

The Swastika

by Thomas Wilson

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1894

Part 2

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Skeleton No.

- 37. One polished stone chisel, one stone pipe, one shell mask (ornamented).*
- 41. One polished stone hatchet, one stone pipe, pottery vase with ears (ornamented), one shell mask, one shell pin, four arrowheads (two with serrated edges), two stone perforators.*
- 43. Lot of shell beads.*
- 49. One polished stone hatchet, one spade-shaped stone ornament (perforated), one spear-head, one stone pipe, one pottery bowl with two handles, two shell masks (ornamented), twenty-seven bone needles, two beaver teeth, one bone implement (raccoon), piece of mica, lot of red paint, two shell gorgets (one ornamented with Swastika, fig. 238), thirty-six arrow-heads, lot of flint chips, fragment of animal jaw and bones, lot of large shells, one image pot.*
- 51. One shell pin, one shell mask, one arrow-head, two small shell beads.*
- 52. One shell mask, one shell gorgot, one shell ornament.*

These objects are now in the U. S. National Museum and in my department. The list is taken from the official catalogue, and they number from 115505 to 115684.

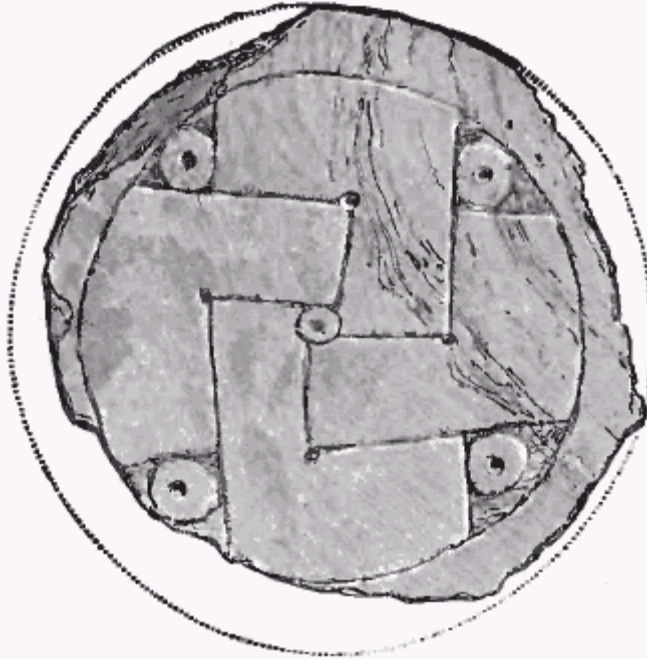


Fig. 237.

SHELL GORGET WITH ENGRAVED SWASTIKA, CIRCLES,
AND DOTS.

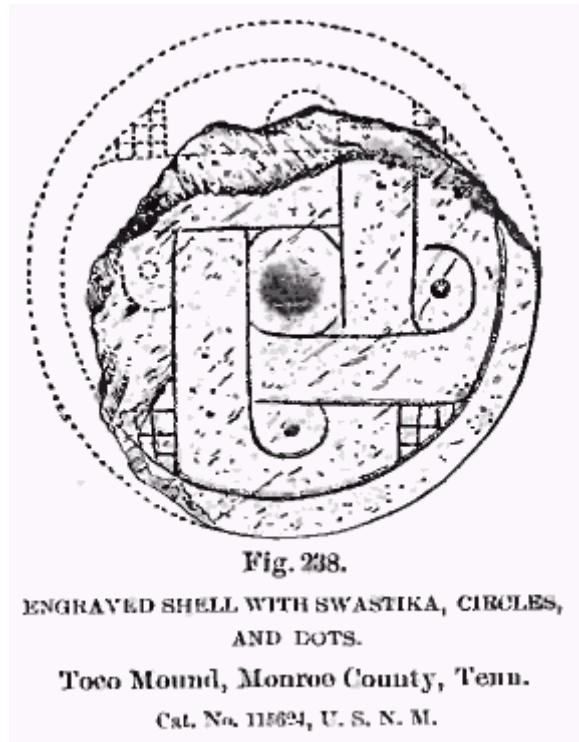
Fains Island, Tennessee.

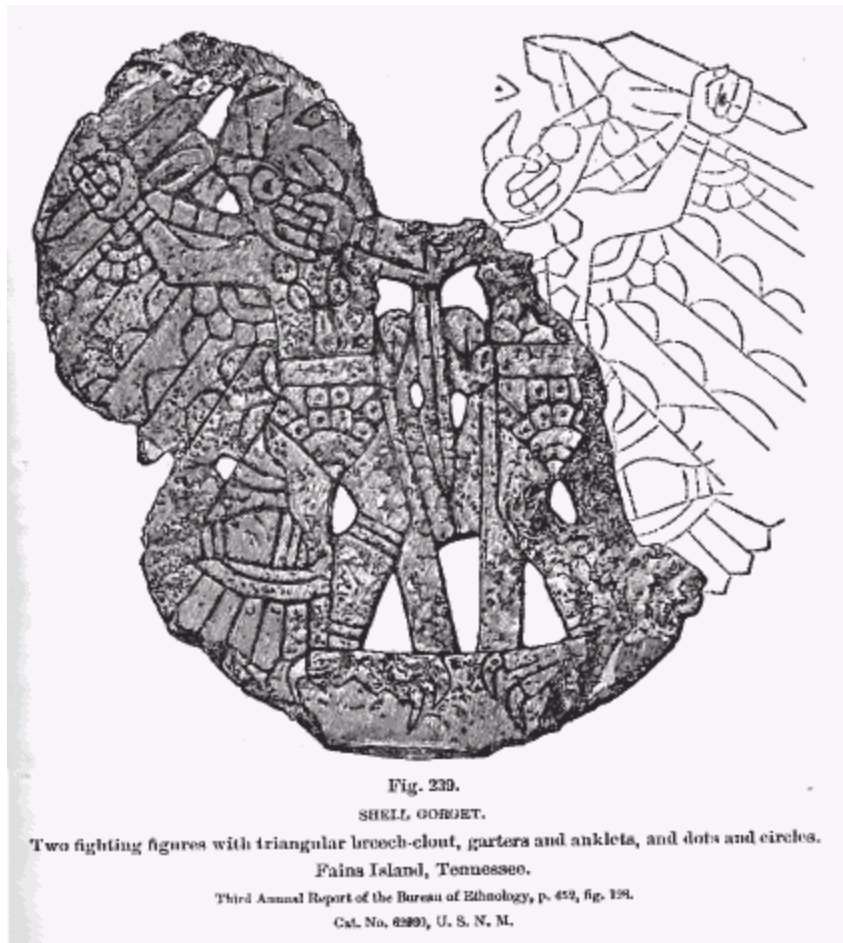
Cat. No. 82998 U. S. N. M.

I have had the opportunity of comparing the objects with this description and find their general agreement. Dr. Palmer, the finder, was an employé of the Bureau of Ethnology, is a man of the highest character, of great zeal as an archæologist and naturalist, and has been for many years, and is now, in the employ of the Bureau or Museum, always with satisfaction and confidence. Mr. Emmert was also an employé of the Bureau for many years, and equally reliable.

The specimens of shell in this and several other mounds, some of which are herein figured, were in an advanced stage of decay, pitted, discolored, and crumbling, requiring to be handled with the utmost care to prevent disintegration. They were dried by the collector, immersed in a weak solution of glue, and forwarded immediately (in 1885), with other relics from the neighborhood, to the Bureau of Ethnology and National Museum at Washington, where they have remained ever since. There is not the slightest suspicion concerning the genuineness or antiquity of this specimen or of those bearing the Swastika as belonging to the mound-building epoch in the valley of the Tennessee.

Other figures of sufficient similarity to the Swastika have been found among the aborigines of North America to show that these do not stand alone; and there are also other human figures which show a style of work so similar and such resemblance in detail of design as to establish the practical identity of their art. One of these was a remarkable specimen of engraved shell found in the same mound, Fains Island, which contained the first Swastika (fig. 237). It is described in the Second Annual Report of the Bureau of Ethnology, page 301, under the name of McMahon's mound. It is a large polished Fulgur shell disk which, when entire, has been nearly 5 inches in diameter (fig. 239). A little more than one-third has crumbled away, and the remaining portion has been preserved only by careful handling and immediate immersion in a solution of glue. It had been engraved on the concave side. The design represents two human figures plumed and winged, armed with eagles' talons and engaged in mortal combat. The design apparently covered the entire shell, leaving no space for encircling lines. The two figures are in profile and face each other in a fierce onset. Of the right-hand figure, only the body, one arm, and one leg remain. The left-hand figure is almost complete. The outline of the face, one arm, and one foot is all that is affected. The right hand is raised above the head in the act of brandishing a long knife pointed at both ends. The other combatant, clutching in his right hand a savage-looking blade with its point curved, seems delivering a blow in the face of his antagonist. Of the visible portions of the figures, the hands are vigorously drawn, the thumbs press down upon the outside of the forefingers in a natural effort to tighten the grasp. The body, arms, and legs are well defined and in proper proportion, the joints are correctly placed the left knee is bent forward, and the foot planted firmly on the ground, while the right is thrown gracefully back against the rim at the left, and the legs terminate in well-drawn eagles' feet armed with curved talons.





The head is decorated with a single plume which springs from a circular ornament placed over the ear; an angular figure extends forward from the base of this plume, and probably represents what is left of the headdress proper. In front of this --- on the very edge of the crumbling shell --- is one-half of the lozenge-shaped eye, the dot representing the pupil being almost obliterated. The ankles and legs just below the knee and the wrists each have three lines representing bracelets or anklets. It is uncertain whether the leg is covered or naked; but between the waistband and the leggings, over the abdomen, is represented on both figures a highly decorated triangular garment, or, possibly coat of mail, to which particular attention is called. (1)



In the center, at the top, just under the waistband, are four circles with dots in the center arranged in a square; outside of this, still at the top, are two triangular pieces, and outside of them are two more circles and dots; while the lower part of the triangle, with certain decorations of incised lines, completes the garment. This decoration is the same on both figures, and corresponds exactly with the Buddha figure. An ornament is suspended on the breast which shows three more of the circles and dots. The earring is still another. The right-hand figure, so far as it can be seen, is a duplicate of the left, and in the drawing it has, where destroyed, been indicated by dotted lines. It is remarkable that the peculiar clothing or decoration of these two figures should be almost an exact reproduction of the Buddha figure (pl. 10). Another interesting feature of the design is the highly conventionalized wing which fills the space beneath the uplifted arm. This wing is unlike the usual specimens of aboriginal art which have been found in such profusion in that neighborhood. But it is again remarkable that this conventionalized wing and the

bracelets, anklets, and garters should correspond in all their peculiarities of construction and design with the wings on the copper and shell figures from the Etowah mound, Georgia (figs. 240, 241, and 242). (2)

ENDNOTES:

1. Cf. Ghandi, p. 882, of this paper.
2. Fifth Ann. Rep. Bureau of Ethnology, 1883-84, pp. 96-106, figs. 42, 43, 45.





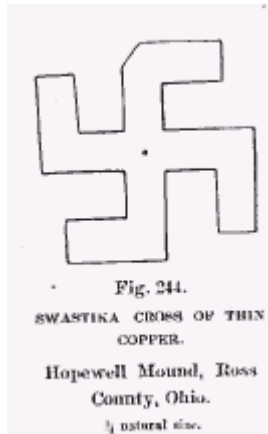
Behind the left-hand figure is an ornament resembling the spreading tail of an eagle which, with its feather arrangement and the detail of their mechanism, correspond to a high degree with the eagle effigies in repoussé copper (fig. 243) from the mound in Union County, Ill., shown in the Fifth Annual Report of the Bureau of Ethnology (p. 105) and in the Twelfth Annual Report (p. 309).

Hopewell Mound, Chillicothe, Ross County, Ohio. --- A later discovery of the Swastika belonging to the same period and the same general locality --- that is, to the Ohio Valley --- was that of Prof. Warren K. Moorehead, in the fall and winter of 1891-92, in his excavations of the Hopewell mound, seven miles northwest of Chillicothe, Ross County, Ohio. (1) The locality of this mound is well shown in Squier and Davis's work on the "Monuments of the Mississippi Valley" (pl. 10, p.26), under the name of "Clark's Works," here reproduced as pl. 11. It is the large irregular unnumbered triple mound just within the arc of the circle shown in the center of the plan. The excavation contemplated the destruction of the mound by cutting it down to the surrounding level and scattering the earth of which it was made over the surface; and this was done. Preparatory to this, a survey and ground plan was made (pl. 12). I assisted at this survey and can vouch for the general correctness. The mound was surrounded by parallel lines laid out at right angles and marked by stakes 50 feet apart. The mound was found to be 530 feet long and 250 feet wide. Squier and Davis reported its height at 32 feet, but the excavation of the trenches required but 18 and 16 feet to the original surface on which the mound was built. It was too large to be cut down as a whole, and for convenience it was decided by Mr. Moorehead to cut it down in trenches, commencing on the northeast .

Nothing was found until, in opening trench 3, about five feet above the base of the mound, they struck a mass of thin worked copper objects, laid flat one to the other, in a rectangular space, say three by four feet square. These objects are unique in American prehistoric archæology. Some of them bore a resemblance in form to the scalloped mica pieces found by Squier and Davis, and described by them in their "Ancient Monuments of the Mississippi Valley: (p. 240), and also those of the same material found by Professor Putnam in the Turner group of mounds in the valley of the Little Miami.

ENDNOTES:

1. These explorations were made for the Department of Ethnology at the World's Columbian Exposition, Chicago, 1893.



They had been apparently laid between two layers of bark, whether for preservation or mere convenience of deposit, can only be guessed.

The following list of objects is given, to the end that the reader may see what was associated with these newly found copper Swastikas: Five Swastika crosses (fig. 244); a long mass of copper covered with wood on one side and with squares and five similar designs traceable on the reverse; smaller mass of copper; eighteen single copper rings; a number of double copper rings, one set of three and one set of two; five pan lids on hat-shaped rings; ten circular disks with holes in center, represented in [fig. 245](#), originally placed in a pile and now oxidized together; also large circular, stencil-like ornaments one ([fig. 246](#)) 7 1/2 inches in diameter; another ([fig. 247](#)) somewhat in the shape of a St.

Andrew's cross, the extreme length over the arms being 8 3/4 inches.

About five feet below the deposit of sheet copper and 10 or 12 feet to the west, two skeletons lay together. They were covered with copper plates and fragments, copper hatchets, and pearl beads, shown in the list below, a lid in rectangular form about seven feet in length and five feet in width, and so close as to frequently overlap.



Fig. 245.
FLAT RING OF THIN COPPER.
Hopewell Mound, Ross
County, Ohio.
 $\frac{1}{2}$ natural size.

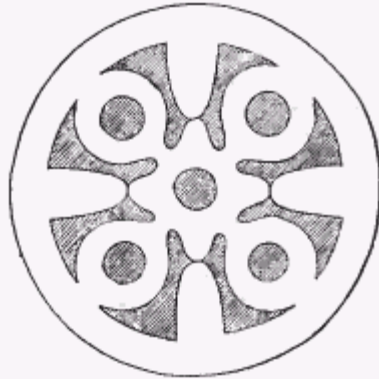
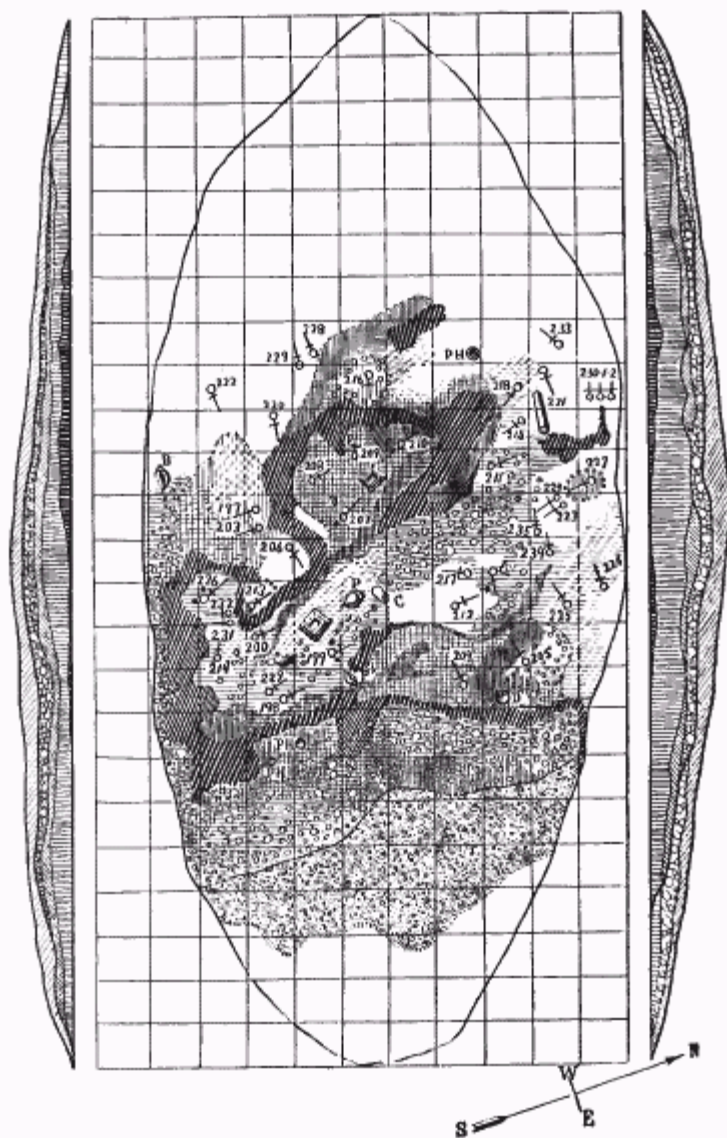


Fig. 246.
STENCIL ORNAMENT OF THIN COPPER.
Hopewell Mound, Ross County, Ohio.
 $\frac{1}{4}$ natural size.



Fig. 247.
STENCIL ORNAMENT OF
THIN COPPER.
Hopewell Mound, Ross
County, Ohio.
 $\frac{1}{4}$ natural size.



PLAN OF HOPEWELL MOUND, IN WHICH ABORIGINAL COPPER SWASTIKAS WERE FOUND.

Ross County, Ohio.

Moorehead, "Primitive Man in Ohio," PL. xxxiv.

There were also found sixty-six copper hatchets, ranging from 1½ to 22½ inches in length; twenty-three copper plates and fragments; one copper eagle; eleven semicircles, bars, etc.; two spool-shaped objects; four comb-shaped effigies; one wheel with peculiar circles and bars of copper; three long plates of copper; pearl and shell beads and teeth; a lot of extra fine pearls; a lot of wood, beads, and an unknown metal; a lot of bones; a human jaw, very large; a fragmentary fish resembling a sucker (fig. 248); one stool of copper with two legs; broken copper plates; one broken shell; bear and panther tusks; mica plates; forty fragmentary and entire copper stencils of squares, circles, diamonds, hearts, etc; copper objects, saw-shaped; twenty ceremonial objects, rusted or oxidized copper; two

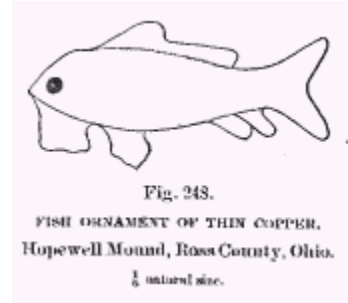


Fig. 248.
FISH ORNAMENT OF THIN COPPER.
Hopewell Mound, Ross County, Ohio.
½ natural size.

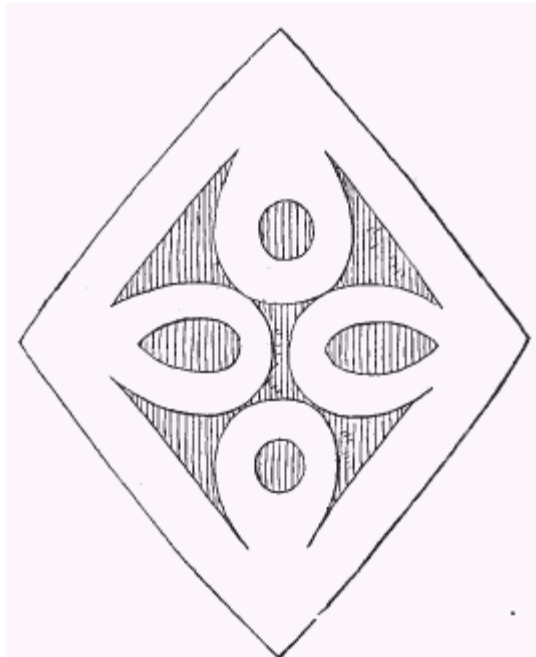


Fig. 249.
LOZENGE-SHAPED STENCIL OF THIN COPPER.
Hopewell Mound, Ross County, Ohio.
½ natural size.

diamond-shaped stencils, copper (fig. 249); four peculiar spool-shaped copper ornaments, perforated, showing repoussé work (fig. 250).

I made sketches or two or three of the bone carvings, for the purpose of showing the art of the people who constructed this monument, so that by comparison with that of other known peoples some knowledge may be obtained, or theory advanced, concerning the race or tribe to which they belonged and the epoch in which they lived. Fig. 251 shows an exquisite bone carving of a paroquet which belongs much farther south and not found in that locality in modern times. The design shown in fig. 252 suggests a Mississippi Kite, but the zoologists of the Museum, while unable to determine with exactitude its intended representation, chiefly from the mutilated condition of the fragment, report it more likely to be the head of the "leather-back" turtle. Fig. 253 probably represents an otter with a fish in his mouth.

PLATE 13.



HUMAN SKULL WITH COPPER-COVERED HORNS.
Hopewell Mound, Ross County, Ohio.
Moorehead, "Primitive Man in Ohio," frontispiece.



PREHISTORIC ALTAR.

Hopewell Mound, Ross County, Ohio.

Found near the copper Swastika shown in fig. 244.

Moorehead, "Primitive Man in Ohio", Fig. XXXVII. Cat. No. 148062, U. S. N. M.

PLATE 14.

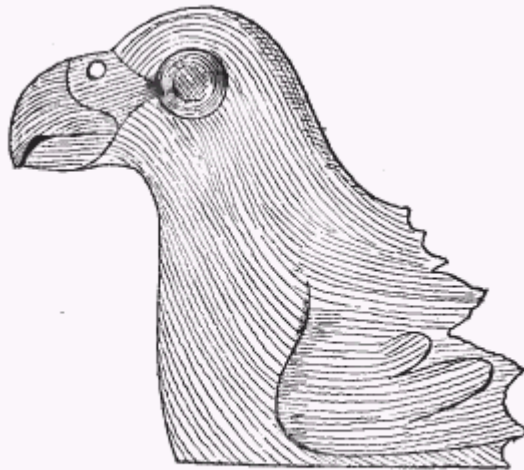


Fig. 251.

FRAGMENT OF ENGRAVED BONE REPRESENTING A PAROQUET.

Hopewell Mound, Ross County, Ohio.

Natural size.

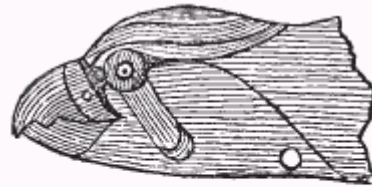


Fig. 252.

FRAGMENT OF ENGRAVED BONE PROBABLY REPRESENTING A MISSISSIPPI KITE OR LEATHER-BACK TURTLE.

Hopewell Mound, Ross County, Ohio.

Natural size.

In trench No. 3, 15 skeletons (numbered 264 to 278, inclusive), were found on the base line, all extended. Objects of coal, bone, shell, or stone, had been placed with nearly all of them. Nos. 265 and 266 were laid on blocks of burnt earth 3 inches higher than the base of the mound. One of the skeletons in this mound (No. 248) is shown in [pl. 13](#). It was a most remarkable specimen, and forms the frontispiece of Prof. W. K. Moorehead's volume "Primitive Man in Ohio," where it is described (p. 195) as follows:

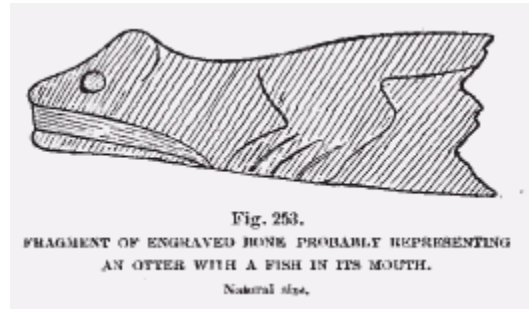


Fig. 253.
FRAGMENT OF ENGRAVED BONE PROBABLY REPRESENTING
AN OTTER WITH A FISH IN ITS MOUTH.
Natural size.

At his head were imitation elk horns, neatly made of wood and covered with sheet copper rolled into cylindrical forms over the prongs. The antlers were 22 inches high and 19 inches across from prong to prong. They fitted into a crown of

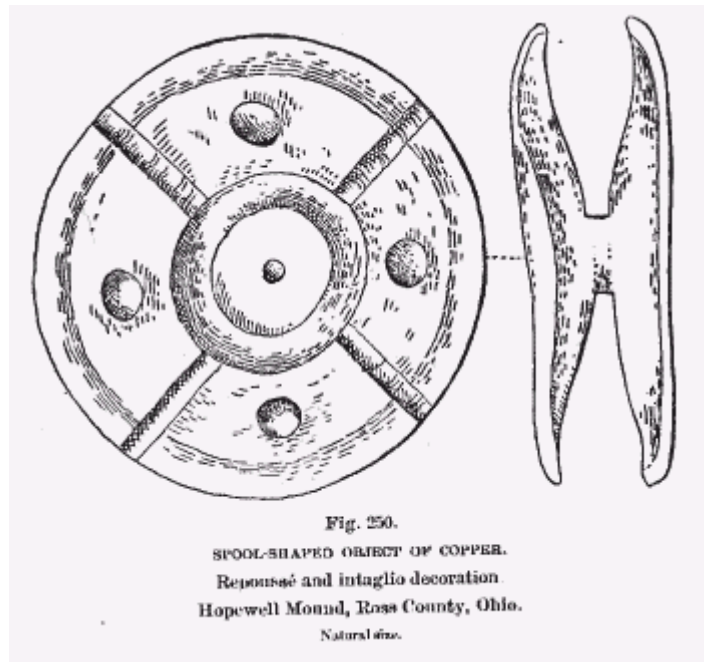


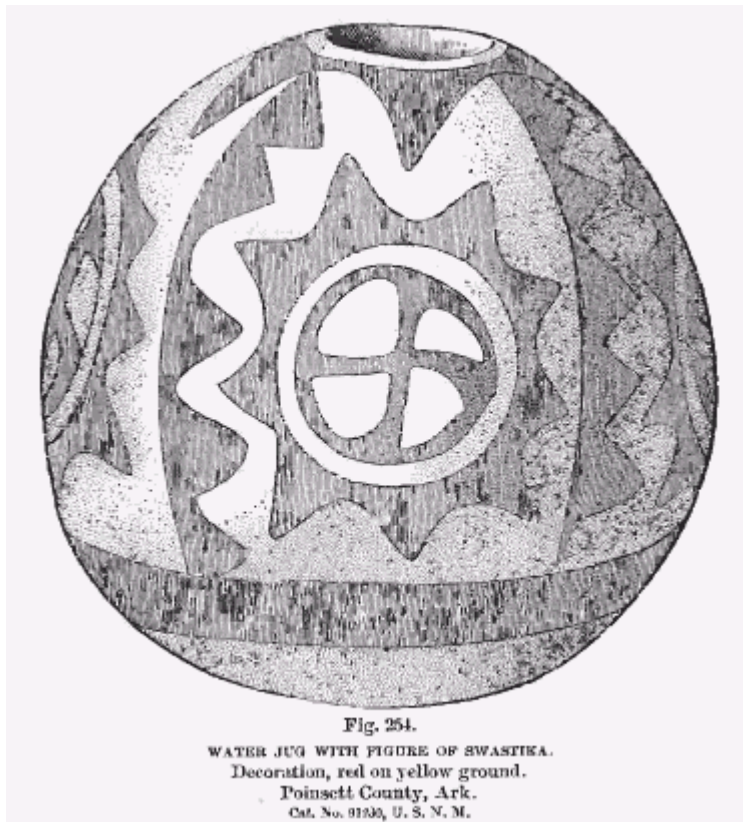
Fig. 250.
SPOOL-SHAPED OBJECT OF COPPER.
Repoussé and intaglio decoration
Hopewell Mound, Ross County, Ohio.
Natural size.

copper bent to fit the head from occipital to upper jaw. Copper plates were upon the breast and stomach, also on the back. The copper preserved the bones and a few of the sinews. It also preserved traces of cloth similar to coffee sacking in texture, interwoven among the threads of which were 900 beautiful pearl beads, bear teeth split and cut, and hundreds of other beads, both pearl and shell. Copper spool-shaped objects and other implements covered the remains. A pipe of granite and a spear-head of agate were near the right shoulder. The pipe was of very fine workmanship and highly polished.

