and foot-holds, cut in the vertical face of the tufa cliff, affords a somewhat perilous means of ascent. On the circular wall of the back of the cave frieze are painted, with carbon, calcite, and red ocher, representations of many well-known conventional symbols, such as clouds, lightning, masked dancers, and the sun. Occupying a conspicuous position in the center of the frieze is a great plumed serpent (pl. XII). The cave faces S. 65° W., and beneath it are four cliff-rooms.

#### STONE LIONS OF POTRERO DE LOS IDOLOS

On a high mesa known as Potrero de los Idolos, unaccompanied by any pueblo, were carved in the hard bed-rock the images of two pumas, side by side, almost identical in size and form with the Stone Lions on the Potrero de las Vacas, just described as a shrine of Yapashi. This fetish (pl. I, no. 75), identified by Bandelier as the Mokatsh (mountain-lions) of the Shyayak (hunters) of some Keres tribe, was also inclosed in a corral built of large, loose stones. Years ago one of the images was destroyed by some relic-hunter, and the stones of the inclosure scattered. A mile to the southeast lies the ruined pueblo of Kuapa (pl. I, no. 76), to which, according to the Indians, the shrine belonged.

#### CONE DWELLINGS OF OTOWI

An antiquity found in no other locality in this country are the cone-dwellings, locally known as "Tent Rocks", of Otowi. That these tufa pyramids should be selected for the excavation of rooms, when there was at hand a vast extent of tufa cliffs offering more desirable sites for dwellings, strongly suggests that they had some ceremonial significance. In a paper entitled "The Cave Dwellings of the Old and New Worlds"<sup>1</sup> Dr J. Walter Fewkes records similar cone-dwellings found in Cappadocia. Whether in the latter locality the selection of the cone for a domicile was a matter of necessity or a question of choice, is not disclosed. (See pl. XIII.)

#### CIRCLE OF STONES

A type of shrine frequently accompanying large community buildings, usually placed to the east of the building, is constructed of stones loosely laid, or set edgewise in the more elaborate examples, to form circles from 8 to 35 feet in diameter (pl. I, nos. 8, 58, 134, 183, 197, 198). In a type very common in southern Colorado and Utah, the stones are thin slabs set edgewise to form an oval 3 x 6 feet. The writer was informed by persons who had excavated several such structures that ashes were found at a depth of about two feet.

At Kuuinge (pl. I, 196) a small shrine takes a quadrangular form of stone inclosure. It is on the east of the building, and a mound of stones is on the west.

<sup>1</sup> *American Anthropologist*, vol. 12, no. 3, July-Sept. 1910.

## INDEX TO ARCHEOLOGICAL MAP (PL. I)

*Note.* The antiquities indicated on the map are only the most important of those that have been actually located. There are many others which are not shown. The north walls of nearly all the cañons of the Jemez plateau are honeycombed with cliff-dwellings. The community houses are always accompanied by many other antiquities, such as cliff-dwellings, talus-dwellings, shrines, kivas (subterranean ceremonial chambers), rock-worn trails, stairways carved in the rock, pictographs and petroglyphs. The major pueblos have their kivas and shrines; these the small scale of the map prevents showing.

*How to Use the Index.*—On the right margin of the map the township numbers are marked, and on the top margin are the range numbers. The intersection of the lines projected from these numbers locate the township in which the antiquity or the cañon may be found; these townships are shown on the map by broken lines, except in the land grants. Theoretically these lines are extended into the grants. After the identification number and name of each item of the index, follow the township and range number as a guide in finding the particular point; i. e. "14 Puyé 20-7," the Puyé community house, bearing identification number 14, is in township 20 north, range 7 east. For creeks and cañons the township is given in which the identification number appears.

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