While digging out skeletons 280 to 284, Professor Moorehead says they touched the edge of an altar (pl. 14). It was on the base line and 15 feet north of the copper find before described. On the 5th of January, 1892, the altar was uncovered, and the earth, charcoal, and objects within it put into five soap boxes and transported to headquarters, where the material was assorted in my presence and with my aid. The mass on the altar had been charred throughout. It contained, in part, mica ornaments, beads, spool-shaped objects, whale, bear, and panther teeth, flint knives, carved effigies of bone and stone, some of which were broken, while others were whole. There were stone tablets, slate ornaments, copper balls, fragments of cloth, rings of chlorite, quartz crystals perforated and grooved, and a few pieces of flint and obsidian, with several thousand pearls drilled for suspension. These objects were heaped in the cavity of the altar without any regularity. All were affected by heat, the copper being fused in many cases. The teeth and tusks were charred, split, and calcined. There were no ashes. All the fuel was charcoal, and from the appearance of the debris, especially the wood, earth, and bone, one might suppose that after the fire had started it had not been allowed to burn to ashes as if in the open air, but had been covered with earth, and so had smoldered out as in a charcoal pit.

Evidence was found of an extended commerce with distant localities, so that if the Swastika existed in America it might be expected here. The principal objects were as follows: A number of large seashells (*Fulgur*) native to the southern Atlantic Coast 600 miles distant, many of them carved; several thousand pieces of mica from the mountains of Virginia or North Carolina, 200 or more miles distant; a thousand large blades of beautifully chipped objects in obsidian, which could not have been found nearer than the Rocky Mountains, 1,000 or 1,200 miles distant; four hundred pieces of wrought copper, believed to be from the Lake Superior region, 150 miles distant; fifty-three skeletons, the copper headdress (pl. 13) made in semblance of elk horns, 16 inches high, and other wonderful things. Those not described have no relation to the Swastika.

These objects were all prehistoric. None of them bore the slightest evidence of contact with white civilization. The commoner objects would compare favorably with those found in other mounds by the same and other investigators. Much of it may be undetermined. It is strange to find so many objects brought such long distances, and we many not be able to explain the problem presented; but there is no authority for injecting any modern or European influence into. By what people were these made? In what epoch? For what purpose? What did they represent? How did this ancient, curious, and widespread sign, a recognized symbol of religion of the Orient, find its way to the bottom of one of the mounds of antiquity in the Scioto Valley? These are questions easy to ask but difficult to answer. They form some of the riddles of the science of prehistoric anthropology.



Mounds in Arkansas. --- A water jug in the collection of the U. S. National Museum (fig. 254) was obtained in 1883 by P. W. Norris, of the Bureau of Ethnology, from a mound in Poinsett County, Ark. It is of yellow ground, natural color of clay, and decorated with light red paint. The paint is represented in the cut by the darkened surfaces. The four quarters of the jug are decorated alike, one side of which is shown in the cut. The center of the design is the Swastika with the arm crossing at right angles, the ends turned to the right, the effect being produced by an enlargement on the right side of each arm until they all join the circle. A similar water jug with a Swastika mark of the same type as the foregoing decorates Major Powell's desk in the Bureau of Ethnology.

Marquis Nadaillac (1) describes and figures a grooved ax from Pemberton, N. J., on which some persons have recognized a Swastika, but which the Marquis doubts, while Dr. Abbott (2) denounces the inscription as a fraud.

North American Indians.

The Kansas --- The Rev. J. Owen Dorsey (3) describes the mourning customs of the Kansas Indians. In the course of his description he tells of a council of ceremony held among these Indians to decide if they should go on the warpath. Certain sacred songs were sung which had been arranged according to a chart, which Mr. Dorsey introduces as pl. 20, page 676. The outside edge of this chart bore twenty-seven ideographs, which suggest or determine the song or speech required. No. 1 was the sacred pipe; No. 2, the

maker of all songs; No. 3, song of another old man who gives success to the hunters; No. 4 (fig. 255 in the present paper) is the Swastika sign, consisting of two ogee lines intersection each other, the ends curved to the left. Of it, Mr. Dorsey says only the following:

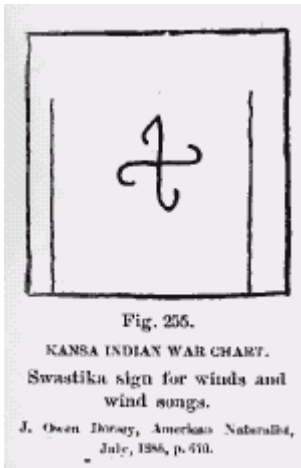


Fig. 4 Tradje wayun, wind songs. The winds are deities; they are Bazanta (at the pines), the east wind; Ak'a, the south wind; A'k'a jifigaor A'k'uaya, the west wind; and Huia (toward the cold), the north wind. The warriors used to remove the hearts of slain foes, putting them in the fire as a sacrifice to the winds.

In the Eleventh Annual Report of the Bureau of Ethnology (p. 525) Mr. Dorsey repeats this statement concerning the names of the winds, and shows how, in their invocations the Kansas began with the east wind and went around to the right in the order here given. His fig. 195 illustrates this, but the cross has straight arms. In response to my personal inquiry, Mr. Dorsey says the war chart (4) was drawn for him, with the Swastika as represented, by Pahanle-gagle, the war captain, who had official charge of it and who copied it from one he had inherited from his father and his "father's fathers"; and Mr. Dorsey assured me that there can be no mistake or misapprehension about this Indian's intention to make the sign as there represented.

ENDNOTES:

1. "Prehistoric America," p. 22, note 24. fig. 9.
2. "Primitive Industry," p. 32.
3. *American Naturalist*, XIX, July, 1885, p. 670.
4. *Ibid.*, pl. 20.

Asked if the sign was common and to be seen in other cases or places, Mr. Dorsey replied that the Osage have a similar chart with the same and many other signs or pictographs ---- over a hundred --- but except these, he knows of no similar signs. They are not in common use, but the chart and all it contains are sacred objects, the property of the two Kansas gentes, Black Eagle and Chicken Hawk, and not to be talked of nor shown outside of the gentes of the council lodge. (1)

The Sac Indians. --- Miss Mary A. Owen, of St. Joseph, Mo., sending some specimens of beadwork of the Indians (pl. 15) from the Kansas Reservation, two of which were garters and the third a necklace 13 inches long and 1 inch wide, in which the Swastikas represented are an inch square, writes, February 2, 1895, as follows:

The Indians call it [the Swastika] the "luck," or "good luck." It is used in necklaces and garters by the sun worshippers among the Kickapoo, Sacs, Pottawatomies, Iowas, and (I have been told) by the Winnebagoes. I have never seen it on a Winnebago. The women use the real Swastika and the Greek key pattern, in the silk patchwork of which they make sashes and skirt trimmings. As for their thinking it an emblem of fire or deity, I do not believe they entertain any such ideas, as some Swastika hunters have suggested to me. They call it "luck," and say it is the same thing as two other patterns which I send in the mail with this. They say they "always" made that pattern. They must have made it for a long time, for you can not get such beads as compose it, in the stores of a city or in the supplies of the traders who import French beads for the red folk. Another thing. Beadwork is very strong, and this is beginning to look tattered, a sure sign that it has seen long service.

These sun worshippers --- or, if you please, Swastika wearers --- believe in the Great Spirit, who lives in the sun, who creates all things, and is the source of all power and beneficence. They ancestors are a sort of company of animal saints, who intercede for the people. There are many malicious little demons who thwart the ancestors and lead away the people at times and fill them with diseases, but no head devil. Black Wolf and certain ghosts of the unburied are the worst. Everybody has a secret fetish or "medicine," besides such general "lucks" as Swastika, bear skins, and otter and squirrel tails.

Of the other cult of the peoples I have mentioned, those who worship the sun as the deity and not the habitation, I know nothing. They are secret, suspicious, and gloomy, and do not wear the "luck." I have never seen old people wear the "luck."

Now, I have told you all I know, except that it [the Swastika] used in ancient times to be made in quill embroidery on herb bags.

Miss Owen spoke of other garters with Swastikas on them, but she said they were sacred, were used only during certain ceremonies, and she knew not if she could be able to get or even see them. During the prolongation of the preparation of this paper she wrote two or three times, telling of the promises made to her by the two Sac women who were the owners of these sacred garters, and how each time they had failed.

ENDNOTES:

1. This was the last time I ever saw Mr. Dorsey. He died within a month, beloved and regretted by all who knew him.

Yet she did not give up hope. Accordingly, in the winter of 1896, the little box containing the sacred garters arrived. Miss Owen says the husbands of these two Sac women are Pottawatomies on the Cook County (Kans.) Reservation. They are sun worshippers. These garters have been sketched and figured in [pl. 16](#).

The Pueblos. --- The Pueblo country in Colorado, Utah, New Mexico, and Arizona, as is well known, is inhabited by various tribes of Indians speaking different languages, separated from one another and from all other tribes by differences of language, customs, and habit, but somewhat akin to each other in culture, and many things different from other tribes are peculiar to them. These have been called the "Pueblo Indians" because they live in Pueblos or towns. Their present country includes the regions of the ancient cliff dwellers, of whom they are supposed to be the descendants. In those manifestations of culture where in they are peculiar and different from other tribes they have come to be considered something superior. Any search for the Swastika in America which omitted these Indians would be fatally defective, and so here it is found. Without speculating how the knowledge of the Swastika came to them, whether by independent invention or brought from distant lands, it will be enough to show its knowledge among and its use by peoples of this country.

In the Annual Report of the Bureau of Ethnology for the year 1880-81 (p. 394, fig. 562) is described a dance rattle made from a small gourd, ornamented in black, white, and red (fig. 256). The gourd has a Swastika on each side, with ends bent, not square, but ogee (the tetraskelion). The U. S. National Museum possesses a large number of these dance rattles with Swastikas on their sides, obtained from the Pueblo Indians of New Mexico and Arizona. Some of them have the natural neck for a handle, as shown in the cut; others are without neck, and have a wooden stick inserted and passed through for a handle. Beans, pebbles, or similar objects are inside, and the shaking of the machine makes a rattling noise which marks time for the dance.



The Museum possesses a large series of pottery from the various pueblos of the Southwest; these are of the painted and decorated kind common to that civilization and country. Some of these pieces bear the Swastika mark; occasionally it is found outside, occasionally inside. It is more frequently of the ogee form, similar to that on the rattle from the same country (fig.

256). The larger proportion of these specimens comes from the pueblos of Santa Clara and St. Ildefonso.

Dr. Schleimann reports: (1)

We also see a Swastika (turned to the left) scratched on two terra cotta bowls of the Pueblo Indians of New Mexico, preserved in the ethnological section of the Royal Museum at Berlin.

G. Nordenskiöld, (2) in the report of his excavations among the ruined pueblos of the Mesa Verde, made in southwestern Colorado during the summer of 1891, tells of the finding of numerous specimens of the Swastika. In pl. 23, fig. 1, he represents a large, shallow bowl in the refuse heap at the "Step House." It was 50 centimeters in diameter, of rough execution, gray in color, and different in form and design from other vessels from the cliff houses. The Swastika sign (to the right) was in its center, and made by lines of small dots. His pl. 27, fig. 6, represents a bowl found in a grave (g on the plan) at "step House." Its decoration inside was of the usual type, but the only decoration on the outside consisted of a Swastika, with arms crossing at right angles and ends bent at the right, similar to fig. 9. His pl. 18, fig. 1, represented a large bowl found in Mug House. Its decoration consisted in part of a Swastika similar in form and style to the Etruscan gold "bulla," fig. 188 in this paper. Certain specimens of pottery from the pueblos of Santa Clara and St. Ildefonso, deposited in the U. S. National Museum (Department of Ethnology), bear Swastika marks, chiefly of the ogee form. (3)



Fig. 9.
NORMAL SWASTIKA.



Fig. 188.

ETRUSCAN GOLD BULLA
WITH SWASTIKA ON
BOTTOM.

Waring, "Ceramic Art in Re-
mote Ages," pl. 42, fig. 4a.

The Navajoes. --- Dr. Washington Matthews, U. S. A., than whom no one has done better, more original, nor more accurate anthropologic work in America, whether historic or prehistoric, has kindly referred me to his memoir of the Fifth Annual Report of the Bureau of Ethnology, comprising 82 pages, with 9 plates and 9 figures, entitled "The Mountain Chant; a Navajo ceremony." It is descriptive of one of a number of ceremonies practiced by the shamans or medicine men of the Navajo Indians, New Mexico. The ceremony is public, although it takes place during the night. It lasts for nine days and is called by the Indians "*dsilyidje qaçal*" may allude to mountains in general, to the Carrizo Mountains in particular, to the place in the mountains where the

prophet (originator of these ceremonies) dwelt, to his name, or to all of these combined. "*Qaçal*" means a sacred song or a collection of sacred songs. Dr. Matthews describes at length the myth which is the foundation of this ceremony, which must be read to be appreciated, but may be summarized thus: An Indian family, consisting of father, mother, two sons, and two daughters, dwelt in ancient times near the Carrizo Mountains. They lived by hunting and trapping; but the place was desert, game scarce, and they moved up the river farther into the mountains.

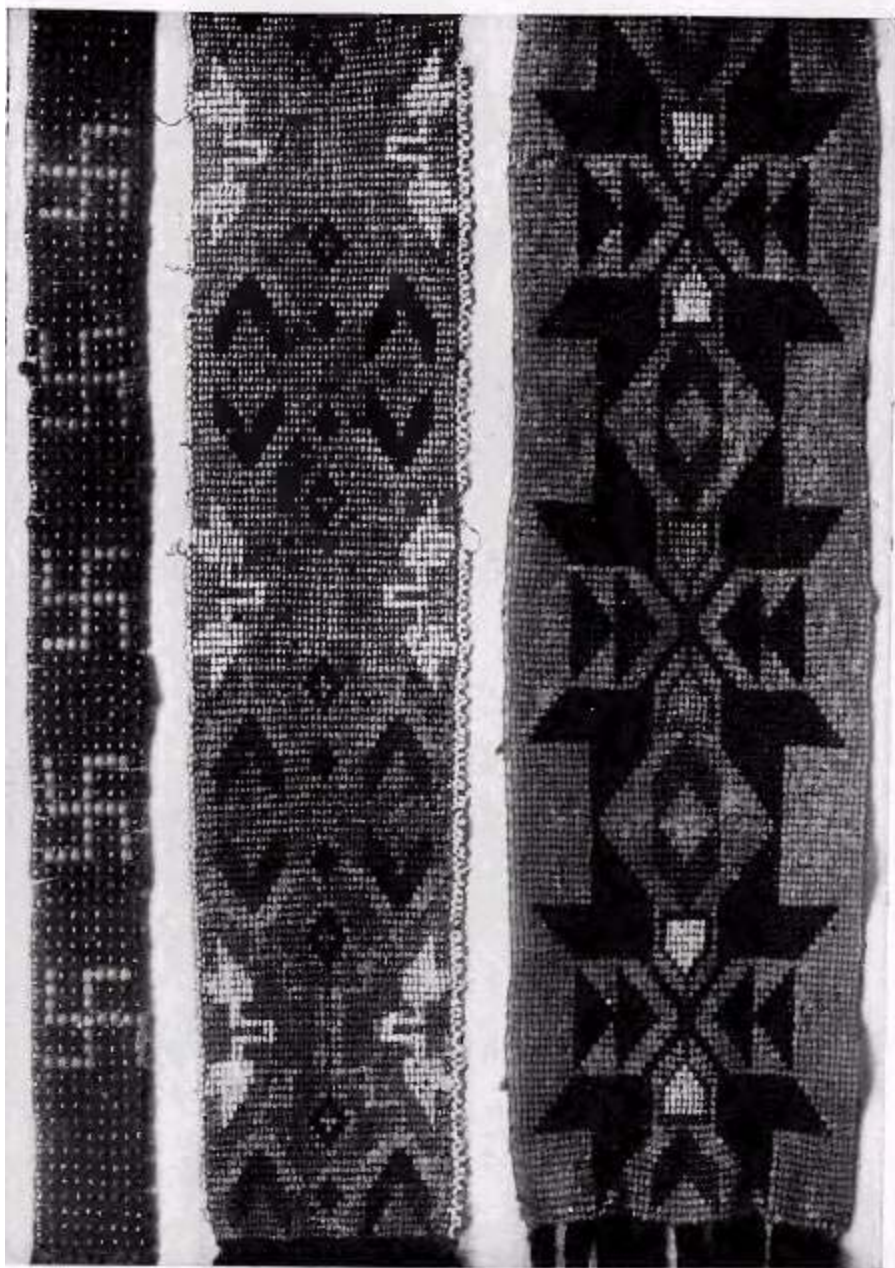
ENDNOTES:

1. "Troja," p. 123.
2. "The Cliff Dwellers of the Mesa Verde, Southwestern Colorado," P. A. Norstedt & Son, Chicago, 1893.
3. From letter of Mr. Walter Hough, Winslow, Ariz. "I send you two pieces of pottery [bearing many ogee Swastikas] from the ruins near here formerly inhabited by the Moki. Many of the bowls which we have found in this ruin had the Swastika as a major *motif* in the decoration."
See also *The Archæologist*, III, No. 7, p. 248.
H. Mis. 90, pt. 2 ----- 57

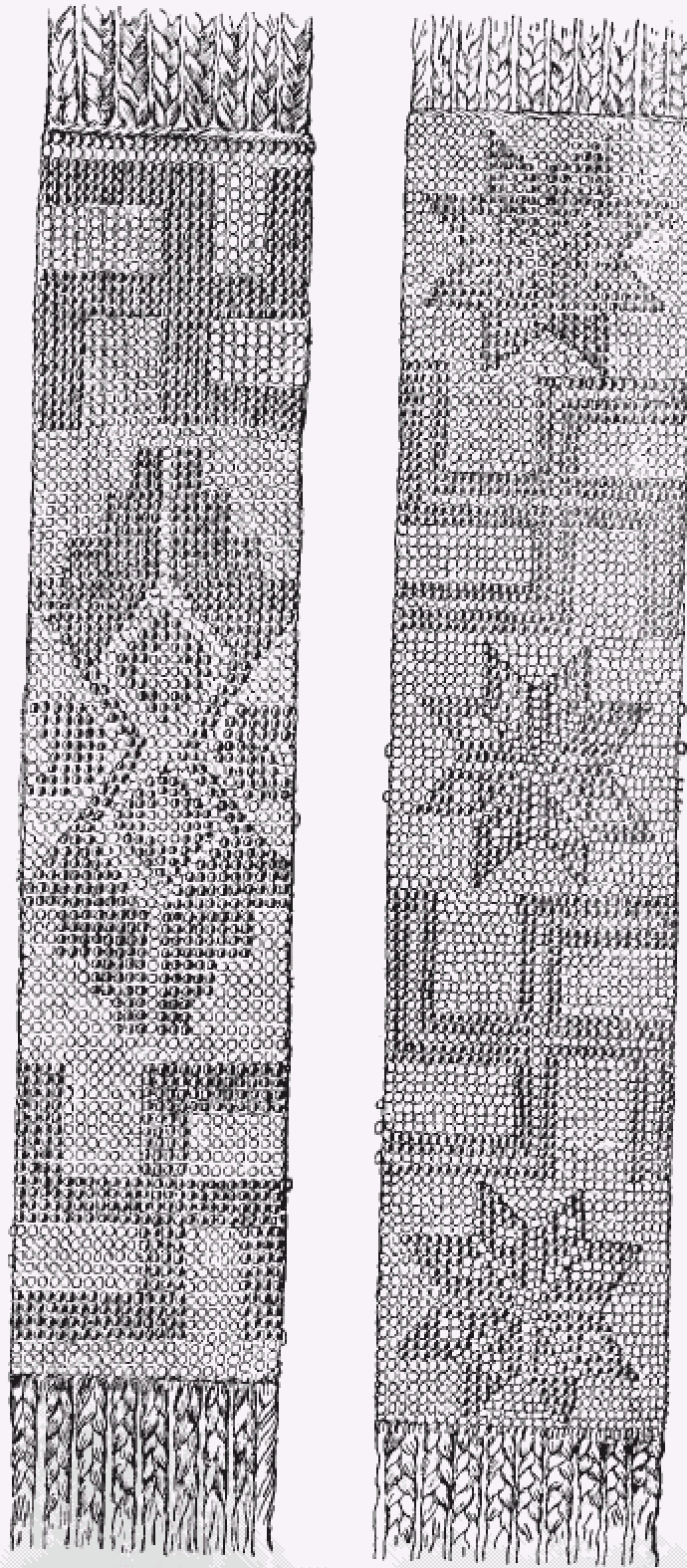
The father made incantations to enable his two sons to capture and kill game; he sent them hunting each day, directing them to go to the east, west, or north, but with the injunction not to the south. The elder son disobeyed this injunction, went to the south, was captured by a war party of Utes and taken to their home far to the south. He escaped by the aid of *Yáybichy* (*Qastcéélçi*) and divers supernatural beings. His adventures in returning home form the body of the ceremony wherein these adventures are, in some degree, reproduced. Extensive preparations are made for the performance of the ceremony. Lodges are built and corrals made for the use of the performers and the convenience of their audience. The fete being organized, stories are told, speeches made, and sacred songs are sung (the latter are given by Dr. Matthews as "songs of sequence," because they must be sung in a progressive series on four certain days of the ceremony). Mythological charts of dry sand of divers colors are made on the earth within the corrals after the manner of the Navajo and Pueblo Indians. These dry sand paintings are made father a given formula and intended to be repeated from year to year, although no copy is preserved, the artists depending only upon the memory of their shaman. One of these pictures or charts represents the fugitive's escape from the Utes, his captors, down a precipice into a den or cave in which burnt a fire "on which was no wood." Four pebbles lay on the ground together --- a black pebble in the east, a blue one in the south, a yellow one in the west, and a white one in the north. From these flames issued. Around the fire lay four bears, colored and placed to correspond with the pebbles. When the strangers (*Qastcéélçi* and the Navajo) approached the fire the bears asked them for tobacco, and when they replied they had none, the bears became angry and thrice more demanded it. When the Navajo fled from the Ute camp, he had furtively helped himself from one of the four bags of tobacco which the council was using. These, with a pipe, he had tied up in his skin robe; so when the fourth demand was made he filled the pipe and lighted it at the fire. He handed the pipe to the black bear, who, taking but one whiff, passed it to the blue bear and immediately fell senseless. The blue bear took two whiffs and passed the pipe, when he too fell over unconscious. The yellow bear succumbed after the third

whiff, and the white bear in the north after the fourth whiff. Now the Navajo knocked the ashes and tobacco out of his pipe and rubbed the latter on the feet, legs, abdomen, chest, shoulders, forehead, and mouth of each of the bears in turn, and they were at once resuscitated. He replaced the pipe in the corner of his robe. When the bears recovered, they assigned to the Navajo a place on the east side of the fire where he might lie all night, and they brought out their stores of corn meal, *teiltein*, and other berries, offering them to him to eat; but Qastcéelçi warned him not to touch the food, and disappeared. So, hungry as he was, the Indian lay down supperless to sleep. When he awoke in the morning, the bears again offered food, which he again declined, saying he was not hungry. Then they showed him how to make the bear *ketháwns*, or sticks, to be sacrificed to the bear gods, and they drew from one corner of the cave a great sheet of cloud, which they unrolled, and on it were painted the forms of the "yays" of the cultivated plants.

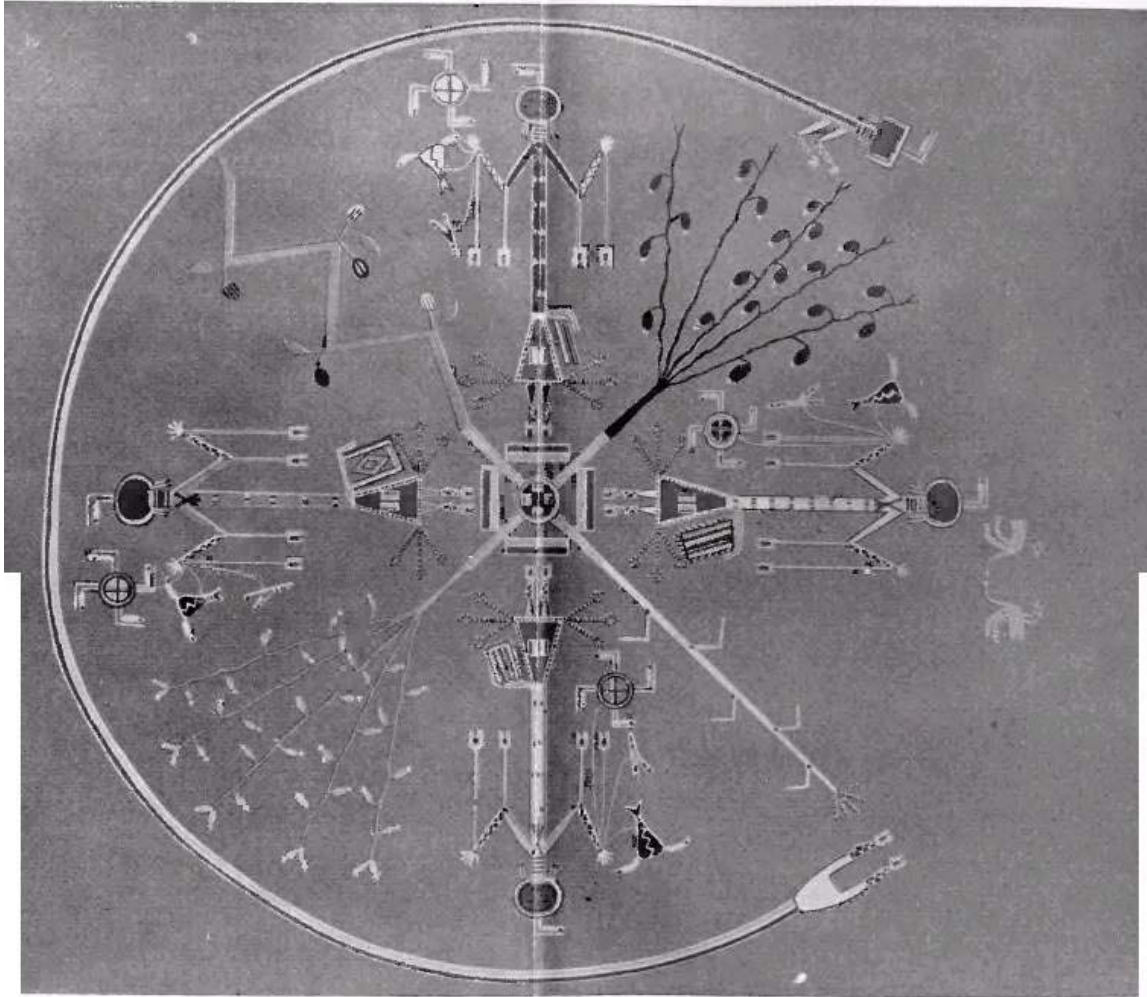
In Dr. Matthew's memoir (marked third, but described on p. 447 as the second picture), is a representation of the painting which the prophet was believed to have seen at the home of the bears in the Carrizo Mountains. This is here reproduced as pl. 17. In the center of the figure is a bowl of water covered with black powder; the edge of the bowl is garnished with sunbeams, while outside of it and forming a rectangle are the four *ca'bitlol* of sunbeam rafts on which seem to stand four gods, or "yays," with the plants under their special protection, which are painted the same color as the gods to which they belong. These plants are represented on their left hand, the hand being open and extended toward them. The body of the eastern god is white, so is the stalk of corn at his left in the southwest; the body of the southern god is blue, so is the beanstalk beside him in the southwest; the body of the western god is black, so is the tobacco plant in the northeast. Each of the sacred plants grows from five white roots in the central waters and spreads outward to the periphery of the picture. The figures of the gods form a cross, the arms of which are directed to the four cardinal points; the plants form another cross, having a common center with the first, the arms extending to the intermediate points of the compass. The gods are shaped alike, but colored differently; they lie with their feet to the center and heads extended outward, one to each of the four cardinal points of the compass, the faces look forward, the arms half extended on either side, the hands raised to a level with the shoulders. They wear around their loins skirts of red sunlight adorned with sunbeams. They have ear pendants, bracelets, and armlets, blue and red, representing turquoise and coral, the prehistoric and emblematic jewels of the Navajo Indians. Their forearms and legs are black rain clouds. In the north god these colors are, for artistic reasons, reversed. The gods have, have respectively, a rattle, a charm, and a basket, each attached to his right hand by strings. This basket, represented by concentric lines with a Greek cross in the center, all of the proper color corresponding with the god to whom each belongs, has extending from each of its quarters, arranged perpendicularly at right angles to each other, in the form of a cross, four white plumes of equal length, which at equal distances from the center are bent, all to the left, and all of the same length. Thus are formed in this chart four specimens of the Swastika, with the cross and circle at the intersection of the arms. The plumes have a small black spot at the tip end of each.



CEREMONIAL BEAD NECKLACE WITH SWASTIKA ORNAMENTATION.
Sac Indians, Cook County (Kansas) Reservation.



CEREMONIAL BEAD GARTERS WITH SWASTIKAS.
See Indians, Cook County (Kansas) Reservation.



NAVAJO DRY PAINTING CONTAINING SWASTIKAS.

Dr. Washington Matthews, "The Mountain Chant: A Navajo Ceremony," FIFTH Annual Report of the Bureau of Ethnology, 1881-84, Pl. xvii.

Dr. Matthews informs me that he has no knowledge of any peculiar meaning attributed by these Indians to this Swastika symbol, and we know not whether it is intended as a religious symbol, a charm of blessing, or good luck, or whether it is only an ornament. We do not know whether it has any hidden, mysterious, or symbolic meaning; but there it is, a prehistoric or Oriental Swastika in all its purity and simplicity, appearing in one of the mystic ceremonies of the aborigines in the great American desert in the interior of the North American Continent.

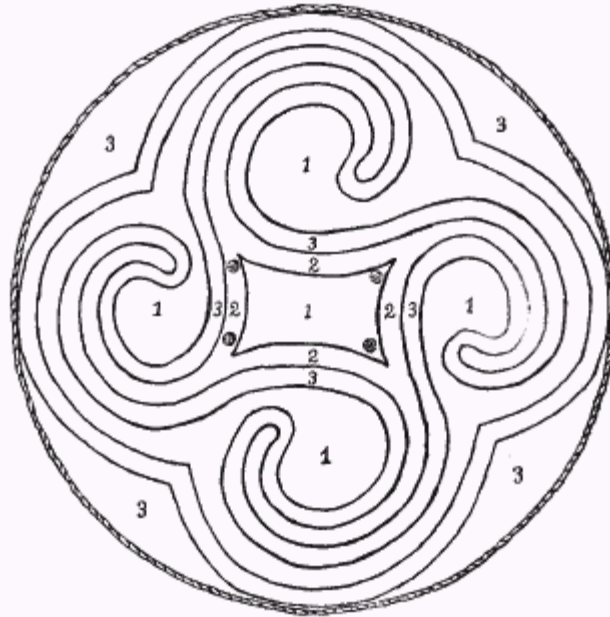
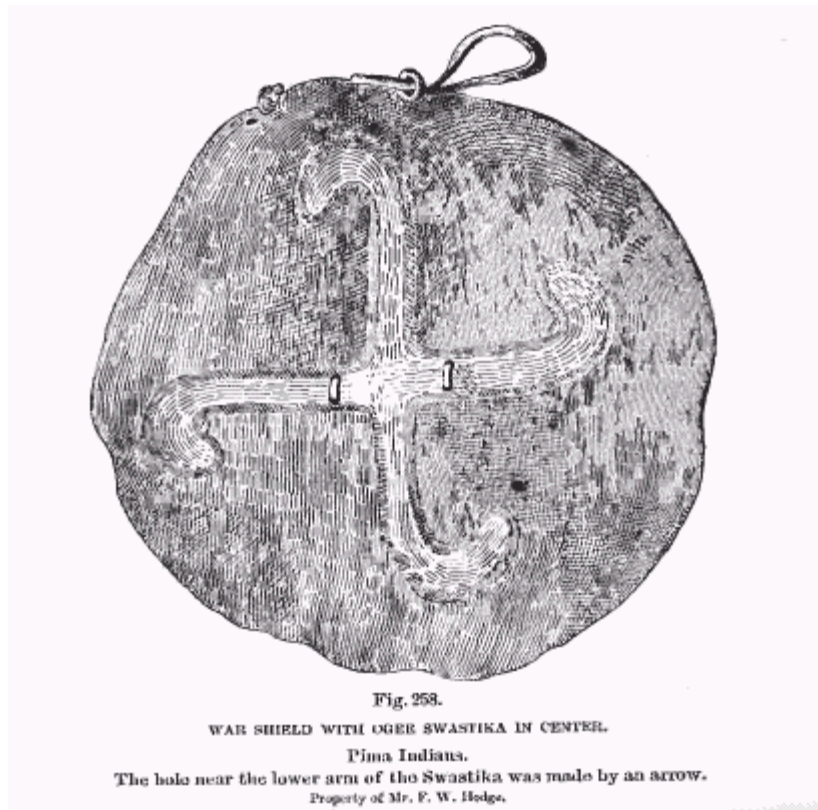


Fig. 257.

WAR SHIELD USED BY THE PIMA INDIANS.

Ogee Swastika (tetraskelion) in three colors: (1) blue, (2) red, (3) white.
 Cat. No. 27829, U. S. N. M.

The Pimas. --- The U. S. National Museum possesses a shield (Cat. No. 27829) of bull hide, made by the Pima Indians. It is about 20 inches in diameter, and bears upon its face an ogee Swastika (tetraskelion), the ends bent to the right. The body and each arm is divided longitudinally into three stripes or bands indicated by colors, blue, red, and white, arranged alternately. The exterior part of the shield has a white ground, while the interior or center has a blue ground. This shield (fig. 257) is almost an exact reproduction of the Swastika from Mycenæ (fig. 161), from Ireland (fig. 216), and from Scandinavia (figs. 209 and 210). Fig. 258 shows another Pima shield of the same type.



Its Swastika is, however, painted with a single or possibly a mixture of two, red and white. It is ogee, and the ends bend to the left. This shield is the property of Mr. F. W. Hodge, of the Bureau of Ethnology. He obtained it from a Pima Indian in Arizona, who assured him that the hole at the end of the lower arm of the Swastika was made by an arrow shot at him by an Indian enemy.

Colonial Patchwork.

In Scribner's Magazine for September, 1894, under the title of "Tapestry in the New World," one of our popular writers has described, with many illustrations, the bedquilt patterns of our grandmothers' time. One of these she interprets as the Swastika. This is, however, believed to be forced. The pattern in question is made of patches in the form of rhomboids and right-angled triangles sewed and grouped somewhat in the form of the Swastika (fig. 259).

It is an invented combination of patchwork which formed a new pattern, and while it bears a slight resemblance to the Swastika, lacks its essential elements. It was not a symbol, and represents no idea beyond that of a pretty pattern.

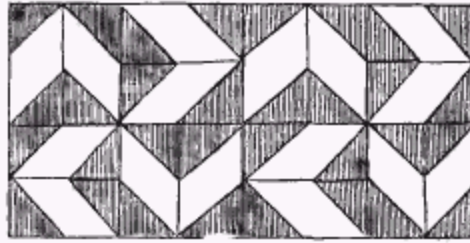


Fig. 250.

COLONIAL PATCHWORK WITH FIGURES RESEMBLING SWASTIKAS.

Seiler's Magazine, September, 1881.

It stood for nothing sacred, nor for benediction, blessing, nor good luck. It was but an ornamental pattern which fortuitously had the resemblance of Swastika. It was not even in the form of a cross. The difference between it and the Swastika is about the same there would be between the idle and thoughtless boy who sporadically draws the cross on his slate, meaning nothing by it, or at most only to make an ornament, and the devout

Christian who makes the same sign on entering the church, or the Indian who thus represents the four winds of heaven. He who made the Swastika recognizes an occult power for good and against evil, and he thereby invokes the power to secure prosperity. She who made the quilt pattern apparently knew nothing of the old-time Swastika, and was not endeavoring to reproduce it or anything like it. She only sought to make such an arrangement of rhomboidal and triangular quilt patches as would produce a new ornamental pattern.

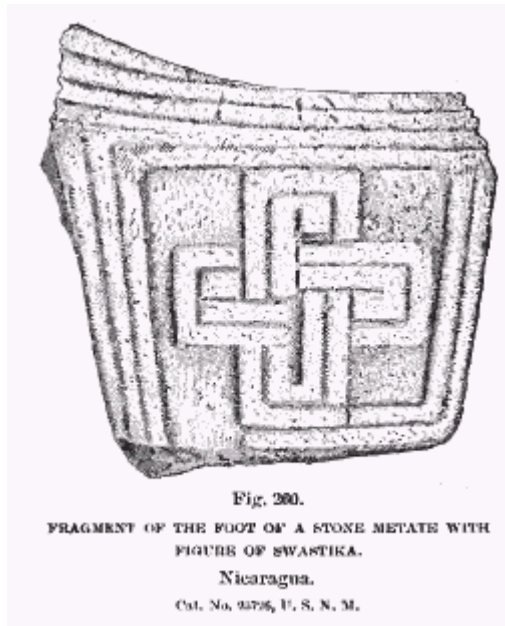


Fig. 260.

FRAGMENT OF THE FOOT OF A STONE METATE WITH FIGURE OF SWASTIKA.

Nicaragua.

Cat. No. 23726, U. S. N. M.

Central America.

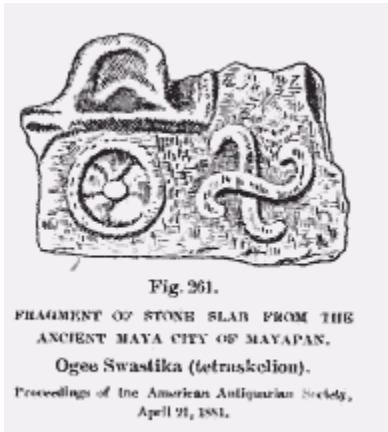
Nicaragua.

The specimen shown in fig. 260 (Cat. No. 23726, U. S. N. M.) is a fragment, the foot of a large stone metate from Zapatero, Granada, Nicaragua. The metate was chiseled or pecked out of the solid. A sunken panel is surrounded by moldings, in the center of which appears, from its outline, also by raised moldings, a figure, the outline of which is a Greek cross, but whose exterior is a Swastika. Its form as such is perfect, except that one bent arm is separated from its stem by a shallow groove.

"The Cross, Ancient and Modern," by W. W. Blake, shows, in its fig. 57, a Swastika pure and simple, and is cited by its author as representing a cross found by Squier in Central America. The Mexican enthusiast, Orozco y Perra, claims at first glance that it shows Buddhist origin, but I have not been able as yet to verify the quotation.

Yucatan.

Dr. Schliemann reports, in the Ethnological Museum at Berlin, a pottery bowl from Yucatan ornamented with a Swastika, the two main arms crossing at right angles, and he adds, (1) citing Le Plougeon, "Fouilles an Yucatan," that "during the last excavations in Yucatan this sign was found several times on ancient pottery."



Le Plougeon discovered a fragment of a stone slab in the ancient Maya city of Mayapan, of which he published a description in the Proceedings of the American Antiquarian Society. It contains an ogee Swastika (tetraskelion), with ends curved to the left and an inverted U with a wheel (fig. 261). Le Plougeon believed it to be an Egyptian inscription, which he translated thus: The character, inverted U, stood for *Ch* or *K*; the wheel for the sun, *Aa* or *Ra*, and the Swastika for *Ch* or *K*,

making the whole to be *Chach* or *Kak*, which, he says is the word *fire* in the Maya language. (2)

Costa Rica.

A fragment of a metate (Cat. No. 9693, U. S. N. M.) found on Lempa River, Costa Rica, by Capt. J. M. Dow, has on its bottom a Swastika similar to that on the metate from Nicaragua. Specimen No. 59182, U. S. M. N., is a fragment of a pottery vase from Las Huacas, Costa Rica, collected by Dr. J. F. Bransford. It is natural maroon body color, decorated with black paint. A band two inches wide is around the belly of the vase divided into panels of solid black alternated with fanciful geometric figures, crosses, circles, etc. One of these panels contains a partial Swastika figure. The two main arms cross at right angles in Greek form. It is partial Swastika in that, while the two perpendicular arms bend at right angles, turning six times to the right; the two horizontal arms are solid black in color, as though the lines and spaces had run together.

South America.

Brazil.

The leaden idol ([fig. 125](#)) (Artemis Nana (3) of Chaldea, Sayce; statuettes of the Cyclades, Lenormant) found by Dr. Schliemann in the third, the burnt city of Hissarlik, Troy, was described (p. 829) with its Swastika on the triangular shield covering the pudendum, with the statement that it would be recalled in the chapter on Brazil.

The aboriginal women of Brazil wore a triangular shield or plaque over their private parts. These shields are made of terra cotta, quite thin, the edges rounded, and the whole piece rubbed smooth and polished. It is supported in place by cords around the body, which are attached by small holes in each angle of the triangle. The U. S. National Museum possesses several of these plaques from Brazil, and several were shown at the Chicago Exposition.

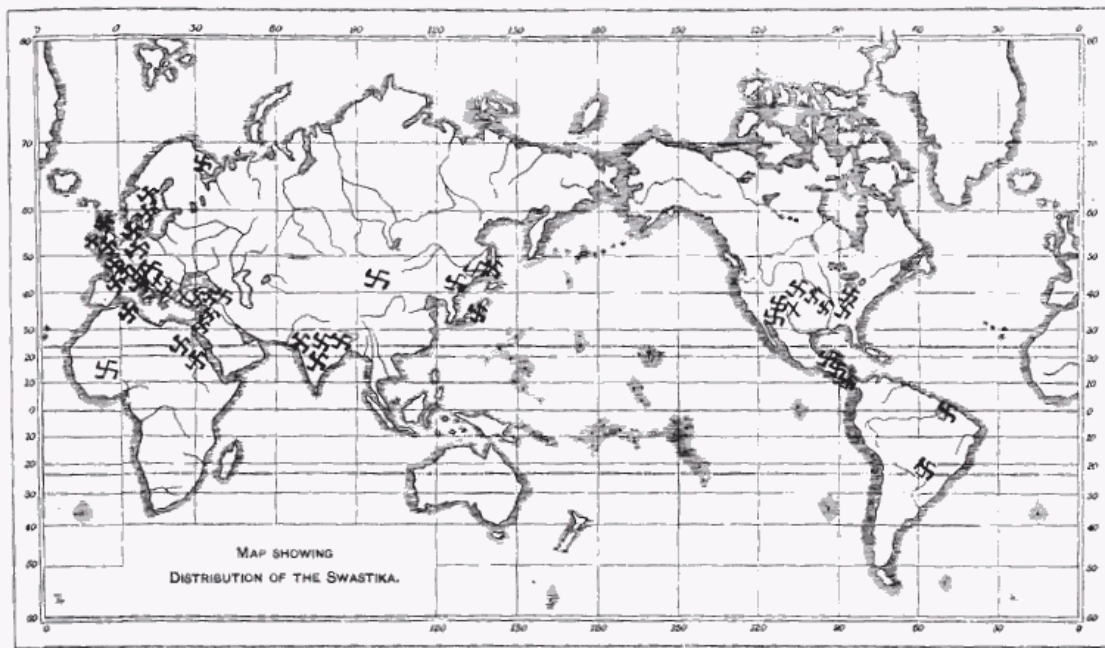
ENDNOTES:

1. "Troja," p. 122.
2. The presence of the Swastika is the only purpose of this citation. The correctness of the translation is not involved and is not vouched for.
3. Equivalent to Istar of Assyria and Babylon, Astarte of Phenicia, to the Greek Aphrodite, and the Roman Venus.

The consideration of the leaden idol of Hissarlik, with a Swastika, as though for good luck, recalled to the author similar plaques in his department from Brazil. Some of the common yellow ware, others were finer, were colored red and rubbed smooth and hard, but were without decoration. The specimen shown in [pl. 13](#) (upper figure) was from Marajo, Brazil, collected by Mr. E. M. Brigham. It is of light gray, slip washed, and decorated with pale red or yellow paint in bands, lines, parallels, geometric figures. The specimen shown in the lower figure of the same plate, from the Caneotires River, Brazil, was collected by Prof. J. B. Steere. The body color, clay, and the decoration paint are much the same as the former. The ornamentation is principally by two light lines laid parallel and close so as to form a single ornament on other pieces from Marajo Island. Midway from top to bottom, near the outside edges, are two Swastikas. They are about five-eighths of an inch in size, are turned at right angles, one to the right and the other to the left. These may have been a charm signifying good fortune in bearing children. (See pp. 830-832.)

These specimens were submitted by the author to the Brazilian minister, Señor Mendonça, himself an archæologist and philologist of no small capacity, who recognized these objects as in use in ancient times among the aborigines of his country. The name by which they are known in the aboriginal language is *Tambeao* or *Tamatiatang*, according to the dialects of different provinces. The later dialect name for apron is reported as *tunga*, and the minister makes two remarks having a possible bearing on the migration of the race: [1] the similarity of *tunga* with the last syllable of the longer word, *atang*, and [2] that *tunga* is essentially an African word from the west coast. Whether this piece of dress so thoroughly savage, with a possible ceremonial meaning relating to sex or condition, with its wonderful similarity of names, might not have migrated in time of antiquity from the west coast of Africa to the promontory of Brazil on the east coast of America where the passage is narrowest, is one of those conundrums which the prehistoric anthropologist is constantly encountering and which he is usually unable to solve. [Plate 18](#)

The purpose of these objects, beyond covering the private parts of the female sex, is not known. They may have been ceremonial, relating, under certain circumstances, to particular conditions of the sex, or they may have been only variations of the somewhat similar covers used by the male aborigine. They bear some resemblance to the *Ceintures de Chasteté*, specimens of which are privately shown at the Musée de Cluny at Paris. These are said to have been invented by Francçoise de Carara, viguier imperial (provost) of Padua, Italy, near the end of the fourteenth century. He applied it to all the women of his seraglio. He was beheaded A. D. 1405, by a decree of the Senate of Venice, for his many acts of cruelty. The palace of St. Mark contained for a long time a box or case of these ceintures with their locks attached, which were represented as *des pieces de conviction* of this monster. (1) Voltaire describes his hero "*qui tient sous la clef, la vertu de sa femme.*"



Paraguay.

Dr. Schliemann reports that a traveler of the Berlin Ethnological Museum obtained a pumpkin bottle from the tribe of Lenguas in Paraguay which bore the imprint of the Swastika scratched upon its surface, and that he had recently sent it to the Royal Museum at Berlin.

III. Forms Allied to the Swastika.

Meanders, Ogees, and Spirals, Bent To the Left As Well As To the Right.

There are certain forms related to the normal Swastika and greatly resembling it --- meanders, ogees, the triskelion, tetraskelion, and five and six armed spirals or volutes. This has been mentioned above (page 768), and some of the varieties are shown in [fig. 13](#). These related forms have been found in considerable numbers in America, and this investigation would be incomplete if they were omitted. It has been argued (p. 839) that the Swastika was not evolved from the meander, and this need not be reargued.

The cross with the arms bent or twisted in a spiral is one of these related forms. It is certain that in ancient, if not prehistoric, times the cross with extended spiral arms was frequently employed. This form appeared in intimate association with the square Swastikas which were turned indifferently to the right and left. This association of different yet related forms was so intimate, and they were used so indiscriminately as to justify the contention that the maker or designer recognized or admitted no perceptible or substantial difference between the square and spiral forms, whether they turned to the right or left, or whether they made a single or many turns, and that he classed them as the same sign or its equivalent. A Greek vase ([fig. 174](#)) shows five Swastikas, four of which are of different form ([fig. 262](#)). Curiously enough, the design of this Greek vase is painted maroon on a yellow ground, the style generally adopted in the vases from the mounds of Missouri and Arkansas, which mostly represent the spiral Swastika.

In Ireland a standing stone ([fig. 215](#)) has two forms of Swastika side by side. In one the arms are bent square at the corners, the other has curved or spiral arms, both turned to the right. These examples are so numerous that they would seem convincing in the absence of any other evidence. ([figs. 166, 167, 168, 169, 170, 171, 172, 173, 174, 175 and 176](#)).

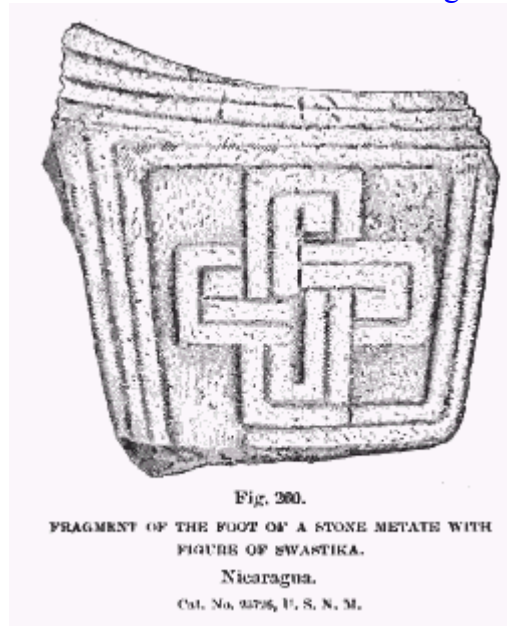


Fig. 260.
FRAGMENT OF THE FOOT OF A STONE METATE WITH
FIGURE OF SWASTIKA.
Nicaragua.
Cat. No. 9376, U. S. N. M.

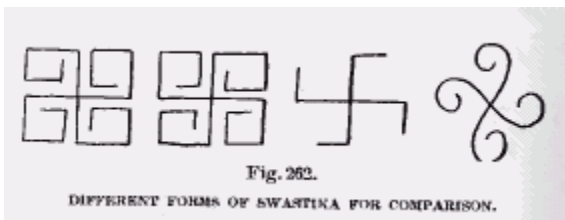


Fig. 262.
DIFFERENT FORMS OF SWASTIKA FOR COMPARISON.

ENDNOTES:

1. Cited in "Mission Voyage d'Italie," tome 1, p. 217; Dulaure, "Histoire des Differens

Cultes," II; Brantôme, "Dames Galantes"; Rabelais, "Pantagruel," 3, chap. 35.

Aboriginal American Engravings and Paintings.

These allied forms of Swastika appear on prehistoric objects from mounds and Indian graves in different parts of the country an din times of high antiquity as well as among modern tribes. This paper contains the results of the investigations in this direction.



Fig. 263.

SHELL GORGET.

Cross, circle, sun's rays (?), and heads of four ivory-billed woodpeckers (?) arranged to form a Swastika.

Mississippi.

Designs On Shell.

The Department of Prehistoric Anthropology in the U. S. National Museum, contains a considerable number of large shells of aboriginal workmanship.



The shell most employed was that of the genus *Fulgur*, a marine shell found on the coast from Florida to the capes. The *Unio* was employed, as well as others. These marine shells were transported long distances inland. They have been found in mounds and Indian graves a thousand miles from their original habitat. They served as utensils as well as ornaments. In many specimens the whorl was cut out, the shells otherwise left entire, and they served as vessels for holding or carrying liquids. When intended for ornaments, they were cut into the desired form and engraved with the design; if to be used as gorgets, holes were drilled for suspension. Frequently they were smoothed on the outside and the design engraved thereon. The preference of the aborigines for the *Fulgur* shell may have been by reason of its larger size. Among the patterns employed for the decoration of these shells, the Swastika, in the form of spirals, volutes, or otherwise, appeared, although many others, such as the rattlesnake, birds, spiders, and human masks were employed. No detailed description of the patterns of this shellwork will be attempted, because figures will be required to give the needed information for the interpretation of the Swastika. Many of the cuts and some of the descriptions are taken from the annual reports of the Bureau of Ethnology and, so far as relates to shell, mostly from Mr. Holmes's paper on "Art in Shell of the Ancient Americans." I desire to express my thanks for all cuts obtained from the Bureau publications.

Ivory-billed woodpecker. --- A series of gorgets in shell have been found ornamented with designs resembling the Swastika, which should be noticed. They combine the square and the cross, while the head and bill of the bird form the *gamma* indicative of the Swastika. Fig. 263, taken from the Second Annula Report of the bureau of Ethnology, 1880-81 (pl. 58), shows one of these shell gorgets from Mississippi, which "was, in all probability, obtained from one of the multitude of ancient sepulchres that abound in the State of Mississipi." The design is engraved on the convex side, the perforations are placed near the margin, and show much wear by the cord of suspension. In the center is a nearly symmetrical Greek cross enclosed in a circle of 1 ¼ inches. The spaces between the arms are emblazoned with radiating lines. Outside this circle are twelve small pointed or pyramidal rays. A square framework of four continuous parallel lines looped at the corners encloses this symbol; projecting from the center of each side of this square, opposite the arms of the cross, are four heads of birds representing the ivory billed woodpecker, the heron, or the swan. The long, slender, and straight mandibles give the Swastika form to the object. Mr. Holmes says (p. 282) that he has been able to find six of these specimens, all of the type described, varying only in detail, workmanship, and finish.

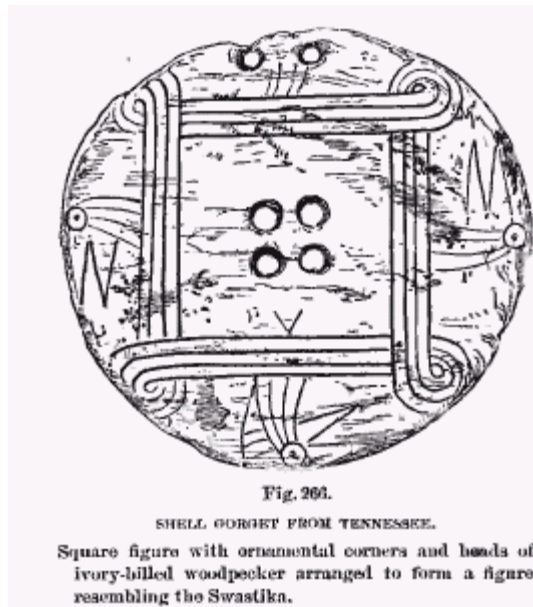


Fig. 264, 265, and 266, (1) represent three of these shell gorgets. The first was obtained by Professor Putnam from a stone grave, Cumberland River, Tennessee. It is about 2 ½ inches in diameter and, like the former, it has a Greek cross in the center.

The second was obtained by Mr. Cross from a stone grave near Nashville, Tenn. The third is from a stone grave near Oldtown, Tenn. All these have been drilled for suspension and are much worn.

The second was obtained by Mr. Cross from a stone grave near Nashville, Tenn. The third is from a stone grave near Oldtown, Tenn. All these have been drilled for suspension and are much worn.

The triskele, tirskeleios, or triquetrum. --- These are Greek and Latin terms for the spiral volute with three branches or arms. The coins of Lycia were in this form, made originally by the junction of three cocks' heads and necks. The armorial bearings of the island of Sicily, in ancient times, consisted of three human legs joined at the thigh and flexed, sometimes booted and spurred. (p. 873).

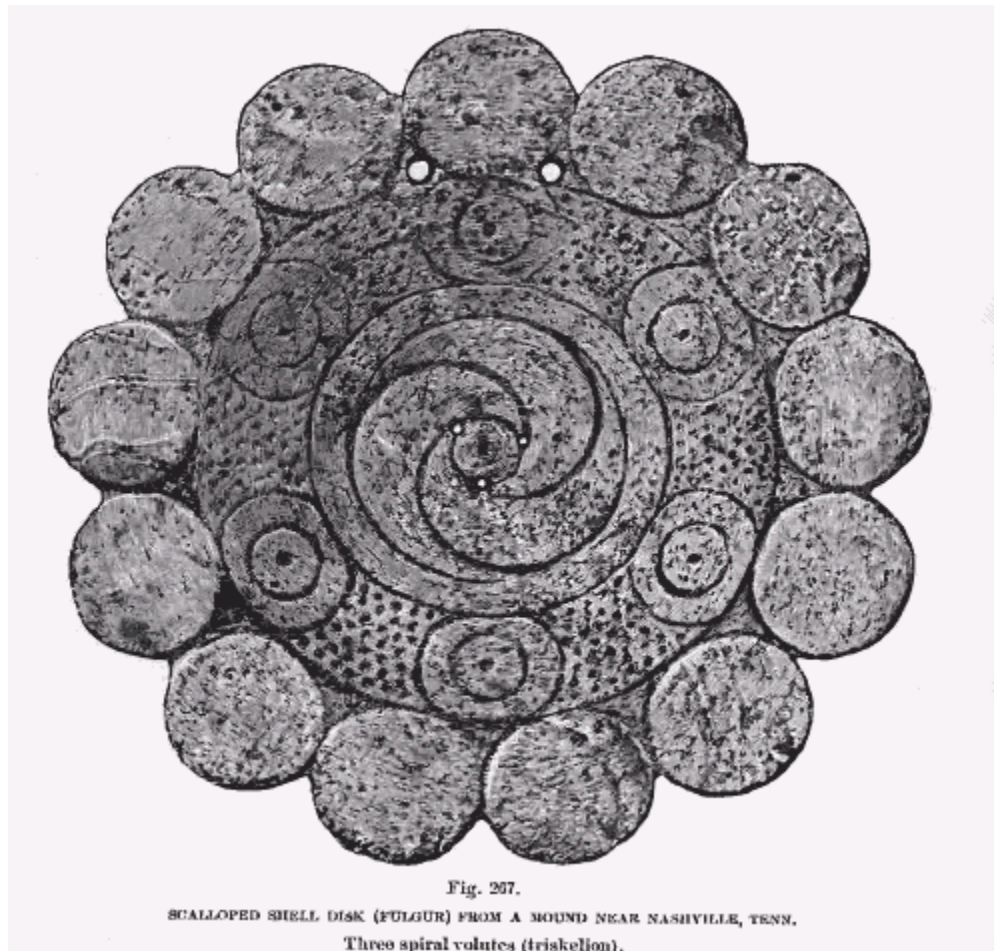


Aboriginal shell gorgets have been found in the mounds of Tennessee and the adjoining country, which were engraved with this design, though always in spiral form. There seems to have been no distinction in the direction of the volutes, they turning indifferently to the right or to the left. Because of their possible relation to the Swastika it has been deemed proper to introduce them.

Fig. 267 (2) shows a *Fulgur* shell specimen obtained by Major Powell from a mound near Nashville, Tenn. It was found near the head of a skeleton. Its substance is well preserved; the surface was once highly polished, but now is pitted by erosion and discolored by age. The design is engraved on the concave surface as usual, the lines are accurately drawn and clearly cut. The central circle is three-eighths of an inch in diameter and is surrounded by a zone one-half an inch in width, which contains a triskelion or triquetrum of three voluted lines beginning near the center of the shell on the circumference of the inner circle of three small equidistant perforations, and sweeping outward spirally to the left as shown in the figure, making upward of half a revolution.

ENDNOTES:

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1. Second Ann. Rep. Bureau of Ethnology, p. 59.
 2. Second Ann. Rep. Buereau of Ethnology, 1880-81, p. 273, pl. 54.



These lines are somewhat wider and more deeply engraved than the other lines of the design. In some specimens they are so deeply cut as to penetrate the disk, producing crescent-shaped perforations. Two medium-sized perforations for suspension have been made near the inner margin of one of the bosses next the dotted zone; these show abrasion by the cord of suspension. These perforations, as well as the three near the center, have been bored mainly from the convex side of the disk.

[Fig. 268 \(1\)](#) represents a well-preserved disk with four volute arms forming the tetraskelion, and thus allied to the Swastika. The volutes (to the right) are deeply cut and for about one-third their length penetrate the shell, producing four crescent-shaped perforations which show on the opposite side. This specimen is from a stone grave near Nashville, Tenn., and the original is in the Peabody Museum. [Fig. 269 \(2\)](#) shows a specimen from the Brakebill mound, near Knoxville, Tenn. it has a dot in the center, with a circle five-eighths of an inch in diameter. There are four volute arms which start from the opposite sides of this circle, and in their spiral form extend to the right across the

field, increasing in size as they approach the periphery.

ENDNOTES:

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1. Second Ann. Rep. Bureau of Ethnology, 1880-81, pl. 55, fig. 1
 2. Ibid., pl. 55, fig. 2.

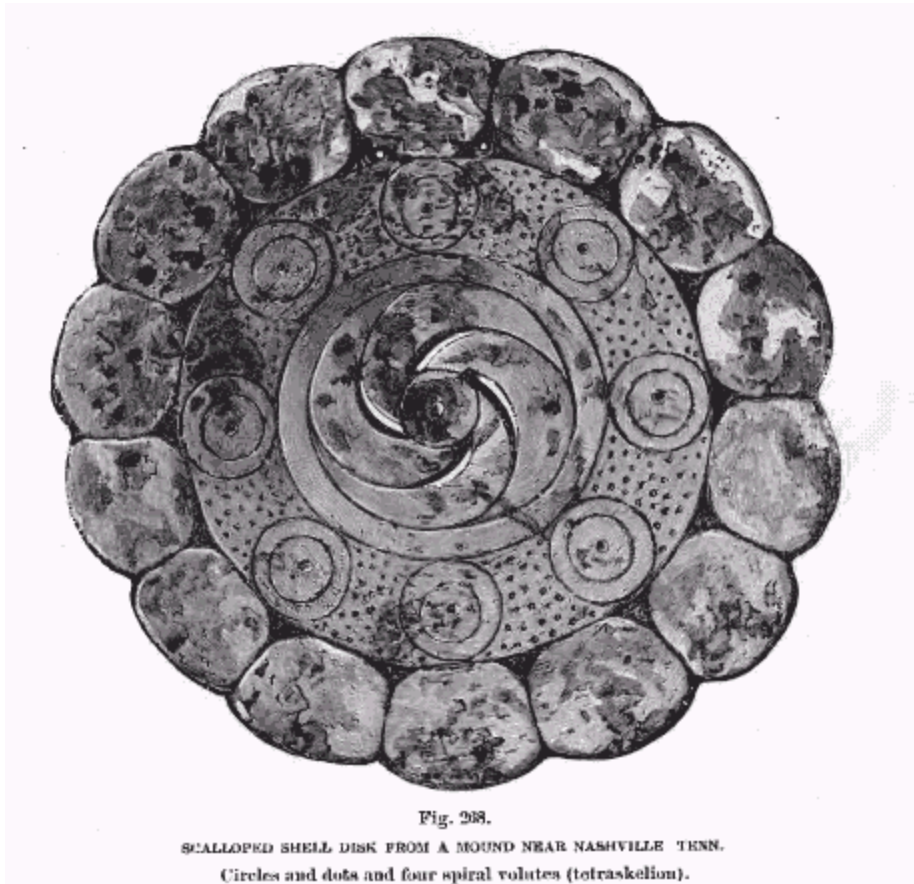
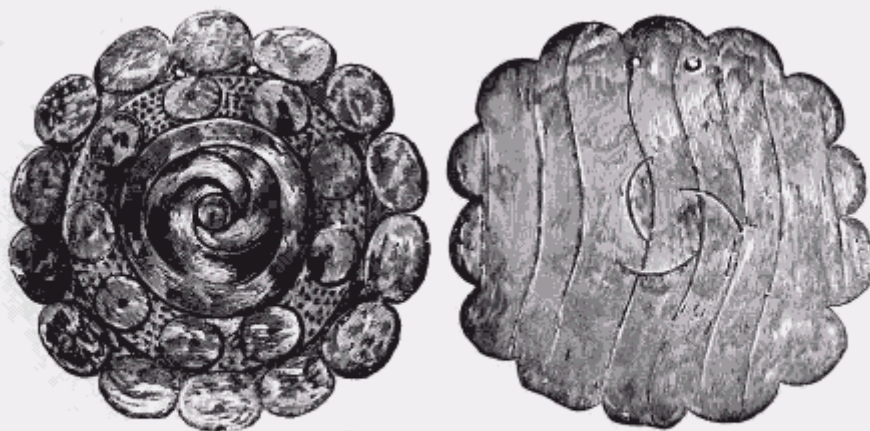




Fig. 269.

SHELL DISK FROM SHAKRHILL MOUND, NEAR KNOXVILLE, TENN.

Dot and circles in center and ogee Swastika (tetraskelion) marked but not completed.



Figs. 270 and 271.

ENGRAVED SHELL DISK.

Obverse and reverse.

Three-armed volute (triskelion).

This is an interesting specimen of the tetraskelion or spiral Swastika, in that it is unfinished, the outline having been cut in the shell sufficient to indicate the form, but not perfected. Fig. 270 and 271 show obverse and reverse sides of the same shell. It comes from one of the stone graves of Tennessee, and is thus described by Dr. Joseph Jones, of New Orleans, (1) as a specimen of the deposit and original condition of these objects:

In a carefully constructed stone sarcophagus in which the face of the skeleton was looking toward the setting sun, a beautiful shell ornament was found resting upon the breastbone of the skeleton. This shell ornament is 4.4 inches in diameter, and it is ornamented on its concave surface with a small circle in the center and four concentric bands, differently figured, in relief. The first band is filled up by a triple volute; the second is plain, while the third is dotted and has nine small found bosses curved at unequal distances upon it. The outer band is made up of

fourteen small elliptical bosses, the outer edges of which give to the object a scalloped rim. This ornament, on its concave figured surface, has been covered with red paint, much of which is still visible. The convex smooth surface is highly polished and plain, with the exception of the three concentric marks. The material out of which it is formed was evidently derived from a large flat seashell. * * * The form of the circles or "suns" carved upon the concave surface is similar to that of the paintings on the high rocky cliffs on the banks of the Cumberland and Harpeth rivers.

* * * This ornament when found lay upon the breastbone with the concave surface uppermost, as if it had been worn in this position suspended around the neck, as the two holes for the thong or sting were in that portion of the border which pointed directly to the chin or central portion of the jaw of the skeleton. The marks of the thong by which it was suspended are manifest upon both the anterior and posterior surfaces, and, in addition to this, the paint is worn off from the circular space bounded below by the two holes.

Fig. 271 represents the back or convex side of the disk shown in fig. 270. The long curved lines indicate the laminations of the shell, and the three crescent-shaped figures near the center are perforations resulting from the deep engraving of the three lines of the volute on the concave side. The stone grave in which this ornament was

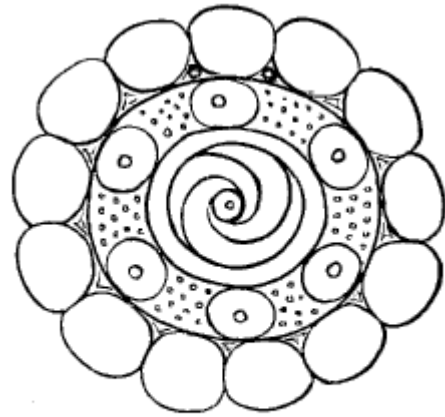


Fig. 272.
ENGRAVED SHELL DISK.
Tennessee.
Three-armed volute (triskelion).

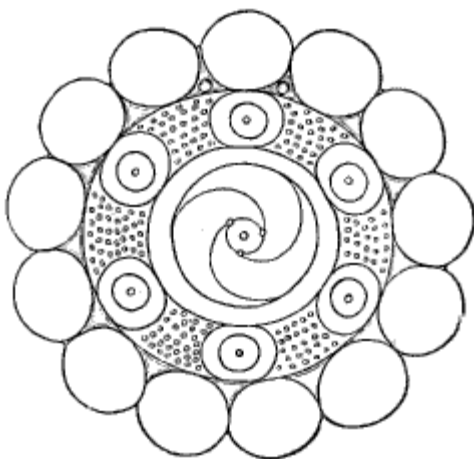


Fig. 273.
ENGRAVED SHELL DISK.
Tennessee.
Three-armed volute (triskelion).

found occupied the summit of a mound on the banks of the Cumberland River, opposite Nashville, Tenn.

Figs. 272, 273, and 274 are other representations of shell carved in spirals, and may have greater or less relation to the Swastika. (2) They are inserted for comparison and without any expression of opinion. They are drawn in outline, and the spiral form is thus more easily seen.

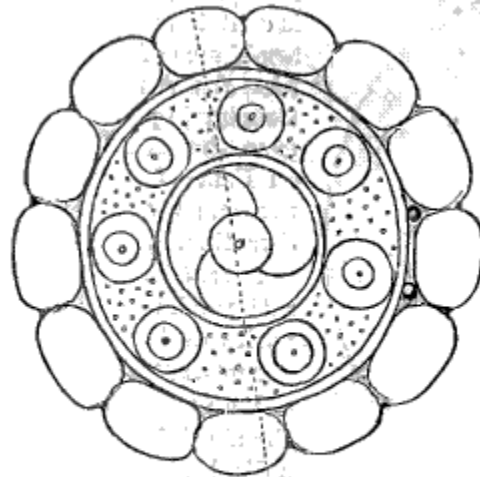


Fig. 274.
ENGRAVED SHELL DISK,
Tennessee.
Three-armed valvite (triskelion).

Mr. Holmes (3) makes some observations upon these designs and gives his theory concerning their use:

I do not assume to interpret these designs; they are not to be interpreted. All I desire is to elevate these works from the category of trinkets to what I believe is their rightful place --- the serious art of a people with great capacity for loftier works. What the gorgets themselves were, or of what particular value to their possessor, aside from simple ornaments, must be, in a measure, a matter of conjecture. They were hardly less than the totems of clans, the insignia of rulers, or the potent charms of the priesthood.

The spider. --- The spider was represented on the shell gorgets. Figs. 275, 276, 277 and 278 (4) present four of these gorgets, of which figs. 275 and 277 display the Greek cross in the center, surrounded by two concentric incised lines forming a circle which is the body of a spider.

ENDNOTES:

1. Second Ann. Rep. Bureau of Ethnology, 1880-81, p. 276, pl. 56, figs. 1,2.
2. Op. cit., p. 276, pl. 56, figs. 3, 5, 6.
3. Op. cit., p. 281.
4. Second Ann. Rep. Bureau of Ethnology, 1880-81, pl. 61.



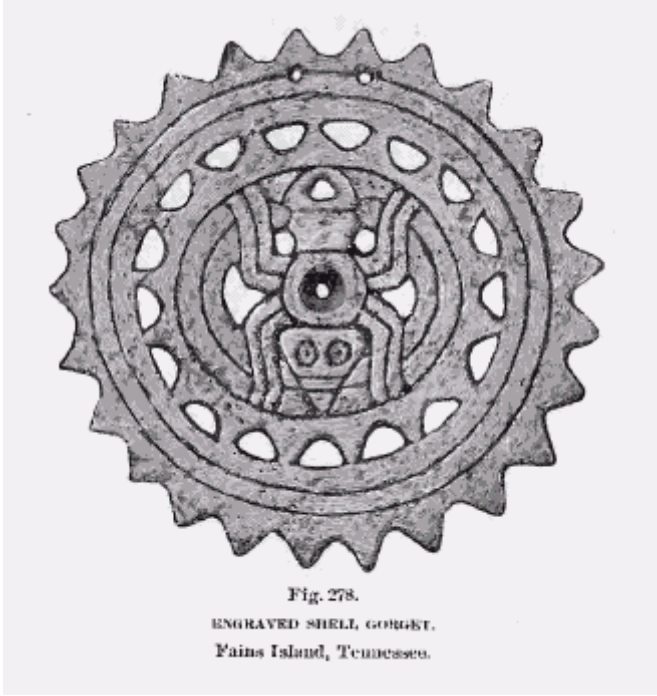


Fig. 278.
ENGRAVED SHELL GORGET.
Fains Island, Tennessee.



Fig. 276.
ENGRAVED SHELL GORGET.

Fig. 276 shows the same spider and circle, and inside of it a cross much resembling the Swastika, in that the arms are turned at their extremities to the right and form, in an inchoate manner, the gamma. Fig. 278 represents the shell with the spider, and, though it contains no cross nor semblance of the Swastika, derives its value from having been taken from the same mound on Fains Island, Tennessee, as was the true Swastika. (See fig. 237.)

The rattlesnake. --- The rattlesnake was a favorite design on these gorgets, affording as it did, an opportunity for the aborigines to make a display of elegance of design, and of accuracy and fineness in execution. Fig. 279 is a specimen in which the snake is represented coiled, the head in the center, the mouth V-shaped in strong lines, the body in volute fashion; on the outside of the circle the tail is shown by its rattle. This specimen is represented three-fourths size, and comes from McMahon mound, Tennessee. Four others of similar design are also from Tennessee and the adjoining States, but the locality is more restricted than is the case with other shell disk ornaments.



The human face and form. --- These were also carved and wrought upon shells in the same general locality. The engraving is always on the convex side of the shell which has been reduced to a pear-shaped form. (1)

ENDNOTES:

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1. Second Ann. Rep. of Ethnology, pls. 69-73.



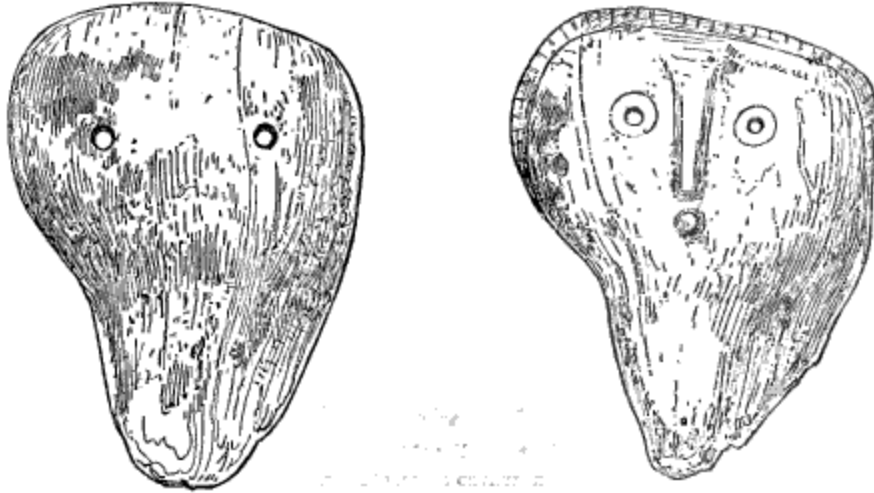
Fig. 279.

ENGRAVED SHELL GORGET REPRESENTING A RATTLESNAKE.

McMahon Mound, Tennessee.

Second Annual Report of the Bureau of Ethnology, pl. LXXX.

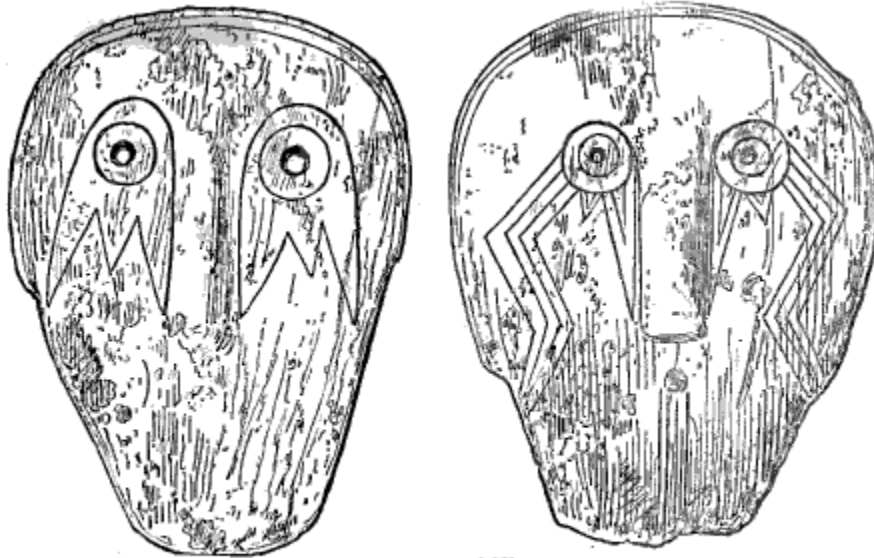
These human faces and forms (fig. 280, 281, 282, 283, 284, 285, 286, 287 and 288), as well as the others, belong to the mound builders, and are found with their remains in the mounds. The figures are inserted, as is the rattlesnake, for comparison with the shell designs and work shown in the Buddha figure (pl. 10) and its associates. Slight inspection will show two styles, differing materially. To decide which was foreign and which domestic, garters or bracelets as the Buddha, the hand is the same as in the fighting figures (fig. 239), and the implement he holds resembles closely those in the copper figures (fig. 240 and 241).



Figs. 280 and 281.

ENGRAVED SHELLS WITH REPRESENTATIONS OF THE HUMAN FACE.
McMahon Mound, Tennessee.

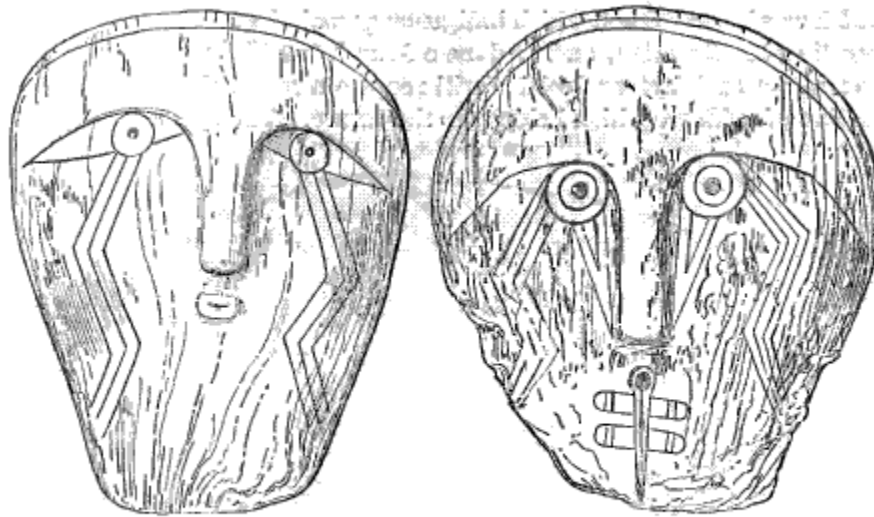
Second Annual Report of the Bureau of Ethnology, pl. LXXX.



Figs. 282 and 283.

ENGRAVED SHELLS WITH REPRESENTATIONS OF THE HUMAN FACE.
Tennessee.

Second Annual Report of the Bureau of Ethnology, pl. LXXX.



Figs. 284 and 285.

ENGRAVED SHELLS WITH REPRESENTATIONS OF THE HUMAN FACE.
Virginia

Second Annual Report of the Bureau of Ethnology, pl. LXX.

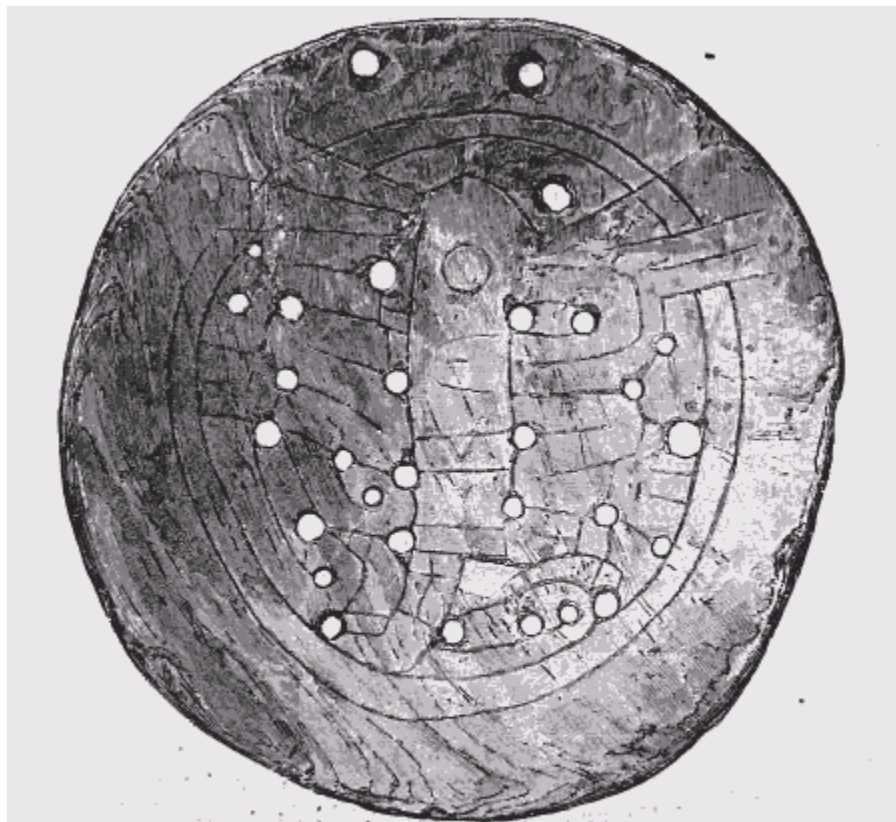


Fig. 286.

ENGRAVED SHELL WITH REPRESENTATION OF A HUMAN FIGURE.
McMahon Mound, Tennessee.

Second Annual Report of the Bureau of Ethnology, pl. LXXI.

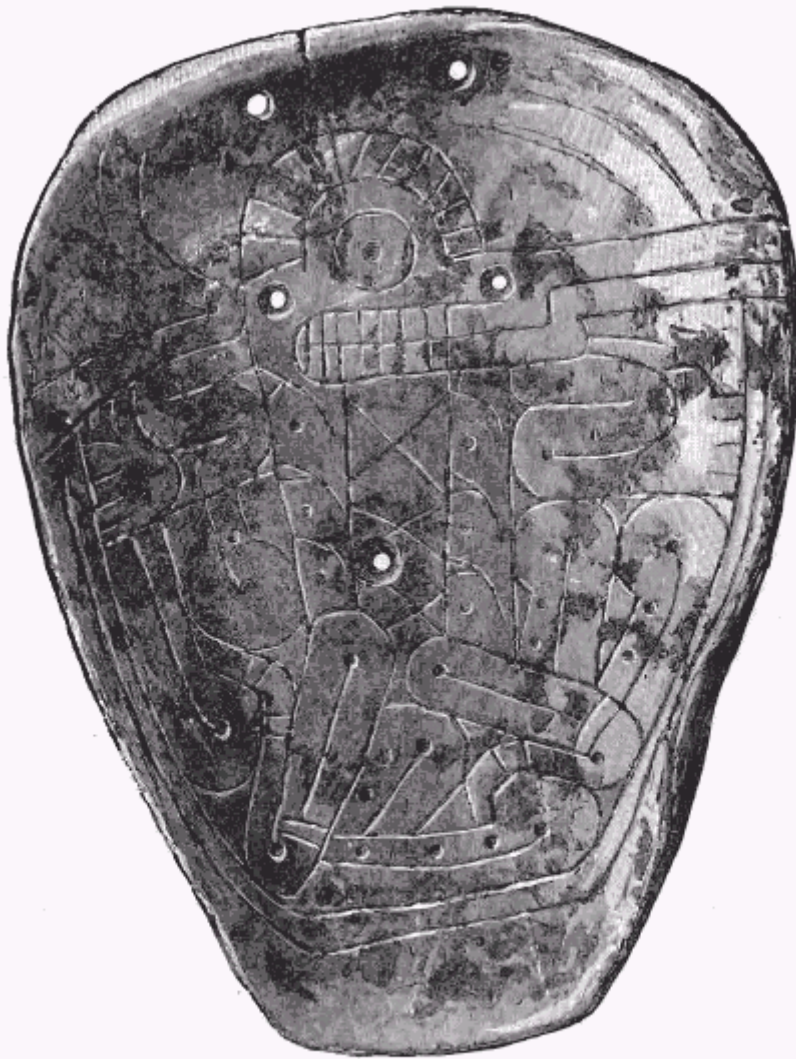


Fig. 287.

ENGRAVED SHELL WITH REPRESENTATION OF A HUMAN FIGURE. *

TENNESSEE.

Second Annual Report of the Bureau of Ethnology, pl. LXXXI.

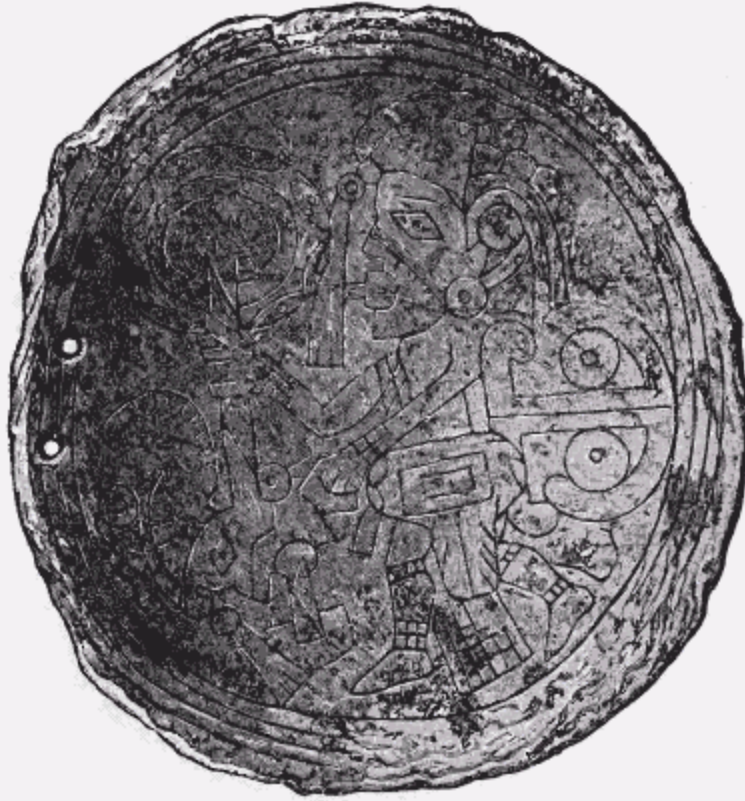


Fig. 288.

ENGRAVED SHELL GORGET WITH REPRESENTATION OF A HUMAN FIGURE.
Missouri.

Second Annual Report of the Bureau of Ethnology, pl. LXXIII.



Fig. 289.

POTTERY VESSEL.

Four-armed volute, ogee Swastika (tetraskeion).

Arkansas.

$\frac{1}{2}$ natural size.

Designs On Pottery.

Spiral volute designs resembling the Swastika in general effect are found on aboriginal mound pottery from the Mississippi Valley. The Fourth Annual Report of the Bureau of Ethnology, 1882-83, (1) shows many of these. Fig. 289 represents a teapot-shaped vessel from Arkansas, on the side of which, in incised lines, is shown the small circle which we saw on the shell disks, and springing from the four opposite sides are three incised lines, twisting spirally to the right, forming the four volutes of the Swastika (tetraskelion) and covering the entire side of the vessel. The same spiral form of the Swastika is given in fig. 290, a vessel of eccentric shape from Pecan Point, Ark. The decoration is in the form of two lines crossing each other and each arm then twisting to the right, forming volutes, the incised lines of which, though drawn close together and at equal distances, gradually expand until the ornament covers the entire side of the vase. It is questionable whether this or any of its kindred were ever intended to represent either the Swastika or any other specific form of cross. One evidence of this is that these ornaments shade off indefinitely until they arrive at a form which was surely not intended to represent any form of the cross, whether Swastika or not. The line of separation is not now suggested by the author. An elaboration of the preceding of the preceding forms, both of the vessel and its ornamentation, is shown by the vessel represented in fig. 291, which is fashioned to represent some grotesque beast with horns, expanding nostrils, and grinning mouth, yet which might serve as a teapot as well as the former two vessels. The decoration upon its side has six incised lines crossing each other in the center and expanding in volutes until they cover the entire side of the vessel, as in the other specimens.

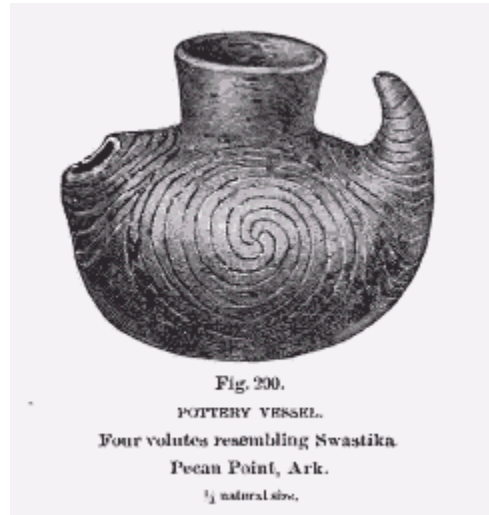


Fig. 290.
POTTERY VESSEL.
Four volutes resembling Swastika
Pecan Point, Ark.
 $\frac{1}{2}$ natural size.



Fig. 291.
POTTERY VESSEL MADE IN THE FORM OF AN ANIMAL.
Spiral volutes, nine arms.
Pecan Point, Ark.
 $\frac{1}{2}$ natural size.

Fig. 292 shows a pot from Arkansas. Its body is decorated with incised lines arranged in much the same form as fig. 291, except that the lines make no attempt to form a cross. There are nine arms which spring from the central point and twist spirally about as volutes until they cover the field, which is one-third the body of the bowl. Two other designs of the same kind complete the circuit of the pot and form the decoration all around.

ENDNOTES:

1. Figs. 402, 413, 415, 416.
2. Third Ann. Rep. Bureau of Ethnology, fig. 157.

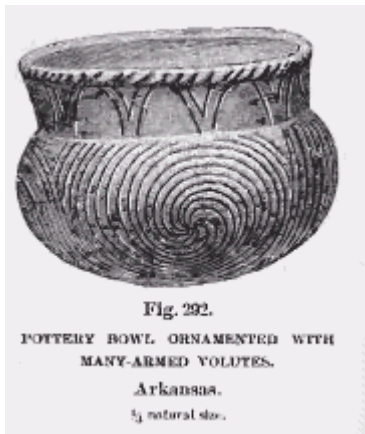


Fig. 293 (2) represents these volutes in incised lines of considerable finesse, close together, and in great numbers, forming a decoration on each of the sides of the vase, separated by three nearly perpendicular lines, which was imported and which indigenous, would be to decide the entire question of migration, and if done off-hand, would be presumptuous.

To make a satisfactory decision will require a marshaling and consideration of evidence which belongs to the future. The specimens shown in [figs. 280, 281, 282, 283, 284 and 285](#) are from Tennessee and Virginia. They are all masks, bearing representations of the human face. The first two are from the McMahon mound, Tennessee; that in [fig. 282](#) from Brakebill mound, Tennessee, and that represented in [fig. 283](#) from Lick Creek mound, Tennessee. The shell shown in [fig. 284](#) is from Aquia Creek, Virginia, and that in [fig. 285](#) is from a mound in Ely County, Va. The workmanship on these has

no resemblance to that on the Buddha figure ([pl. 10](#)), nor does its style compare in any manner therewith.

On the contrary, [figs. 286 and 288](#), representing sketches (unfinished) of the human figure, from mounds in Tennessee and Missouri, have some resemblance in style of work, though not in design, to that of the Buddha and Swastika figures. The first step in execution, after the drawing by incised lines, seems to have been

to drill holes through the shell at each corner and intersection. The work on the specimen shown in [fig. 286](#) has progressed further than that on the specimens shown in [figs. 287 and 288](#). It has twenty-eight holes drilled, all at corners or intersections. This is similar to the procedure in the Buddha statue ([pl. 10](#)). In [fig. 287](#) the holes have not been drilled, but each member of the figure has been marked out and indicated by dots in the center, and circles or half circles incised around them in precisely the same manner as in both Swastikas ([figs. 237 and 238](#)), while [fig. 288](#) continues the resemblance in style of drawing. It has the same peculiar

The spiral Swastika form appears painted upon the pottery from Arkansas. The specimens shown in [fig. 294 \(1\)](#) is a tripod bottle. The decoration upon the side of the body consists of two lines forming the cross, and the four arms expand in volutes until the ornament covers one-third of the vessel, which, with the other two similar ornaments, extend around the circumference. This decoration is painted in red and white colors on a gray or yellowish ground. [Fig. 295](#) shows a bowl from mound No. 2, Thorn's farm, Taylor Shanty group, Mark Tree, Poinsett County, Ark. It is then inches wide and six inches high. The clay of which it is made forms the body color --- light gray. It has been painted red or maroon on the outside without any decoration, while on the inside is painted with the same color a five-armed cross, spirally arranged in volutes turning to the right. The center of the cross is at the bottom of the bowl, and the painted spiral lines extend over the bottom and up the sides to the rim of the bowl, the interior being entirely covered with the design. Another example of the same style of decoration is seen on the upper surface of an ancient vase from the province of Cibola. [\(2\)](#)

The specimen shown in [fig. 296](#) is from the mound at Arkansas Post, in the county and State of Arkansas. [\(3\)](#) It represents a vase of black ware, painted a yellowish ground, with a red spiral scroll. Its diameter is 5 ½ inches. These spiral figures are not uncommon in the localities heretofore indicated as showing the normal Swastika. [Figs. 297 and 298 \(4\)](#) show parallel incised lines of the same style as those forming the square in the bird gorgets already noted ([figs. 263, 264, 265, 266 and 267](#)).

ENDNOTES:

1. Fourth Ann. Rep. Bureau of Ethnology, 1882-83, fig. 442.
2. Fourth Ann. Rep. Bureau of Ethnology, 1882-83, p. 343, fig. 331.
3. Third Ann. Rep. Bureau of Ethnology, 1881-82, fig. 165.
4. Ibid., pp. 502, 503, figs. 186, 180.



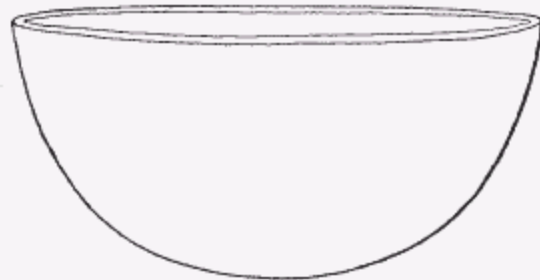


Fig. 295.

POTTERY BOWL WITH FIVE-ARMED SPIRAL SWASTIKA ON THE BOTTOM.
Poliselt County, Ark.
Cat. No. 1406, U. S. N. M.



Fig. 296.
VESSEL OF BLACK WARE.
Spiral scroll.
Arkansas.



Fig. 297.
BIRD-SHAPED POTTERY BOWL.
Three parallel incised lines with ribbon fold.
Charleston, Mo.

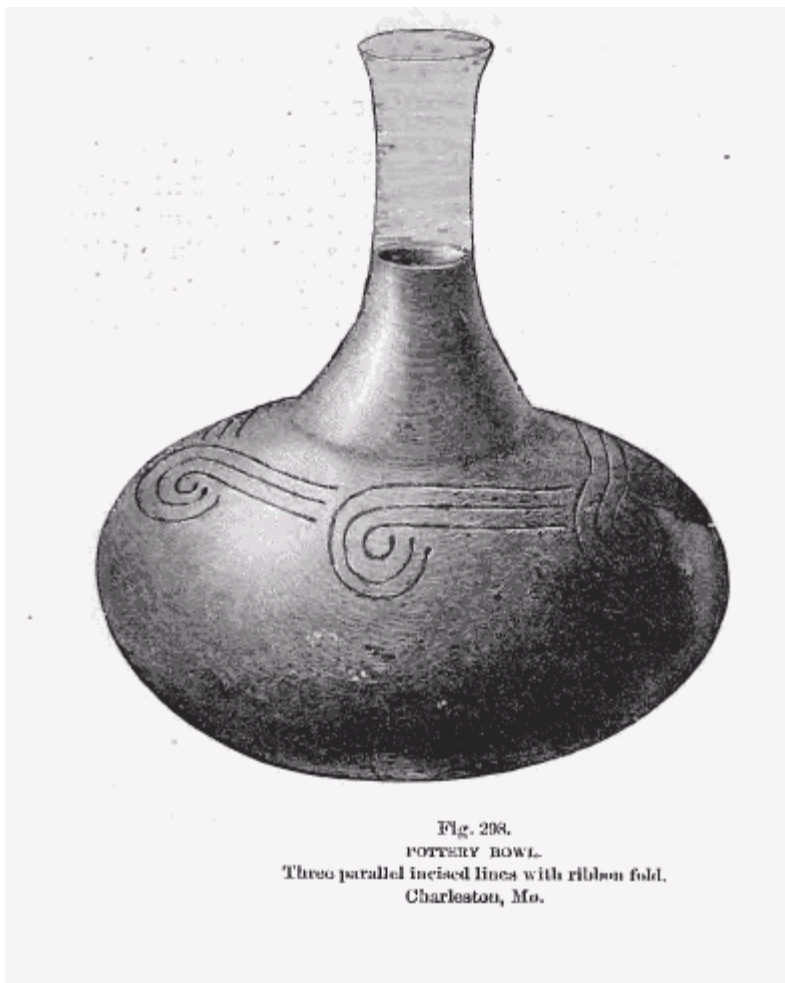
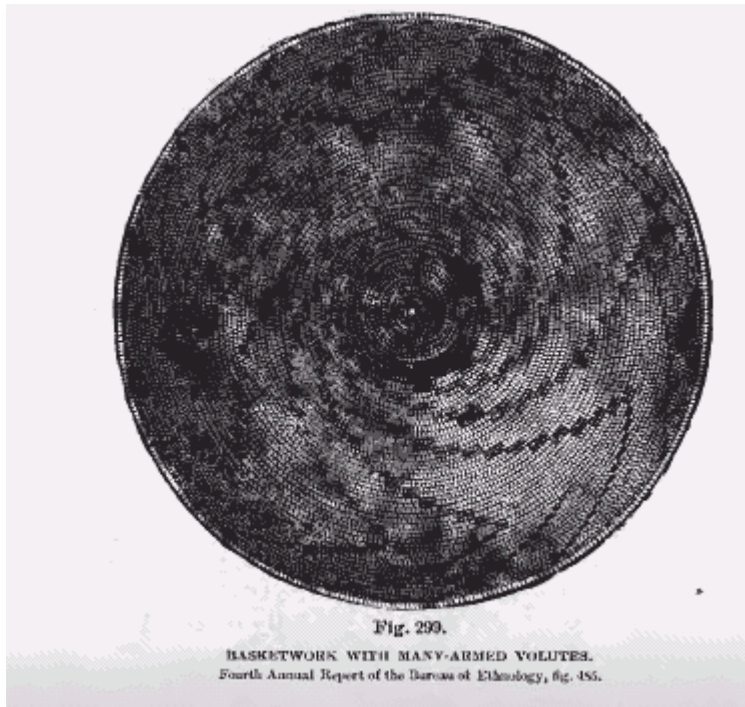


Fig. 297 shows a bowl nine inches in diameter; its rim is ornamented with the head and tail of a conventional bird, which probably served as handles. On the outside, just below the rim, are the four incised parallel lines mentioned. In the center of the side is represented a rolling under or twisting of the lines, as though it represented a ribbon. There are three on each quarter of the bowl, that next the head being plain. Fig. 298 represents a bottle $6\frac{1}{2}$ inches in diameter, with parallel incised lines, three in number, with the same twisting or folding of the ribbon like decoration. This twists to the left, while that of fig. 297 twists in the opposite direction. Both specimens are from the vicinity of Charleston, Mo.

Designs On Basketry.

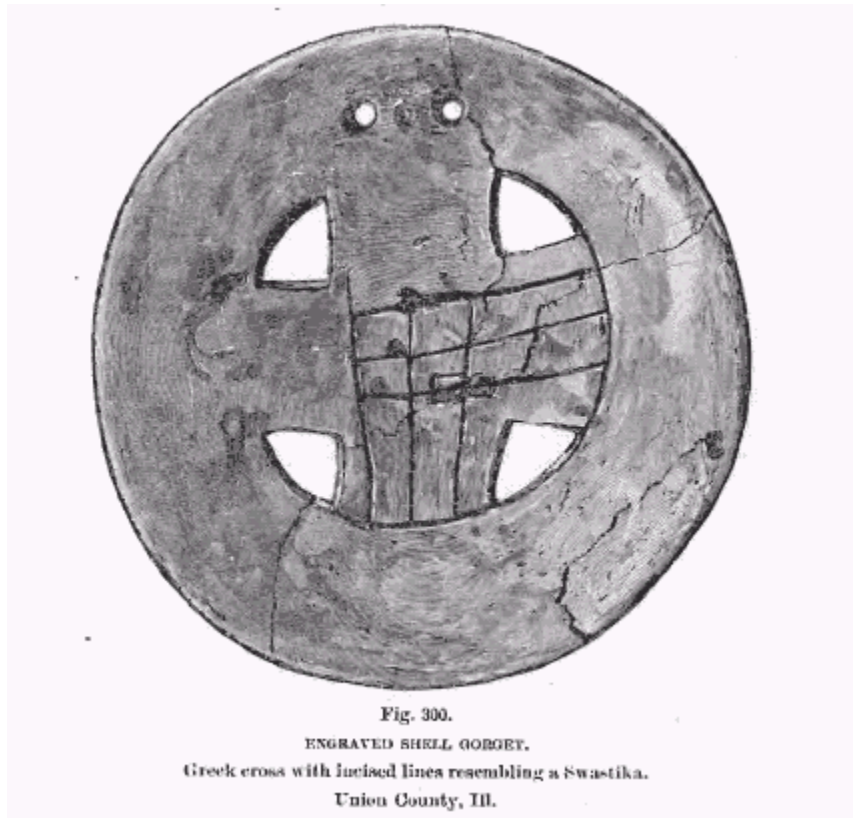
The volute form is particularly adapted to the decoration of basketry of which [fig. 299](#) is a specimen. These motifs were favorites with the Pueblo Indians of New Mexico and Arizona.



IV. The Cross Among The American Indians.

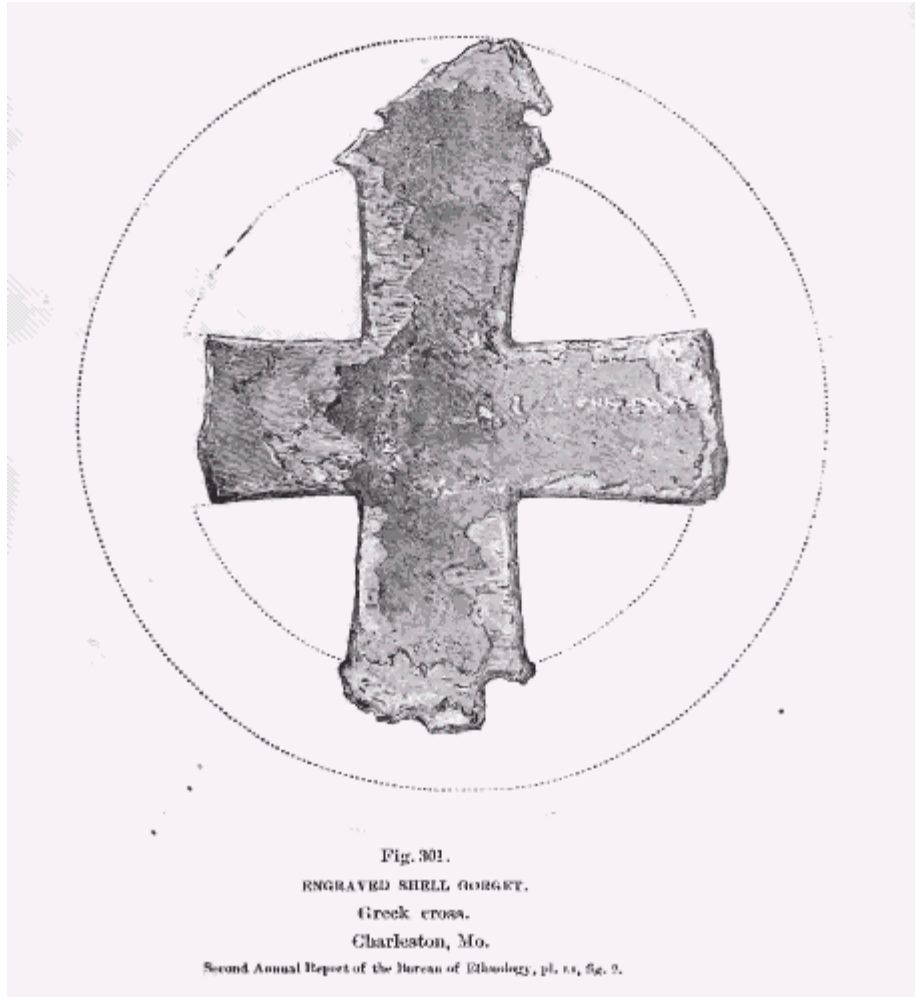
Different Forms.

The foregoing specimens are sufficient evidence of the existence of the Swastika among the aboriginal North Americans during the mound-building period. And although there may be other specimens of the Swastika to be reported, yet we might properly continue this investigation for the purpose of determining if there be any related forms of the cross among the same peoples. This is done without any argument as to the use of these designs beyond that attributed to them. The illustrations and descriptions are mainly collected from objects in and reports of the U. S. National Museum and the Bureau of Ethnology.



The Cross On Objects Of Shell and Copper.

The shell gorget presented in fig. 300 belongs to the collection of Mr. F. M. Perrine, and was obtained from a mound in Union County, Ill. It is a little more than three inches in diameter and has been ground to a uniform thickness of about one-twelfth of an inch. The surfaces are smooth and the margin carefully rounded and polished.



Near the upper edge are two perforations, both well worn with cord-marks indicating suspension. The cross in the center of the concave face of the disk is quite simple and is made by four triangular perforations which separate the arms. The face of the cross is ornamented with six carelessly drawn incised lines interlacing in the center as shown in the figure, three extending along the arm to the right and three passing down the lower arm to the enclosing line. Nothing has been learned of the character of the interments with which this specimen was associated. (1) The incised lines of the specimen indicate the possible intention of the artist to make the Swastika. The design is evidently a cross and apparently unfinished.

The National Museum possesses a large shell cross (fig. 301) which, while quite plain as a cross, has been much damaged, the rim that formerly encircled it, as in the foregoing figure, having been broken away and lost. The perforations are still in evidence. The specimen

ENDNOTES:

1. Second Ann. Rep. bureau of Ethnology, 1880-81, p. 271, pl. 51, fig. 1.

is much decayed and came to the National Museum with a skull from a grave at Charleston, Mo.; beyond this there is no record. The specimen shown in fig. 302 is quoted as a "typical example of the cross of the mound-builder." It was obtained from a mound on Lick Creek, Tennessee, and is in the Peabody Museum, Cambridge, Mass. While an elaborate description is given of it and figures are mentioned as "devices probably significant," and "elementary or unfinished," and more of the same yet nowhere is suggested any relationship to the Swastika, nor even the possibility of its existence in America.

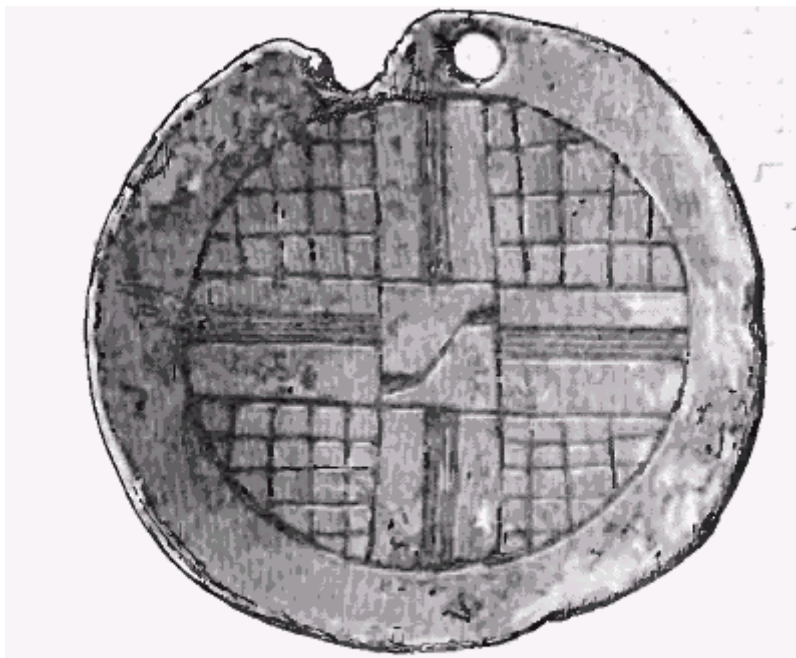


Fig. 302.

SHELL GORGET WITH ENGRAVING OF GREEK CROSS AND
INCHOATE SWASTIKA.

Second Annual Report of the Bureau of Ethnology, pl. 111, fig. 3.

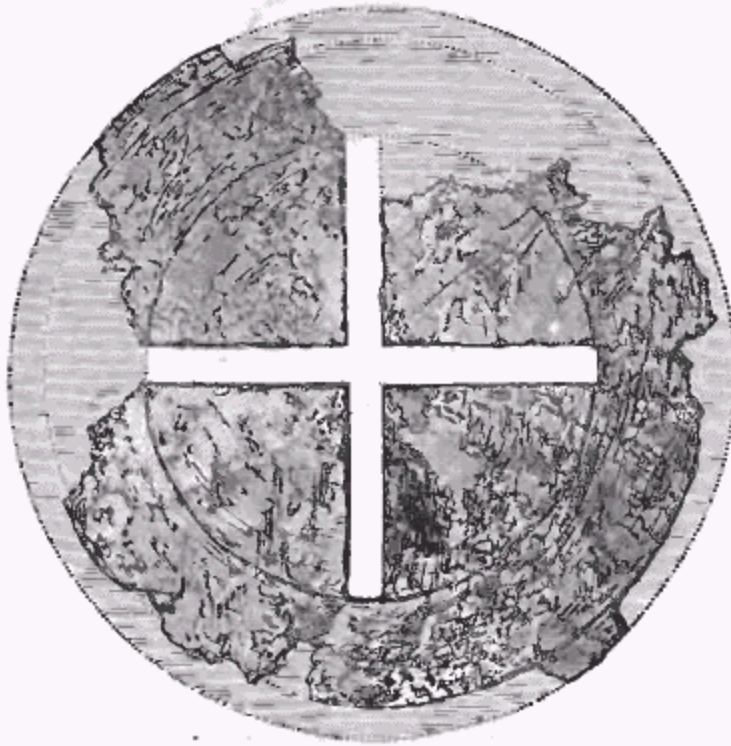


Fig. 303.

FRAGMENT OF COPPER DISK WITH GREEK CROSS IN INNER CIRCLE.

Ohio.

American Museum of Natural History, New York City.

Second Annual Report of the Bureau of Ethnology, pl. LII, fig. 4.

A large copper disk from an Ohio mound is represented in fig. 303. It is in the Natural History Museum of New York. It is eight inches in diameter, is very thin, and had suffered greatly from corrosion. A symmetrical cross, the arms of which are five inches in length, has been cut out of the center. Two concentric lines have been impressed in the plate, one near the margin and the other touching the ends of the cross. Fig. 304 shows a shell gorget from a mound on Lick Creek, Tennessee. It is much corroded and broken, yet it shows the cross plainly. There are sundry pits or dots made irregularly over the surface, some of which have perforated the shell. Pl. 19 represents a recapitulation of specimens of crosses, thirteen in number, "most of which have been obtained from the mounds or from ancient graves within the district occupied by the mound-builders. Eight are engraved upon shell gorgets, one is cut in stone, three are painted upon pottery, and four are executed upon copper. With two exceptions, they are enclosed in circles, and hence are symmetrical Greek crosses, the ends being rounded to conform to a circle." (1) Figs. 7 and 9 of pl. 19 represent forms of the Latin cross, and are modern, having doubtless been introduced by European priests. Figs. 10 and 13 are representatives of the Swastika in some of its forms.

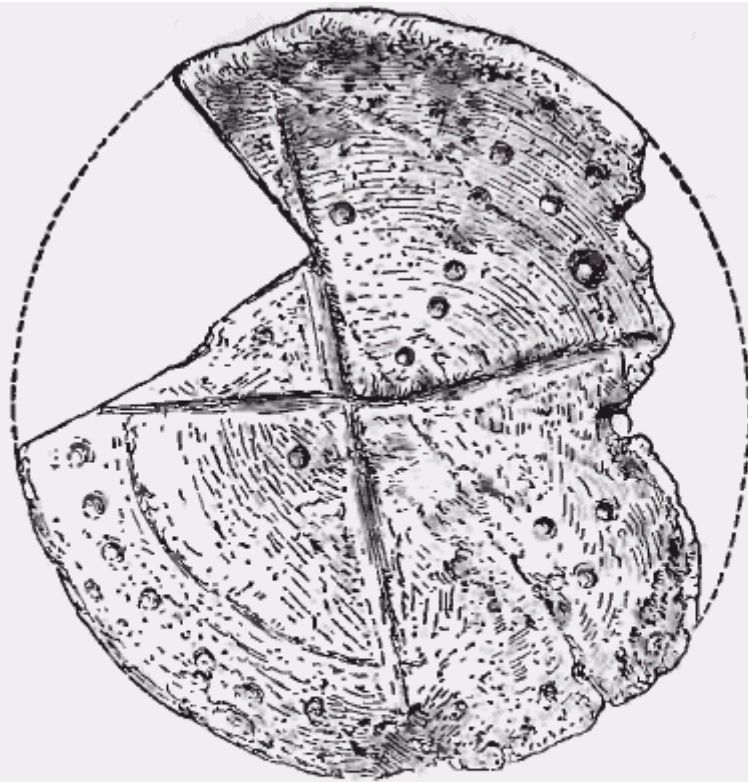


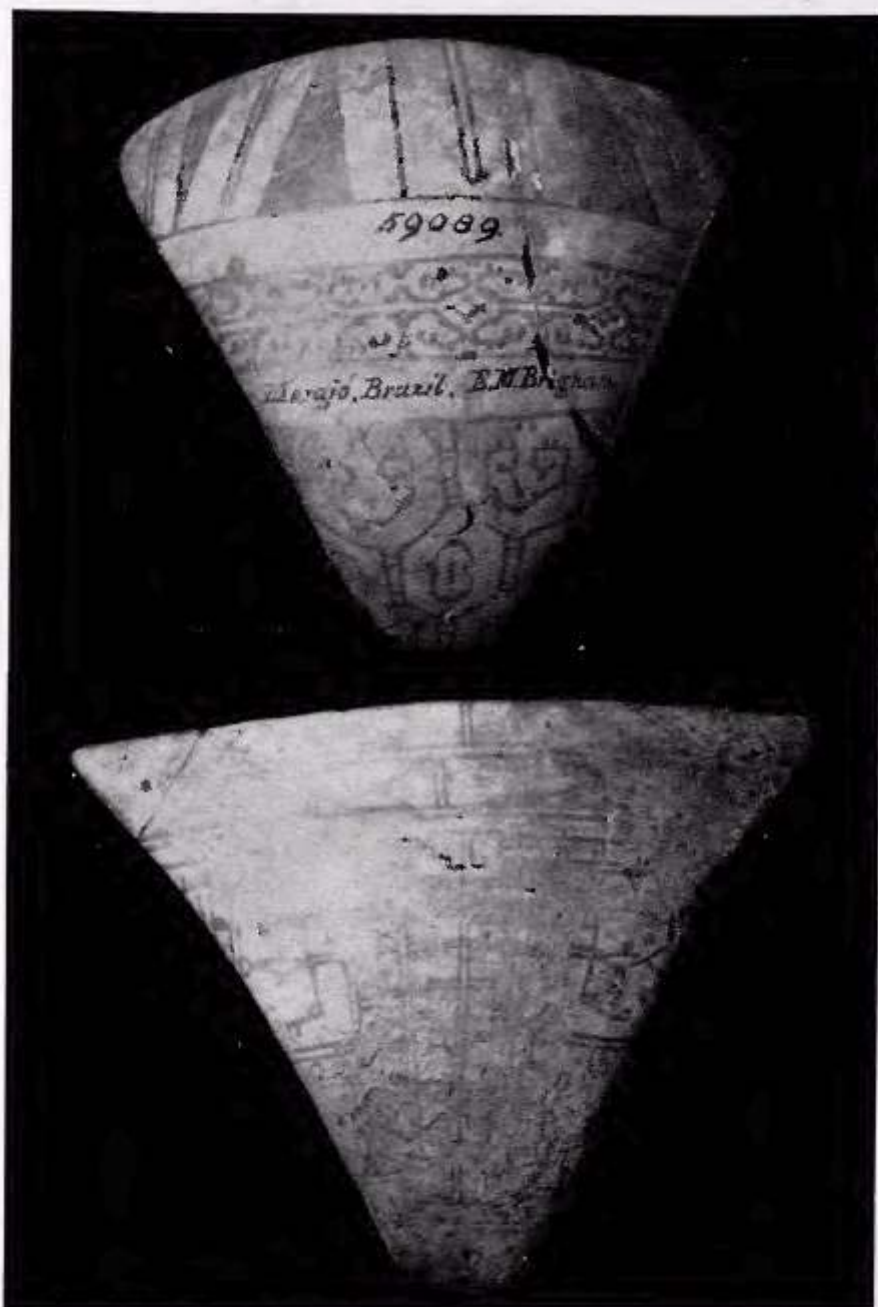
Fig. 304.

ENGRAVED SHELL DISK GORGET.

Rude cross with many dots.

Lick Creek, Tenn.

Second Annual Report of the Bureau of Ethnology, pl. 59, fig. 9.

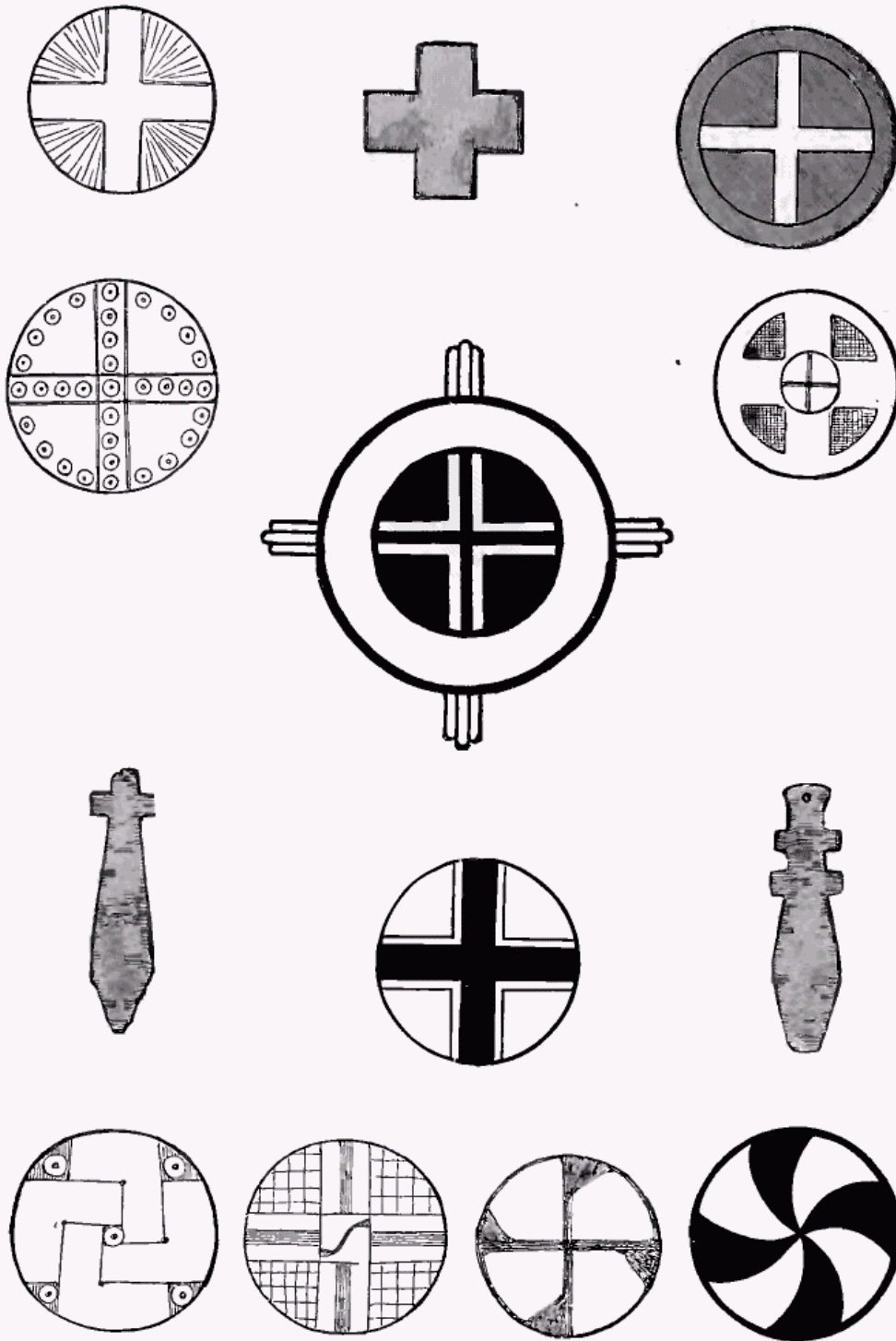


FOLIUM VITUS ("FIG LEAVES").

Terra-cotta covers, "tunga."

Aborigines of Brazil.

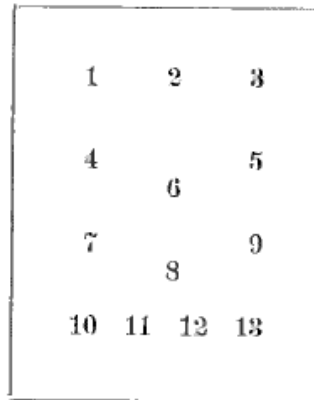
Cat. Nos. 5089 and 36542, U. S. N. M.



VARIOUS FORMS OF CROSSES IN USE AMONG NORTH AMERICAN INDIANS, FROM GREEK CROSS TO SWASTIKA.

Second Annual Report of the Bureau of Ethnology, 1880-81, Pl. LIII.

EXPLANATION OF PLATE 19.



VARIOUS FORMS OF CROSSES IN USE AMONG NORTH AMERICAN INDIANS, FROM GREEK CROSS TO SWASTIKA.

Fig. 1. GREEK CROSS.

2. GREEK CROSS.

3. CROSS ON COPPER.

4. CROSS ON SHELL.

5. GREEK CROSS.

6. GREEK CROSS.

7. LATIN CROSS (Copper).

Fig. 8. GREEK CROSS.

9. LATIN CROSS (Copper).

10. SWASTIKA ON SHELL.

11. SWASTIKA ON SHELL.

12. SWASTIKA ON POTTERY.

13. SWASTIKA ON POTTERY.

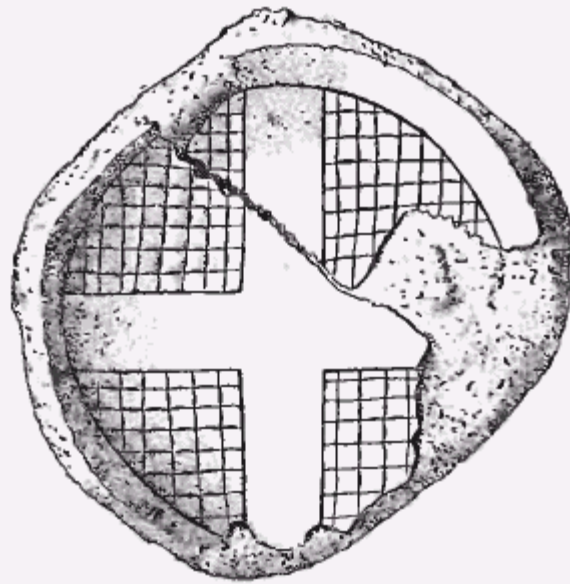


Fig. 305.

ENGRAVED SHELL WITH FIGURE OF GREEK
CROSS.

Caldwell County, N. C.

Cat. No. 31169, U. S. N. M.

The U. S. National Museum possesses a small shell ornament (fig. 305) in the form of a cross, from Lenoir's burial place, Fort Defiance, Caldwell County, N. C. collected by Dr. Spainhour and Mr. Rogan, the latter being an employé of the Bureau of Ethnology. It is in the form of a Greek cross, the four arms crossing at right angles and being of equal length. The arms are of the plain shell, while they are brought to view by the field being cross-hatched. The specimen has unfortunately, been broken, and being fragile has been secured in a bed of plaster.

This and the foregoing specimens have been introduced into this paper that the facts of their existence may be presented for consideration, and to aid in the determination whether the cross had any peculiar or particular meaning. The questions involuntarily arise, Was it a symbol with a hidden meaning, religious or otherwise; was it the totem of a clan, the insignia of a ruler, the charm of a priesthood, or did it, with all the associated shell engravings, belong to the category of trinkets?

ENDNOTES:

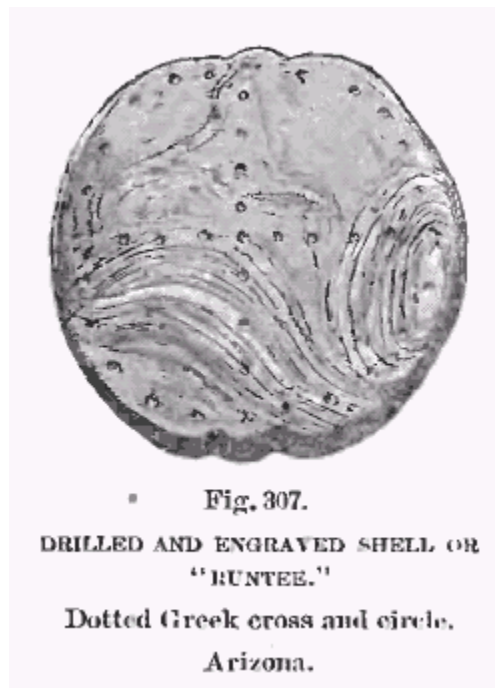
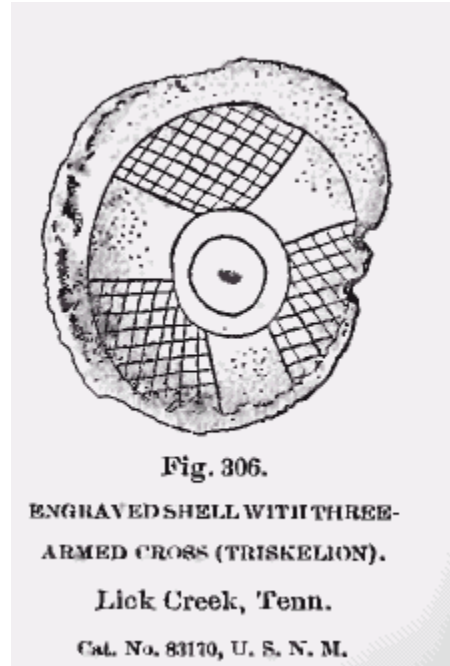
-
1. Second Ann. Rep. Bureau of Ethnology, 1880ö81, pp. 272, 273.
H. Mis. 90, pt. 2-----59

These questions may be partially answered in the section on the meanings given to the cross by the North American Indians (p. 933).

There is also introduced, as bearing on the question, another shell ornament (fig. 306), the style, design, and workmanship of which has such resemblance to the foregoing that if they had not been (as they were) found together we would be compelled to admit their identity or origin, yet the latter specimen has but three arms instead of four. This might take it out of the category of crosses as a symbol of any religion of which we have knowledge. Many of the art objects in shell heretofore cited were more or less closely associated; they came from the same neighborhood and were the results of the same excavations, conducted by the same excavators. In determining the culture status of their makers, they must be taken together.

When we consider the variety of the designs which were apparently without meaning except for ornamentation, like the circles, meanders, zigzags, chevrons, herringbones, ogees, frets, etc., and the representations of animals such as were used to decorate the pipes of the aborigines, not alone the bear, wolf, eagle, and others which might be a totem and represent a given clan, but other which, according to our knowledge and imagination, have never served for such a purpose, as the manatee, beaver, wildcat, heron, finch, sparrow, crow, raven, cormorant, duck, toucan, goose, turkey, buzzard,

cardinal, parroquet, conies, lizard; when we further consider that the cross, whether Greek, Latin, or Swastika form, is utterly unlike any known or possible totem of clan, insignia of ruler, or potent charm of priesthood; when we consider these things, why should we feel ourselves compelled to accept these signs as symbols of a hidden meaning, simply because religious sects in different parts of the world and at different epochs of history have chosen them or some of them to represent their peculiar religious ideas? This question covers much space in geography and in time, as well as on paper. It is not answered here, because no answer can be given which would be accepted as satisfactory, but it may serve as a track or indication along which students and thinkers might pursue their investigations.



The U. S. National Museum possesses a necklace consisting of three shell ornaments, interspersed at regular intervals with about fifty small porcelain beads (figs. 307). (1) It was obtained by Capt. George M. Whipple from the Indians of New Mexico. These shell ornaments are similar to objects described by Beverly in his work on the "History of Virginia," page 145, as "runtees" and "made of the conch shell; only the shape is flat as a cheese and drilled edgewise." It is to be remarked that on its face as well as on figs. 308 and 309 (1) appears a cross of the Greek form indicated by these peculiar indentations or drillings enclosed in a small circle. The specimen shown in fig. 308 is from an ancient grave in Upper Sandusky, Ohio, and that shown in fig. 309 form an Indian cemetery at Onondaga, N. Y. Similar specimens have been found in the same localities.

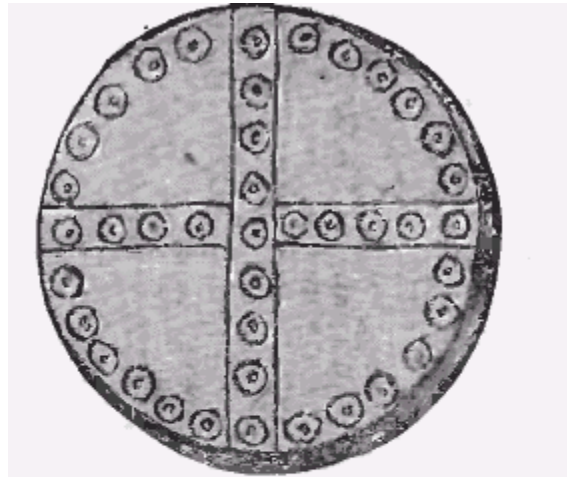


Fig. 308.

DRILLED AND ENGRAVED SHELL OR
 "RUNTEE."
 Dots and rings forming circle and
 Greek cross.
 Ohio.

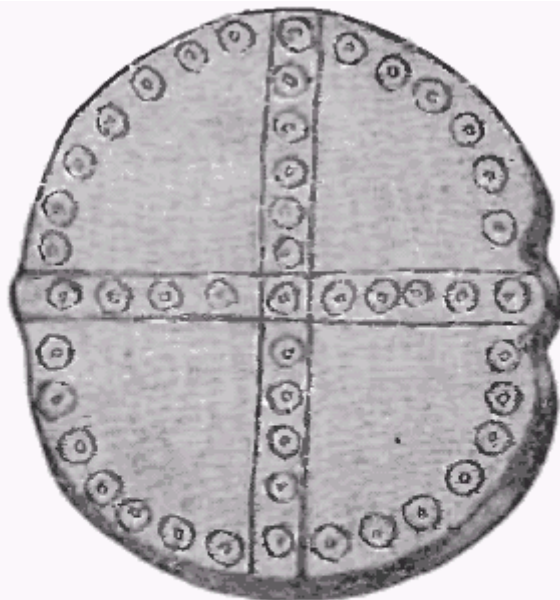


Fig. 309.

DRILLED AND ENGRAVED SHELL OR "RUNTEE."
 Dots and rings forming circle and Greek
 cross.
 New York.

The Cross On Pottery.

Fig. 310 shows a small globular cup of dark ware from the vicinity of Charleston, Mo.; height, 2 ½ inches; width, 3½ inches. It has four large nodes or projections, and between them, painted red, are four ornamental circles, the outside one of which is scalloped or rayed, while the inside one bears the figure of a Greek cross. The specimen shown in fig. 311 (Cat. No. 47197, U. S. N. M.) is a medium-sized decorated olla with scalloped margin, from new Mexico, collected by Colonel Stevenson. It has two crosses -- one Greek, the other Maltese --- both enclosed in circles and forming centers of an elaborate, fanciful, shield-like decoration. In fig. 312 (Cat. No. 39518, U. S. N. M.) is shown a Cochiti painted water vessel, same collection, showing a Maltese cross.

ENDNOTES:

1. Schoolcraft, "History of the Indian Tribes," III, pl. 25; Second Ann. Rep. Bureau of Ethnology, 1880-81, pl. 36

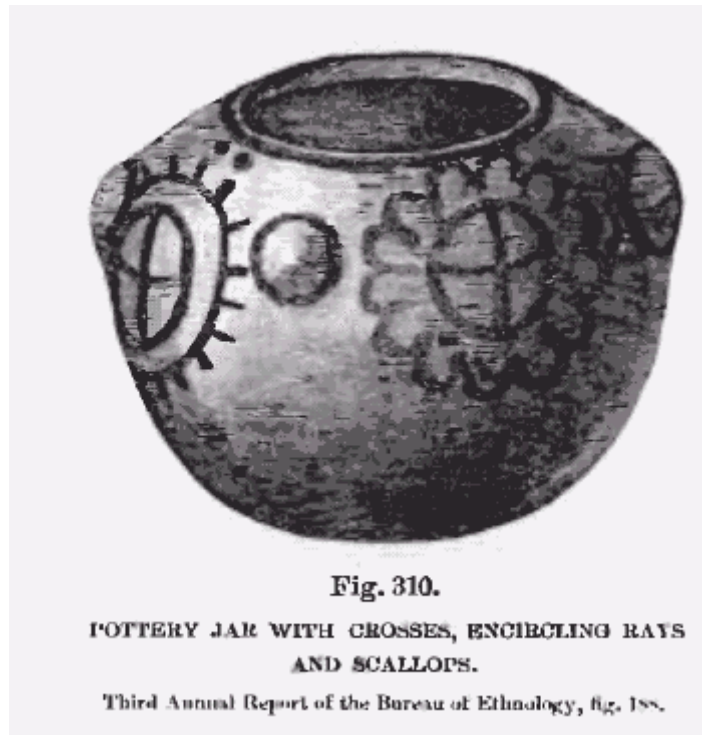


Fig. 310.

POTTERY JAR WITH CROSSES, ENCIRCLING RAYS
AND SCALLOPS.

Third Annual Report of the Bureau of Ethnology, fig. 188.



Fig. 311.

OLLA DECORATED WITH GREEK AND MALTESE CROSSES.

Second Annual Report of the Bureau of Ethnology, fig. 708.



Fig. 312.

POTTERY WATER VESSEL.

Maltese cross.

Second Annual Report of the Bureau of Ethnology, fig. 688.

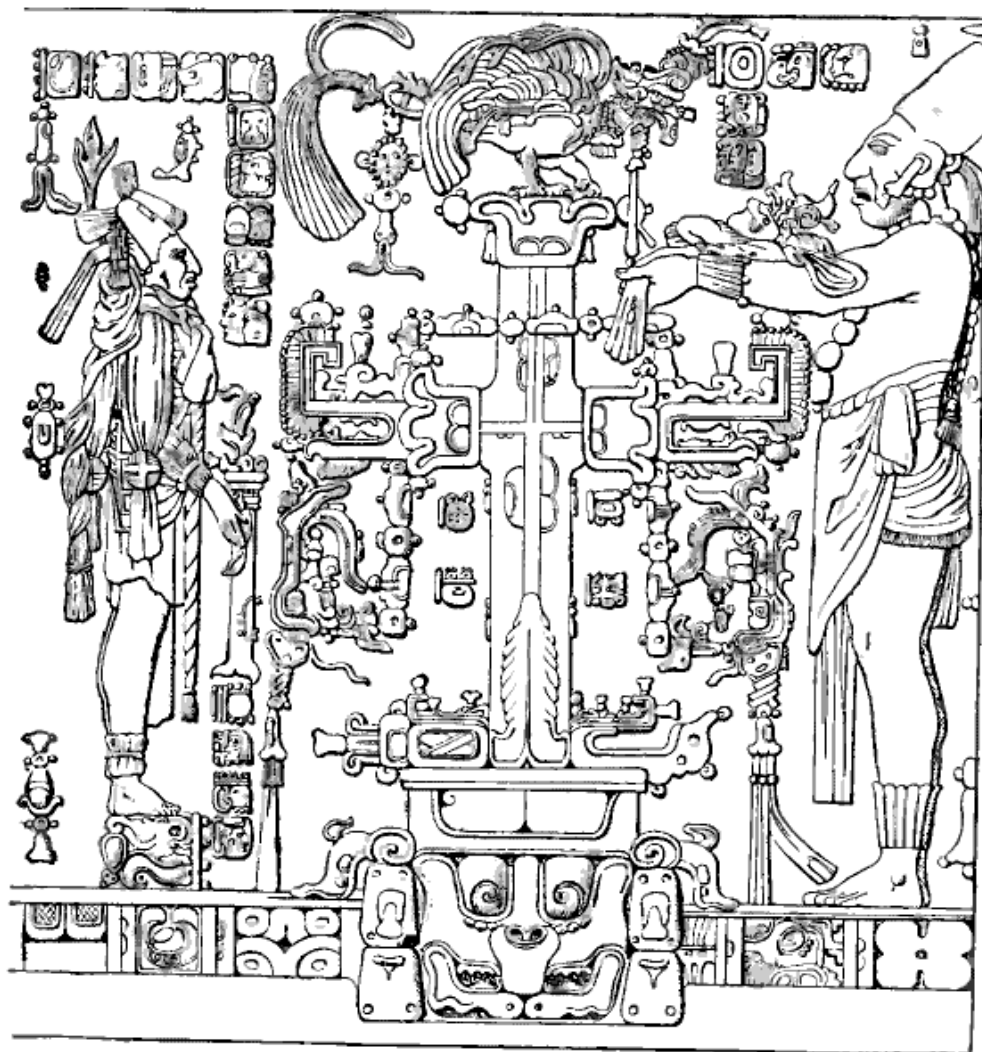


PLATE 20.

PALENQUE CROSS, FOLIATED.

Smithsonian Contributions to Knowledge, Vol. xxii, fig. 7.

Dozens of other specimens are in the collections of the U. S. National Museum which would serve to illustrate the extended and extensive use of the cross in great variety of forms, so that no argument as to either the meaning or the extent of the cross can be based on the supposition that these are the only specimens. Fig. 313 (Cat. No. 132975, U. S. N. M.) shows a vase form Mexico, about 8 inches high, of fine red ware, highly polished, with an elaborate decoration. Its interest here is the Maltese cross represented on each side, with a point and concentric circle, from the outside of which are projecting rays. This may be the symbol of the sun, and if so, is shown in connection with the cross. This style of cross, with or without the sun symbol, is found in great numbers in Mexico --- as, for example, the great cross, [pl. 20](#) from the temple at Palenque. (1)

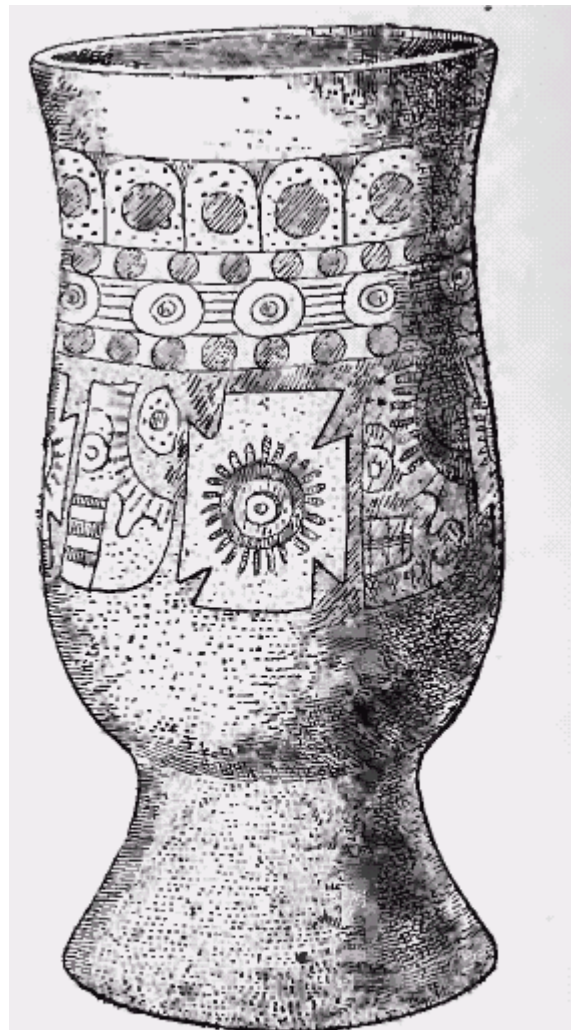


Fig. 313.

POTTERY VASE FINELY DECORATED IN
RED AND WHITE GLAZE.

Maltese cross with sun symbol (!).

Cat. No. 132975, U. S. N. M.

Symbolic Meanings Of the Cross.

It would be an excellent thing to dissect and analyze the Swastika material we have found; to generalize and deduce from it a possible theory as to the origin, spread, and meaning of the Swastika and its related forms, and endeavor, by examination of its associated works, to discover if these were religious symbols or charms or mere decorations; and, following this, determine if possible whether the spread of these objects, whatever their meaning, was the result of migration, contact, or communication. Where they the result of similar, but independent, operations of the human mind, or were they but duplicate inventions, the result of parallelism in human thought? This investigation must necessarily be theoretical and speculative. The most that the author proposes is to suggest probabilities and point the way for further investigation. He may theorize and speculate, but recognizes what many persons seem not able to do --- that speculation and theory are not to be substituted for cold facts. He may do no more than propound questions from which other men, by study, experience, philosophy, or psychology, may possibly evolve some general principle, or a theory pointing to a general principle, concerning the mode of extension and spread of culture among separate and independent peoples.

When the facts shall have been gathered, marshaled, arranged side by side, and each aggregation of facts shall have been weighed, *pro* and *con*, and its fair value given "without prejudice or preconceived opinion,": then will be time enough to announce the final conclusion, and even then not dogmatically, but tentatively and subject to future discoveries.

ENDNOTES:

1. Smithsonian Contributions to Knowledge, p. 33, pl. 14, fig. 5.



Fig. 314.
GREEK CROSS REPRESENTING
WINDS FROM CARDINAL
POINTS.
Dakota Indians.
Tenth Annual Report of the Bureau
of Ethnology, fig. 1255.

Throughout this paper the author has sought but little more than to prepare material on the Swastika which can be utilized by those who come after him in the determination of the difficult and abstruse problems presented.

It is rare in the study of archæology and, indeed, in any science, that a person is able to assert a negative and say what does not exist. The present investigations are rendered much more comprehensive by the appearance of the extensive and valuable work of Col. Garrick Mallery in the Tenth Annual Report of the Bureau of Ethnology, on the subject of "Picture Writing of the American Indians." It is a work of about 800 pages, with 1,300 illustrations, and is the result of many years of laborious study. It purports to be a history, more or less complete, of the picture writing, signs, symbols, totems, marks, and messages of the American Indian, whether pictographs or petroglyphs.

A large portion of his work is devoted to ideography, conventional signs, syllabaries and alphabets, homorophs and symmorophs, and and their respective means of interpretation. Among these he deals, not specifically with the Swastika, but in general terms with the cross. Therefore, by looking at Colonel Mallery's work upon this chapter (p. 724), one is able to say negatively what has not been found.

Apropos of the meanings of the cross among the North American Indians Count Goblet d'Alviella says: (1)

It is nevertheless incontestable that the pre-Columbian cross of America is a "*rose des vents*," representing the four directions whence comes the rain, or the cardinal points of the compass, etc., etc.

Colonel Mallery's volume shows that it meant many other things as well.

The four winds. --- The Greek cross is the form found by Colonel Mallery to be most common among the North American aborigines, possibly because it is the simplest. In this the four arms are equal in length, the sign placed upright so that it stands on one foot and not on two, as does the St. Andrew's cross. The Greek cross (fig. 314) represents, among the Dakotas, the four winds issuing out of the four caverns in which souls of men existed before the incarnation of the human body. All the medicine men --- that is, conjurers and magicians --- recollect their previous dreamy life in these places, and the instructions then received from the gods, demons, and sages; they recollect and describe their preexistent life, but only dream and speculate as to the future life beyond the grave. The top of the cross is the cold, all-conquering giant, the North Wind, most powerful of all. It is worn on the body nearest the head, the seat of intelligence and conquering devices. The left arm covers the hear; it is the East Wind, coming from the seat of life and love. The foot is the melting, burning South Wind, indicating, as it is worn, the seat of fiery passion. The right arm is the gentle West Wind, blowing from the spirit land, covering the lungs, from which the breath at last goes out gently, but into unknown night. The center of the cross is the earth and man, moved by conflicting influences of gods and winds.

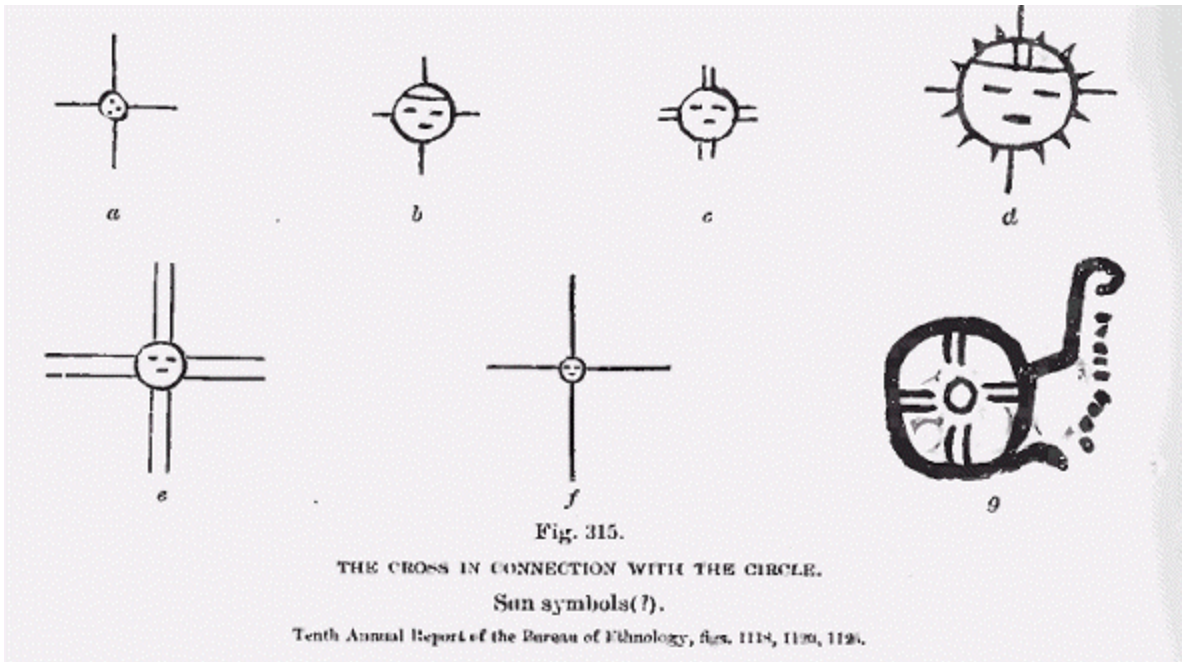
Rev. John McLain, in his work on the "Blackfoot Sun-dance," says:

On the sacred pole of the sun lodge of the Blood Indian is a bundle of small brushwood taken from the birch tree, which is placed in the form of a cross. This was an ancient symbol evidently referring to the four winds.

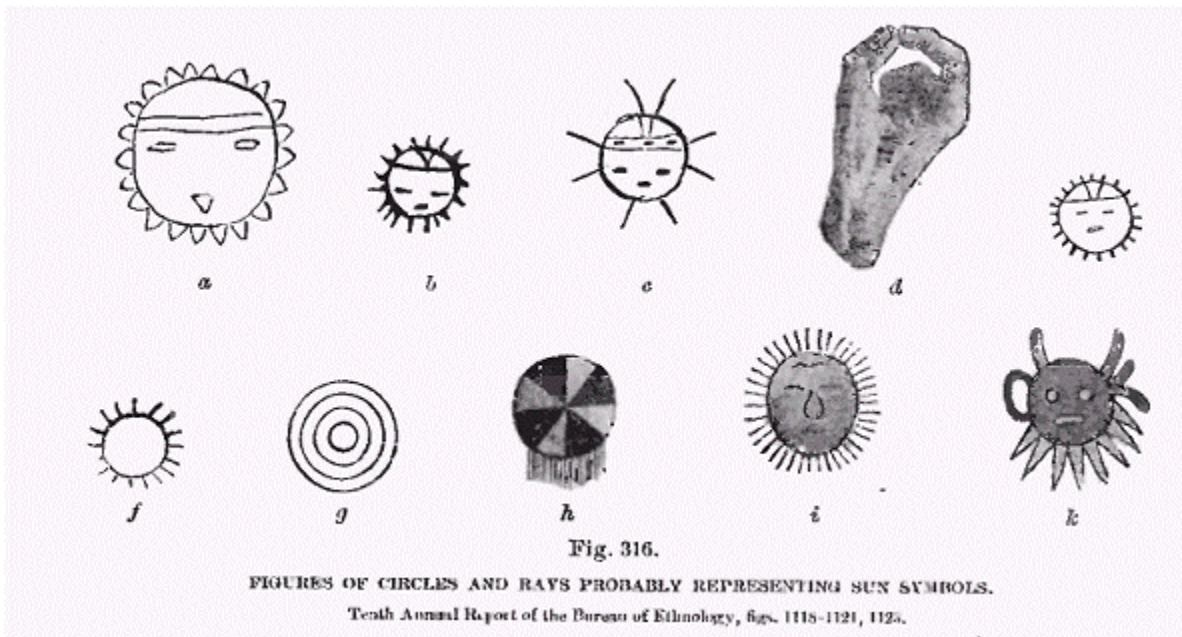
ENDNOTES:

1. "La Migration des Symboles," p. 18.

Sun and star symbols. --- Great speculation has been made, both in Europe and America, over the relation between the Swastika and the sun, because the two signs have been associated by primitive peoples. Colonel Mallery gives the Indian signs of the sun, stars, and light. (1) These have been segregated, and it will be seen that the cross and circle are used indiscriminately for one and the other, and the fact of the two being found associated is no evidence of relationship in religious ideas (figs. 315, 316, 317, 318 and 319).



Dwellings. ---Among the Hidatsa, the cross and the circle represent neither the sun nor any religious ideas, but merely lodges, houses, or dwellings. The crosses in [fig. 319](#) represent Dakota lodges; the small circles signify earth lodges, the points representing the supporting poles. Buildings erected by civilized people were represented by small rectangular figures, while the circles with dots in a square represent earth lodges, the home of the Hidatsa.



Dragon fly (Susbeca). --- Among some of the Indian tribes, the Dakotas among others, the Latin cross is found, i.e., upright with three members of equal length and the fourth, the foot, much longer. The use of this symbol antedates the discovery of America, and is carried back in tradition and myth. This sign signifies the mosquito hawk or the dragon fly (fig. 320). It is called in that language the "Susbeca," and is a supernatural being gifted with speech, warning man of danger, approaching his ear silently and at right angles, saying, "Tci," "Tei," "Tci," an interjection equivalent to "Look out!" "You are surely going to destruction!" "Look out!" "Tci," "tci," "tei!" The adoption of the dragon fly as a mysterious and supernatural being is on account of its sudden appearance in numbers. In the still of the evening, when the shades of darkness come, then is heard in the meadows a sound as of crickets or frogs, but indistinct and prolonged; on the morrow the Susbeca will be hovering over it. It is the sound of their coming, but whence no one knows. The cross not only represents the shape of the insect, but also the angle of its approach. It is variously drawn, but usually as in fig. 320 *a* or *b*, and, in painting or embroidery, *c*, and sometimes *d*.

Fig. 321 is described in Keam's MS. as follows:

This is a conventional design of dragon flies, and is often found among rock etchings throughout the plateau [Arizona]. the dragon flies have always been held in great veneration by the Mokis and their ancestors, as they have been often sent by Oman to reopen springs which Muingwa had destroyed and to confer other benefits upon the people.

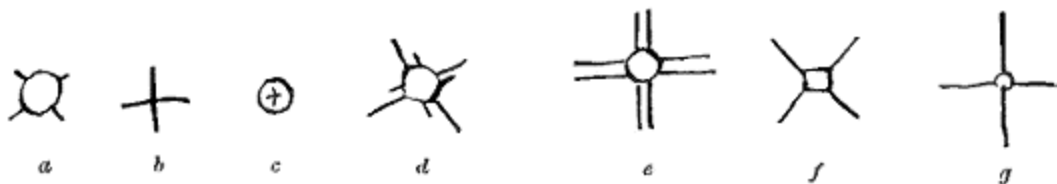


Fig. 317.

FIGURES OF CROSSES AND CIRCLES REPRESENTING STAR SYMBOLS.

Oakley Springs, Ariz.

Tenth Annual Report of the Bureau of Ethnology, fig. 1199.

This form of the figure, with little vertical lines added to the transverse lines, connects the Ratolatei with the Ho-bo-bo emblems. The youth who was sacrificed and translated by Ho-bo-bo reappeared a long time afterwards, during a season of great drought, in the form of a gigantic dragon fly, who led the rain clouds over the lands of Ho-pi-tu, bringing plenteous rains.



Fig. 318.

STAR SYMBOL.
Circle and rays
without cross.
Oakley Springs,
Ariz.

Tenth Annual Report
of the Bureau of Eth-
nology, fig. 1129.

Midé or Shamans. --- Colonel Mallery (or Dr. Hoffman) tells us (p. 726) that among the Ojibways of northern Minnesota the cross is one of the sacred symbols of the Society of Midé or Shamans and has special reference to the fourth degree. The building in which the initiation is carried on has its opening toward the four cardinal points. The cross is made of saplings, the upright poles approaching the height of four to six feet, the transverse arms being somewhat shorter, each being of the same length as the top; the upper parts are painted white or besmeared with white clay, over which are spread small spots of red, the latter suggesting the sacred shell of Midé, the symbol of the order. The lower arm of the pole is square, the side toward the east being painted white to denote the source of light and warmth; the face on the south is green, denoting the source of the thunder bird which brings the rains and vegetation; the surface toward the west is covered with vermilion, relating to the land of the setting sun, the abode of the dead; the north is painted black, as the direction from which comes affliction, cold, and hunger.

ENDNOTES:

1. Tenth Ann. Rep. Bureau of Ethnology, 1888-89, figs. 1118-1129.



Fig. 319.

FIGURES OF CROSSES, CIRCLES, AND SQUARES
REPRESENTING LODGES

Dakota Indians.

Tenth Annual Report of the Bureau of Ethnology, fig. 1963.

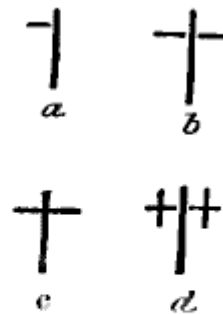


Fig. 320.

LATIN CROSSES REPRESENT-
ING THE DRAGON FLY.

Dakota Indians.

Flocks of birds. --- Groups of small crosses on the sides of Eskimo bow drills represent flocks of birds (Cat. Nos. 45020 and 44211, U. S. N. M.). They are reproduced in fig. 322. Colonel Mallery's fig. 28, page 67, represents a cross copied from the Najowe Valley group of colored pictographs, 40 miles west of Santa Barbara, Santa Barbara County, Cal.

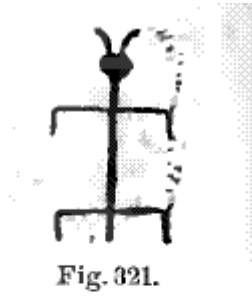


Fig. 321.
DOUBLE CROSS
OF SIX ARMS
REPRESENTING
THE DRAGON
FLY.

Moki Indians,
Arizona.

Tenth Annual Report of the Bureau of Ethnology, fig. 1165.

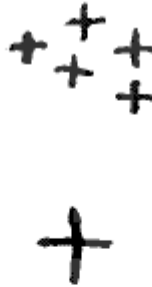


Fig. 322

FIGURES OF CROSSES
AS USED BY THE
ESKIMO TO REPRESENT
FLOCKS OF
BIRDS.

Tenth Annual Report of the Bureau of Ethnology, fig. 1223.

Cat. Nos. 44211 and 45020,
U. S. N. M.

The cross measured 20 inches in length, the interior being painted black while the border is of dark red tint. This design, as well as others in close connection, is painted on the walls of a shallow cave or rock shelter in the limestone formation. Fourteen miles west of Santa Barbara, on the summit of the Santa Ynez Mountains, is a cavern having a large opening west and north, in which are crosses of the Greek type, the interior portion being painted a dull earthy red, while the outside line is a faded-black tint. The cross measures nearly a foot in extent. At the Tulare Indian Agency, Cal. is an immense boulder of granite. It has been split, and one of the lower quarters has been moved sufficiently to leave a passageway six feet wide and nearly ten feet high. The interior walls are well covered with large painted figures, while upon the ceilings are numerous forms of animals, birds, and insects.

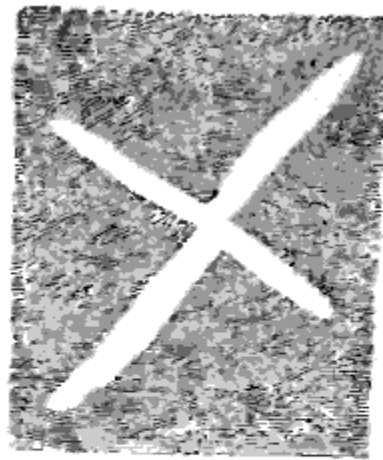


Fig. 323.

PETROGLYPH FROM TULARE VALLEY,
CALIFORNIA.

Large white Greek cross.

Tenth Annual Report of the Bureau of Ethnology, fig. 1729.

Among this latter group is a white cross about 18 inches in length (fig. 323), presenting a unique appearance, for the reason that it is the only petroglyph in that region to which the white coloring matter has been applied.

An interesting example of rock sculpturing in groups is in Owens Valley, south of Benton, Cal. Among them are various forms of crosses, and circles containing crosses of simple and complex types. The most interesting in this connection are the groups in fig. 324, *a* and *b*. The larger one, *a*, occurs upon a large boulder of trachite 16 miles south of Benton, at the "Chalk grave." The circle is a depression about one inch in depth, the cross being in high relief. The small cross *b*, found three miles north from this is almost identical, the arms of the cross, however, extending to the rim of the circle. In this locality occurs also the cross, *c*, same figure, and some examples having more than two cross arms.

Human forms. --- Other simple crosses represent the human form. Some of these are engraved or cut on the rocks of Owens Valley and are similar to those above described (fig. 324), but they have been eroded, so that beyond the mere cross they show slight relation to the human body (fig. 324, *d, e, f*). Col. James Stevenson, describing the Hasjelti ceremony of the Navajoes, (1) shows the form of a man drawn in the sand (fig. 325). Describing the character shown in fig. 326, Keam says: "The figure represents a woman. The breath is displayed in the interior." (2)

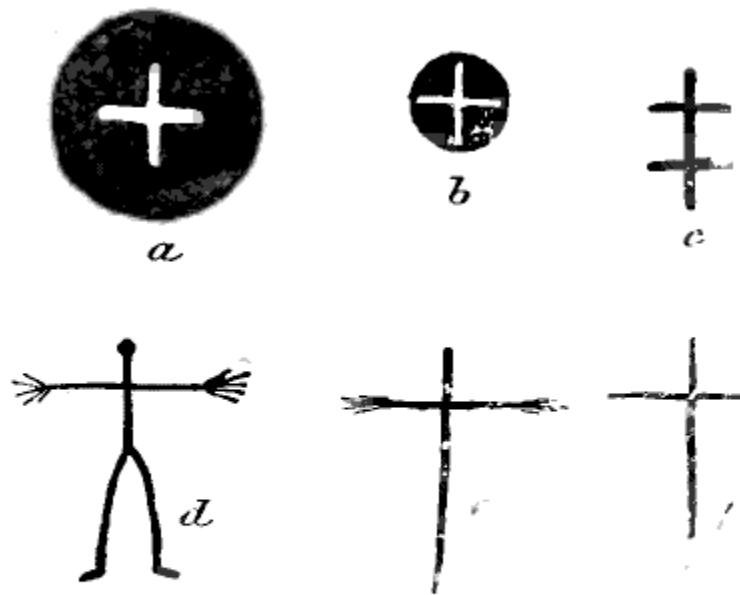


Fig. 324.

PETROGLYPHS FROM OWENS VALLEY, CALIFORNIA.

(*a, b*) Greek crosses, (*c*) double Latin cross, (*d-f*) Latin crosses representing human figures.

Tenth Annual Report of the Bureau of Ethnology, fig. 1330.

Maidenhood. --- Concerning [fig. 327](#) Keam, in his manuscript, says the Maltese cross was the emblem of a virgin, and is still so recognized by the Moki. It is a conventional development of the common emblem of maidenhood, wherein the maidens wear their hair arranged as in a disk three or four inches in diameter on each side of the head ([fig. 327 b](#)).

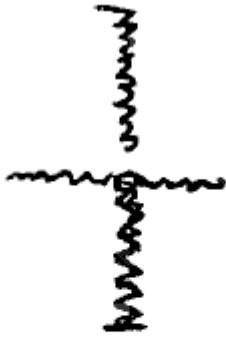


Fig. 325.
CROSS IN ZIGZAG
LINES REPRESENT-
ING THE HUMAN
FORM.
Navajo Indians.

this discoidal arrangement of the hair is typical of the emblem of fructification worn by the virgin in the Muingwa festival. Sometimes the hair, instead of being worn in the complete discoidal form, is dressed upon two curving twigs, and presents the form of two semicircles upon each side of the head. The partition of these is sometimes horizontal, sometimes vertical. The combination of these styles ([fig. 327a and b](#)) present the forms from which the Maltese cross was conventionalized. (3)

Shaman's spirit. --- Among the Kiatéxamut and Inuit tribes, a cross placed on the head, as in [fig. 328](#), signified a shaman's evil spirit of demon. This is an imaginary being under the control of the shaman to execute his wishes. (4)

Divers significations. --- The figure of the cross among the North American Indians, says Colonel Mallery, (5) has many differing significations. It appears "as the tribal sign for Cheyenne" (p. 383); "as Dakota lodges" (p. 582); "as a symbol for trade or exchange" (p. 613); "as a conventional sign for prisoners" (p. 227); "for personal exploits while elsewhere it is used in simple enumeration: (p. 348). Although this device is used for a variety of meanings when it is employed ceremonially or in elaborate pictographs of the Indians both of North and South America, it represents the four winds. This view long ago was suggested as being the signification of many Mexican crosses.

ENDNOTES:

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1. Eighth Ann. Rep. Bureau of Ethnology, p. 283.
 2. Tenth Ann. Rep. Bureau of Ethnology, 1888-89, fig. 1165.
 3. Ibid., fig. 1232.
 4. Ibid., fig. 1231.
 5. Ibid., fig. 729.



Fig. 326.
MALTESE CROSS (?)
REPRESENTING A
WOMAN.

The figure in the
center is in-
tended to indi-
cate the breath.



a



b

Fig. 327.

MALTESE AND SAINT ANDREW'S
CROSSES.

Emblems of maidenhood.
Moki Indians.



Fig. 328.

CROSS WITH
BIFURCATED
FOOT.

Used by the
Innuits to
represent a
shaman or
evil spirit.



Fig. 329.

ST. ANDREW'S
CROSSES, USED
AS A SYMBOL
FOR WOOD.

Tenth Annual Re-
port of the Bureau
of Ethnology, fig.
1231.

And it is sustained by Prof. Cyrus Thomas in his "Notes on Mayan Mexican Manuscript," (1) where strong confirmatory evidence is produced by the arms of the crosses having the appearance of conventionalized wings similar to some representations of the thunder bird of the northern tribes; yet the same author, in his paper on the study of the "Troano Manuscript," (2) gives fig. 329 as a symbol for wood, thus further showing the manifold concepts attached to the general form of the cross. Bandelier thinks that the cross so frequently used by the aborigines of Mexico and Central America were merely ornaments and not objects of worship, while the so-called crucifixes, like that on the Palenque tablet, were only the symbol of the "new fire," or the close of the period of fifty-two years.

He believes them to be representations of the fire drills more or less ornamented. Zamacois (3) says that the cross was used in the religion of various tribes of the peninsula of Yucatan, and that it represented the god of rain.

It is a favorite theory with Major Powell, Director of the Bureau of Ethnology, that the cross was an original invention of the North American Indian, possibly a sign common to all savages; that it represented, first, the four cardinal points, north, south, east, and west; and afterwards by accretion, seven points, north, south, east, west, zenith, nadir, and here.

Capt. John G. Bourke, in his paper on the "Medicine Men of the Apache" (4) discourses on their symbolism of the cross. He says it is related to the cardinal points, to the four winds, and is painted by warriors on their moccasins when going through a strange district to keep them from getting on a wrong trail. He notes how he saw, in October, 1884, a procession of Apache men and women bearing two crosses, 4 feet 10 inches long, appropriately decorated "in honor of Guzanutli to induce her to send rain."

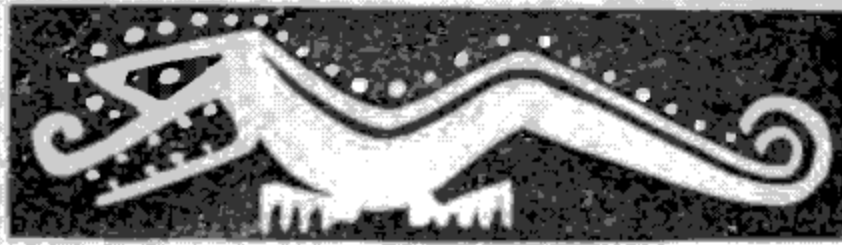


Fig. 330.

GRAPHIC DELINEATION OF ALLIGATOR.

From a vase of the lost color group.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology, fig. 257.

Dr. Brinton (5) tells of the rain maker of the Lenni Lenape who first drew on the earth the figure of a cross. Captain Bourke quotes from Father le Clerq (6) as to the veneration in which the cross was held by the Gaspesian Indians, also from Herrera to the same effect. Professor Holmes (7) makes some pertinent observations with regard to the meanings of the cross given by the American Indians:

Some very ingenious theories have been elaborated in attempting to account for the cross among American symbols. Brinton believes that the great importance attached to the points of the compass --- the four quarters of the heavens --- by savage peoples, has given rise to the sign of the cross. With others, the cross is a phallic symbol derived, by some obscure process of evolution, from the veneration accorded to the procreative principle in nature. It is also frequently associated with sun worship, and is recognized as a symbol of the sun --- the four arms being remaining rays after a gradual process of elimination. Whatever is finally determined in reference to the origin of the cross as a religious symbol in American will probably result from exhaustive study of the history, language, and art of the ancient peoples, combined with a thorough knowledge of the religious conceptions of modern tribes, and when these sources of information are all exhausted it is probably that the writer who asserts more than a probability will overreach his proofs.

* * * A study of the designs associated with the cross in these gorgets [figs. 302, 303 and 304] is instructive, but does not lead to any definite result; in one case the cross is inscribed on the back of a great spider [figs. 275, 276, 277 and 278]; in another it is surrounded by a rectangular framework of lines, looped at the corners and guarded by four mysterious birds [figs. 263, 264, 265, and 266], while in others it is without attendant characters, but the workmanship is purely aboriginal. I have not seen a single example of engraving upon the shell that suggested a foreign hand, or a design, with the exception of this one [a cross], that could claim a European derivation. * * * Such delineations of the cross as we find embodied in ancient aboriginal art, represent only the final states of its evolutions, and it is not to be expected that its origin can be traced through them.



Fig. 331.

GRAPHIC DELINEATION OF ALLIGATOR.
From a vaso of the lost color group.
Chiriqui.

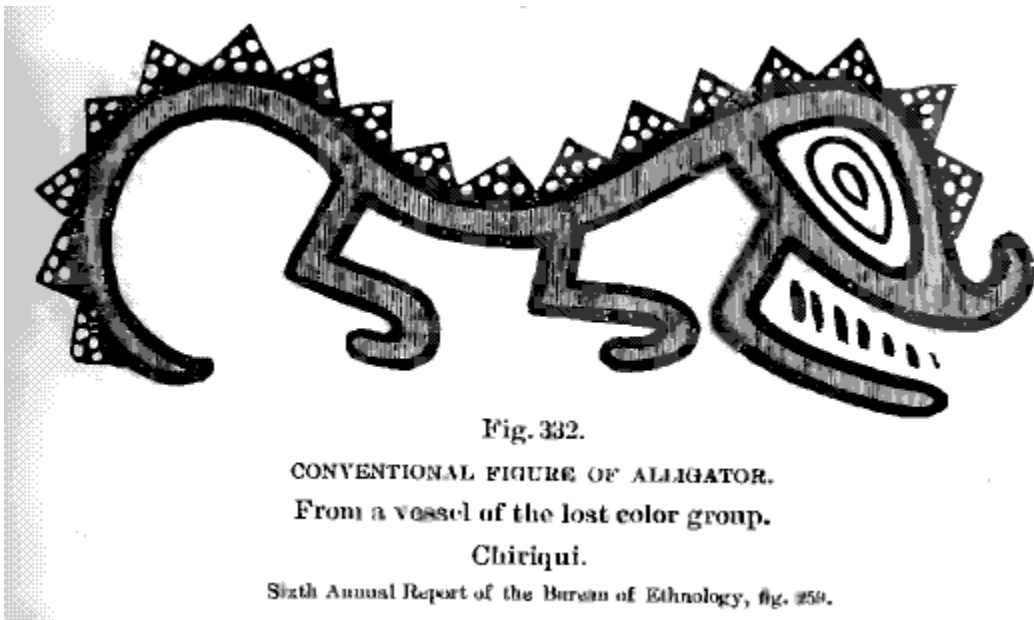
Sixth Annual Report of the Bureau of Ethnology, fig. 358.

Continuing in his "Ancient in Chiriqui," (8) presenting his "Series showing stages in the simplification of animal characters," and "derivation of the alligator," Professor Holmes elaborates the theory how the alligator was the original, and out of it, by evolution, grew the cross. His language and accompanying figures are quoted:

Of all the animal forms utilized by the Chiriquians, the alligator is the best suited to the purpose of this study, as it is presented most frequently and in the most varied forms. In figs. 257 and 258 [figs. 330 and 331 in the present paper] I reproduced drawings from the outer surface of a tripod bowl of the lost color group. Simple and formal as these figures are, the characteristic features of the creature --- the sinuous body, the strong jaws, the upturned snout, the feet, and the scales --- are forcibly expressed. It is not to be assumed that these examples represent the best delineative skill of the Chiriquian artists. The native painter must have executed very much superior work upon the more usual delineating surfaces, such as bark and skins.

ENDNOTES:

1. Second Ann. Rep. Bureau of Ethnology, p. 61.
2. Contrib. North American Ethnology, V, p. 144.
3. "Historia de Mexico," I, p. 238.
4. Ninth Ann. Rep. Bureau of Ethnology, 1887-88. p. 479.
5. "Myths of the New World," p. 96.
6. "Gaspesi," London, 1691, pp. 170, 172, 199.
7. Second Ann. Rep. Bureau of Ethnology, 1880-81, p. 270.
8. Sixth Ann. Rep. Bureau of Ethnology, p. 173 et seq., figs. 257-278.



The examples here shown have been already experienced decided changes through the constraints of the ceramic art, but are the most graphic delineations preserved to us. They are free-hand products, executed by mere decorators, perhaps by women, who were servile copyists of the form employed by those skilled in sacred art.



Fig. 333.

CONVENTIONAL FIGURE OF ALLIGATOR
CROWDED INTO A SMALL GEOMETRICAL
FIGURE.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology, fig.
265.

A third illustration from the same group of ware, given in fig. 259 [fig. 332 of the present paper] shows, in some respects, a higher degree of convention. * * *

I shall now call attention to some important individualized or well-defined agencies of convention. First, and most potent, may be mentioned the enforced limits of the spaces to be decorated, which spaces take shape independently of the subject to be inserted. When the figures must occupy a narrow zone, they are elongated; when they must occupy a square, they are restricted longitudinally, and when they occupy a circle, they are necessarily coiled up. Fig. 265 [fig. 333 of the present paper] illustrated the effect produced by crowding the oblong figure into a short rectangular space. The head is turned back over the body and the tail is thrown down along the side of the space. In fig. 266 [fig. 334 of the present paper] the figure occupies a circle and is, in consequence, closely coiled up, giving the effect of a serpent rather than an alligator. * * *



Fig. 334.

CONVENTIONAL FIGURE
OF ALLIGATOR
CROWDED INTO A CIR-
CLE.

Chiriqui.

Sixth Annual Report of the
Bureau of Ethnology, fig.
266.

I present five series of figures designed to illustrate the stages through which life forms pass in descending from the realistic to highly specialized conventional shapes. In the first series (fig. 277) [fig. 335 of the present paper] we begin with *a*, a meager but graphic sketch of the alligator; the second figure, *b*, is hardly less characteristic, but is much simplified; in the third, *c*, we have still three leading features of the creature --- the body line, the spots, and the stroke at the back of the head; and in the fourth, *d*, nothing remains but a compound yoke-like curve, standing for the body of the creature, and a single dot.

The figures of the second series (fig. 278) [fig. 336 of the present paper] are nearly all painted upon low, round nodes placed about the body of the alligator vases, and hence are enclosed in circles. The animal figure in the first example is coiled up like a serpent [fig. 334], but still preserves some of the well-known characters of the alligator. In the second

example 'fig. 336b] we have a double hook near the center of the space which takes the place of the body, but the dotted triangles are placed separately against the encircling line. In the next figure the body symbol is omitted and the three triangles remain to represent the animal. In the fourth there are four triangles, and the body device being restored in red takes the form of a cross. In the fifth two of the

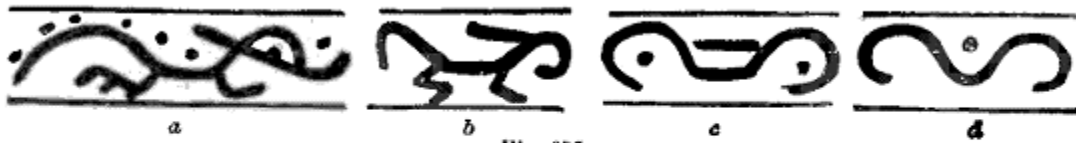


Fig. 335.

SERIES OF FIGURES OF ALLIGATORS SHOWING STAGES OF SIMPLIFICATION.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology, fig. 271.

enclosing triangles are omitted and the idea is preserved by the simple dots. In the sixth the dots are placed within the bars of the cross, the triangles becoming mere interspaces, and in the seventh the dots form a line between the two encircling lines. This series could be filled up by other examples, thus showing by what infinitesimal steps the transformations take place. * * *

We learn by the series of steps illustrated in the annexed cuts that the alligator radical, under peculiar restraints and influence, assumes conventional forms that merge imperceptibly into these classic devices.

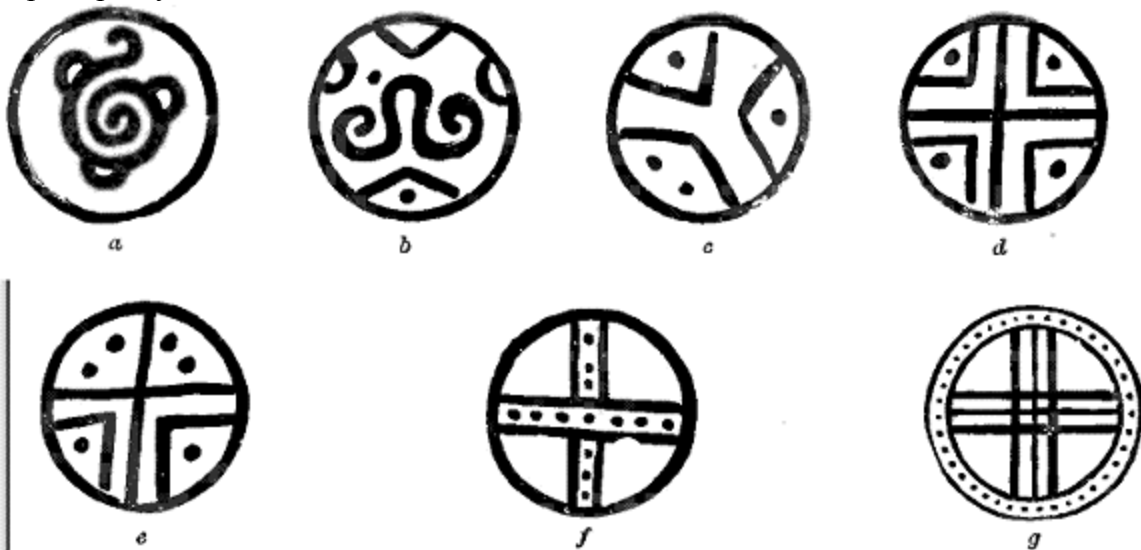


Fig. 336.

SERIES SHOWING STAGES IN THE SIMPLIFICATION OF ANIMAL CHARACTERS, BEGINNING WITH THE ALLIGATOR AND ENDING WITH THE GREEK CROSS.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology, fig. 278.

Professor Holmes's theory of the evolution of the cross from the alligator and its location in Chiriqui is opposed to that of Professor Goodyear, who, in his "Grammar of the Lotus," ascribes the origin of the cross to the lotus and locates it in Egypt. I file what in law would be an "interpleader" --- I admit my want of knowledge of the subject under discussion, and leave the question to these gentlemen.

Introduction Of the Cross Into America.

Professor Holmes is, in the judgment of the author, correct when he insists upon the aboriginal character of the cross in America. We all understand how it is stated that the Spanish missionaries sought to deny this and to connect the apparition of St. Thomas with the appearance of the cross. Professor Holmes (1) says:

The first explorers were accompanied by Christian zealots who spared no effort to root out the native superstition and introduce a foreign religion of which the cross was the all-important symbol. This emblem was generally accepted by the savages as the only tangible feature of a new system of belief that was filled with subtleties too profound for their comprehension. As a result, the cross was at once introduced into the regalia of the natives, at first probably in a European form and material, attached to a string of beads in precisely the manner they had been accustomed to suspend their own trinkets and gorgets; but soon, no doubt, delineated or carved by their own hands upon tablets of stone and copper and shell in the place of their own peculiar conceptions.

There is sufficient evidence, and to spare, of the aboriginal use of the cross in some of its forms, without resorting to the uncertain and forced explanation of its introduction by Christian missionaries. It is possible that the priests and explorers were, like Colonel Mallery's missionary, mistaken as to the interpretation given to the cross by the Indians. Dr. Hoffman, in his paper on the "Midéwiwin or Grand Medicine Society of the Ojibwa," (2) states the myth of the re-creation of the world "as thrown together in a mangled form by Hennepin." Dr. Hoffman observes:

It is evident that the narrator has sufficiently distorted the traditions to make them conform as much as practicable to the Biblical story of the birth of Christ.

And on the same page he quotes from Pêre Marquette, who says:

"I was very glad to see a great cross set up in the middle of the village, adorned with several white skins, red girdles, bows, and arrows, which that good people offered to the Great Manitou to return him their thanks for the care he had taken of them during the winter, and that he had granted them a prosperous hunting."

Marquette [comments Dr. Hoffman] was, without doubt, ignorant of the fact that the cross is the sacred post, and the symbol of the fourth degree of the Midéwiwin, as is fully explained in connection with that grade of society. The erroneous conclusion that the cross was erected as an evidence of the adoption of Christianity and, possibly as a

compliment to the visitor was a natural one on the part of the priest, but this same symbol of the Midé society had probably been erected and bedecked with barbaric emblems and weapons months before anything was known of him.

Most aboriginal objects bearing crosses are from localities along the Ohio River and through Kentucky and Tennessee, a locality which the early Christian missionaries never visited, and where the cross of Christ was rarely, if ever, displayed until after that territory became part of the United States. Per contra, the localities among the Indians in which the early missionaries most conducted their labors --- that is to say, along the Great Lakes and throughout northern Illinois --- produce the fewest number of aboriginal crosses. This was the country explored by Fathers Marquette, LaSalle, and Hennepin, and it was the scene of most of the Catholic missionary labors. Professor Holmes seems to have recognized this fact, for he says: (3)

The cross was undoubtedly used as a symbol by the prehistoric nations of the South, and, consequently, that it was probably also known in the North. A great majority of the relics associated with it in the ancient mounds and burial places are undoubtedly aboriginal. In the case of the shell gorgets, the tablets themselves belong to an American type, and are highly characteristic of the art of the Mississippi Valley. A majority of the designs engraved upon them are also characteristic of the same district.

The author agrees heartily with Professor Holmes's argument in this matter, and his conclusion, when he says of these objects (p. 270):

The workmanship is purely aboriginal. I have not seen a single example of engraving upon shell that suggested a foreign hand or a design, with the exception of one (cross), that could claim a European derivation.

There have been numerous European or Catholic crosses, as well as many other objects of European manufacture or objects of civilized types, found among the Indians. There have been silver crosses found with images of the Virgin thereon, with Latin inscriptions, or of roman letters; there have been glass beads, iron arrowheads, and divers other objects found in Indian graves which bore indubitable evidence of contact with the whites, and no one with any archaeological experience need be deceived into the belief that these were aboriginal or pre-Columbian manufacture. As a general rule, the line of demarkation between objects of Indian manufacture and those made by the whites is definite, and no practiced eye will mistake the one for the other. There may be exceptions, as where the Indian has lived with the whites or a white man with the Indians, or where an object is made with intent to deceive. In such cases one may have more trouble in determining the origin of the object.

There were many Indians who died and were buried within a century past, whose graves might contain many objects of white man's work. Black Hawk and Red Jacket are examples, and, possibly, King Philip. Indian graves have been opened in New England and New York containing the gun or firelock of the occupant of the grave buried with him, and that this was evidence of European contact there can be no doubt. So there have been hundreds, possibly thousands of Indians buried since the Columbian discovery

down to within the last decade whose graves contain white man's tools or implements. But no person with any archæological experience need be deceived by these things. The theory that the Latin or Greek crosses or Swastikas shown on these gorgets, disks, and pottery furnish evidence of contact by the aborigines with Europeans in post-Columbian times is without foundation and inadmissible.

ENDNOTES:

1. Second Ann. Rep. Bureau of Ethnology, p. 269.
2. Seventh Ann. Rep. Bureau of Ethnology, p. 155.
3. Second Ann. Rep. Bureau of Ethnology, p. 269.
H. Mis. 90, pt. 2-----60

Decorative Forms Not Of the Cross, But Allied To the Swastika.

Color Stamps From Mexico and Venezuela.

The aborigines of Mexico and Central and South America employed terra-cotta color



stamps, which, being made into the proper pattern in the soft clay, were burned hard; then, being first coated with color, the stamp was pressed upon the object to be decorated, and so transferred its color, as in the mechanical operation of printing, thus giving the intended decoration. Patterns of these stamps are inserted in this paper in connection with the Swastika because of the resemblance --- not in form, but in style. They are of geometric form, crosses, dots, circles (concentric and otherwise), lozenges, chevrons, fret, and labyrinth

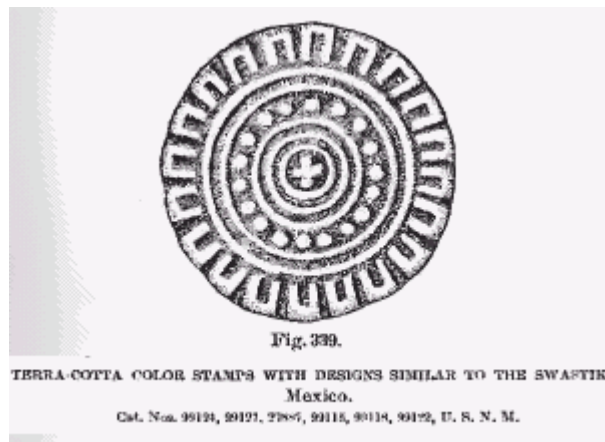
or meander. The style of this decoration lends itself easily to the Swastika; and yet, with the variety of patterns contained in the series of stamps belonging to the U. S. National Museum, shown in figs. 337, 338, 339, 340, 341 and 342, no Swastika appears; nor in the similar stamps belonging to other collections, notably that of Mr. A. E. Douglass, in the Metropolitan Museum of Natural



History, Central Park, New York, are any Swastikas shown. Of the foregoing figures, all are from Tlaltelolco, Mexico (Blake collection), except fig. 339, which is from the Valley of Mexico, and was received from the Museo Nacional of Mexico.

Marciano says: (1)

The present Pinroas of Venezuela are in the habit of painting their bodies by a process different from that of the North American Indian. They make stamps of wood, which, being colored (as types are with ink), they apply to their bodies. Fig. 982 shows examples of these stamps. [See [fig. 343](#) of the present paper.] The designs are substantially the same as some petroglyphs.



They either copied the models they found carved on the rocks by peoples who preceded them, or they knew the meaning and preserved the tradition. The former is the only tenable hypothesis. Painting to the Piaroas both ornamentation and necessity. It serves, not only as a garment to protect them against insects, but become a fancy costume to grace their feasts and meetings.

These designs are not presented as Swastikas nor of any evolution or derivation form one. They show a style common enough to Central and South America, to the Antilles and the Canary Islands, (2) which might easily produce a Swastika. The aboriginal designer of these might, if we depend upon the theory of psychological similarity of culture among all peoples, at this next attempt make a Swastika. Yet, with the hundreds of similar patterns made during the centuries of aboriginal occupation and extending throughout the countries named, none of these seem ever to have produced a Swastika.

ENDNOTES:

1. Mem. Soc. d'Anthrop., Paris, 1890, p. 200.

2. De Quatrefages, "Histoire Générale des Races Humaines," Introduction, p. 239, figs. 185-191, 193-194.



Fig. 340.

TERRA-COTTA COLOR STAMPS WITH DESIGNS SIMILAR TO THE SWASTIKA.
Mexico.

Cat. Nos. 99124, 99127, 77857, 99118, 99119, 99122, U. S. N. M.



Fig. 341.

TERRA-COTTA COLOR STAMPS WITH DESIGNS SIMILAR TO THE SWASTIKA.
Mexico.

Cat. Nos. 99124, 99127, 77857, 99118, 99119, 99122, U. S. N. M.



V. Significance Of the Swastika.

The origin and early history of the Swastika are lost in antiquity. All the author has been able to find on these subjects is set forth in the preceding chapters.

It is proposed to examine the possible uses of the Swastika in an endeavor to discover something of its significance. The Swastika might have served:

- I. *As a symbol ---*
 - 1, *of a religion,*
 - 2, *of a nation or people,*
 - 3, *of a sect with peculiar tenets;*
- II. *As an amulet or charm ---*
 - 1, *of good luck, or fortune, or long life,*
 - 2, *of benediction, or blessing,*
 - 3, *against the evil eye;*
- III. *As an ornament or decoration.*

It may have been {1} originally discovered or invented by a given people in a given country, and transmitted from one generation to the next, passing by migration from one country to another, and it may have been transmitted by communication to widely separated countries and among differently cultured peoples; or {2} it may have appeared in these latter countries by duplicate invention or by accident, and without contact or communication.

Positive evidence concerning its origin and earliest migration is not obtainable, and in its absence we are driven to secondary and circumstantial evidence. This will consist {1} of comparison of known facts directly concerning the subject; {2} of facts indirectly concerning it, and {3} reason, induced by argument, applied to these facts, presenting each truly, and giving to each its proper weight.

The possible migrations of the Swastika, and its appearance in widely separated countries and among differently cultured peoples, afford the principal interest in this subject to archæologists and anthropologists. The present or modern scientific interest in and investigation of the Swastika as a symbol or a charm alone are subsidiary to the greater question of the cause and manner of its appearance in different countries, whether it was by migration and contact or by independent invention. In arguing this question, we must keep continually in mind the rules of reason and of logic, and neither force the facts nor seek to explain them by unknown, imaginary, or impossible methods. There must be no dogmatic assertions nor fanciful theories. If we assume certain migrations of the Swastika, we must consider those things which might have (or must have) migrated with it; and we must admit the means necessary to the assumed end.

The history of the beginning and first appearance of any of the forms of the cross is also lost in antiquity, and it would be hazardous for any person to announce positively their origin, either as to locality or time. The Swastika was certainly prehistoric in its origin. It was in extensive use during the existence of the third, fourth, and fifth cities of the site of ancient Troy, of the hill of Hissarlik; so also in the Bronze Age, apparently during its entire existence, throughout western Europe from the Mediterranean Sea to the Arctic Ocean. It continued in use in Europe during the Iron Age, and also among the Etruscans, Greeks, and Trojans. The name "Swastika," by which it is recognized today in all literature, is a Sanscrit word, and was in common use among the Sanscrit peoples so long ago that it had a peculiar or individual pronunciation in Pânini's grammar prior to the fourth century B. C. Some authorities are of the opinion that it was an Aryan symbol and used by the Aryan peoples before their dispersion through Asia and Europe. This is a fair subject for inquiry and might serve as an explanation how, either as a sacred symbol or charm, an amulet, or token of good wishes or good fortune, the Swastika might have been carried to the different peoples and countries in which we now find it by the splitting up of the Aryan peoples and their migrations and establishment in the various parts of Europe. Professor Sayce is of the opinion that the Swastika was a Hittite symbol and passed by communication to the Aryans or some of their important branches before their final dispersion took place, but he agrees that it was unknown in Assyria, Babylonia, Phenicia, or among the Egyptians.

Whether the Swastika was in use among the Chaldeans, Hittites, or the Aryans before or during their dispersion, or whether it was used by the Brahmins before the Buddhists came to India is, after all, but a matter of detail of its migrations; for it may be fairly contended that the Swastika was in use, more or less common among the people of the Bronze Age anterior to either the Chaldeans, Hittites, or the Aryans. The additional facts in this regard have been set forth in the chapter on this subject and need not be repeated here.

The question should, so far as possible, be divested of speculation, and the evidence accepted in its ordinary meaning "without prejudice or preconceived opinion."

A consideration of the subject in the light of the material here collected develops the following questions:

{1} Was the Swastika, in any of its forms, the symbol of an ancient religion or philosophy, or was it only the sign of a particular sect, tenet, faith, or idea; or was it both?

{2} Was it a charm or amulet to be used by anyone which derived its value from the signification given to it?

{3} What lesson can be gathered from it concerning the early migrations of the reaches of man?

Examples illustrating these questions are to be found in history as well as in everyday life. The scarabæus of Egypt and Etruria was a symbol of eternity. The golden hoop on the lady's finger representing a snake swallowing its tail, is also a symbol of eternity. These represent a sentiment, and are symbols of that sentiment without regard to sect or organized body.

On the other hand, the Maltese cross was the symbol of the Knights of Malta, and has become, in later years, that of the Masonic fraternity; while three three links is the symbol of the Order of Odd Fellows. The Latin cross is a symbol of the Christian religion and, to a certain extent, of a Christian denomination.

Upon the evidence submitted, we must accept the Swastika first as a symbol of the sect of Jains within the Buddhist Church originally in Tibet, which spread itself in the Asiatic country under the names of Tao-sse, Tirthaukara, Ter, Musteg, and Pon or Pon-po, the last signifying purity (ante, p. 774). This sect, or these sects, adopted the Swastika as their symbol, giving it the translation *su* "well," *asti*, "it is" the whole word meaning "it is well," or "so be it," implying resignation under all circumstances, the sect holding, in accordance with the meaning given to their symbol, that contentment and peace of mind were the chief objects of human life. In so far as it concerns this sect, the Swastika was a symbol of both kinds. It represented a religious or at least a moral and philosophic idea, and also the sect which held to this idea.

Among the Buddhists proper, the Swastika seems to have been employed as a holy or sacred symbol; its occurrence as one of the signs in the footprint of Buddha, their founder, with some relation either to the mystery of his appearance as a leader, a missionary, or of the holy and sacred object of his mission, causes this to be inferred. Their use of it on the bronze statues of Buddha, and associating it with solemn inscriptions in the caves of India, leaves no doubt as to its use as a symbol more or less of this character.

Again, the sue in the early Christian times of different forms of the cross, coupled with the extensive use by the Christians of the "monogram of Christ" (fig. 6), shows how naturally there may have been a conflict of opinion in the selection of a cross which should be a representative, while we know from history that there was such discussion, and that different forms of the cross were suggested. Among other forms was the Swastika, but to what extent or with what idea the author is not informed. The Swastika was used, Burnouf says, a thousand times on Chrisitans' tombs in the catacombs at Rome. This is evidence of its use to a certain extent in a sacred or solemn and funereal character, which would signify its use as the symbol of a religious idea.

Beyond these instances the author is unable to find evidence of the Swastika having served as a symbol of any religious or philosophic idea or of any sect or organization.

Whether among the Bronze Age people of western Europe --- among the Trojans, Greeks, or Etruscans --- whether among the semicivilized peoples of South Central America, or among the savages (mound-builders) of North America, there is apparently no instance of the Swastika having been regarded as holy or used on a sacred object --- that is, holy and sacred in the light of godliness, piety, or morality. It may have been or may yet be discovered that some of these wild men used the Swastika upon objects serving at ceremonies or festivals of their religion, or which had, in their eyes, a semi-sacred character. But it does not seem that it was used as a representative of a holy idea or of any god or supernatural being who stood for such an idea. The meal used in the Zuñi ceremony may have been regarded as sacred, and it may, indeed must, have been made on a stone metate, yet neither the metate nor the stone thereby obtained any holy or sacred character. So, also, it may have been decorated with a fret, chevron, herringbone, or any of the numerous styles, none of which would receive any sacred character from such use. So it is believed to have been with the Swastika found on these objects; it was not holy or sacred because of this use.

The author declines to discuss the possible relation of the Swastika to the sun or sun god, to the rain or rain god, the lightning, to Dyans, Zeus or Agni, to Phebus or Apollo, or other of the mythological deities. This question would be interesting if it could be determined with certainty, or if the determination would be accepted by any considerable number of persons. But this is left for some one more competent and more interested than the author.

The most probable use of the Swastika among prehistoric peoples, or among Orientals other than the Buddhists, was as a charm or amulet signifying good fortune, good luck, long life, or benediction and blessing. (1) (See p. 780.)

Looking over the entire prehistoric world, we find the Swastika used on small and comparatively insignificant objects, those in common use, such as vases, posts, jugs, implements, tools, household goods and utensils, objects of the toilet, ornaments, etc., and infrequently on statues, altars, and the like. In Armenia it was found on bronze pins and buttons; in the Trojan cities on spindle-whorls; in Greece on pottery, on gold and bronze ornaments, and fibulæ. In the Bronze Age in western Europe, including Etruria, it is found on the common objects of life, such as pottery, the bronze fibulæ, ceintures, spindle-whorls, etc.

In addition to the foregoing, there were peculiar uses of the Swastika in certain localities: In Italy on the hut urns in which the ashes of the dead are buried; in the Swiss lakes stamped in the pottery; in Scandinavia on the weapons, swords, etc., and in Scotland and Ireland on the brooches and pins; in America on the metates for grinding corn; the Brazilian women wore it on the pottery fig leaf; the Pueblo Indian painted it on his dance rattle, while the North American Indian, at the epoch of the mound building in Arkansas and Missouri, painted it in spiral form on his pottery; in Tennessee he engraved it on the shell, and in Ohio cut it in its plainest normal form out of sheets of copper.

ENDNOTES:

1. Goblet d'Alviella, "La Migration des Symboles," pp. 56, 57.

So also among the modern Indians we find it employed on occasions of ceremony, as in the mountain chant by the Navajoes, and the war chant of the Kansas, on the necklace and ceremonial garters of the Sac woman, and on the war shields of the Pimas.

As we do not find it represented in America on aboriginal religious monuments, on ancient gods, idols, or other sacred or holy objects, we are justified in claiming that it was not here used as a religious symbol; while, as it is found only on trinkets, shells, copper plaques, spindle-whorls, metates, pottery bowls, jugs, bottles, or vases; as we find it sometimes square, sometimes spiral, now outside, now inside, or bowls and jars, etc.; at one time as small rectangular figure and at another of extensive convolutions covering the side of the vase; as we find it on the tools of the workmen, the objects in everyday use, whether in the house or the shop, used indiscriminately by men and women, or on gaming implements or dance rattles, the contention seems justifiable that it was used as an ornament or as a charm for good luck and not as a religious symbol. Yet we know it was used on certain ceremonial occasions which may themselves have had more or less a sacred character.

Thus, after the fullest examination, we find the Swastika was confined to the commoner uses, implements, household utensils, and objects for the toilet and personal decoration. The specimens of this kind number a hundred to one of a sacred kind. With this preponderance in favor of the common use, it would seem that, except among the Buddhists and early Christians, and the more or less sacred ceremonies of the North American Indians, all pretense of the holy or sacred character of the Swastika should be given up, and it should (still with these exceptions) be considered as a charm, amulet, token of good luck or good fortune, or as an ornament and for decoration.

VI. The Migration Of Symbols.

Migration Of the Swastika.

The question of the migration of the Swastika and of the objects on which it was marked, which furnished its only means of transportation, remains to be considered. It is proposed to examine, in a cursory manner perhaps, not only the migration of the Swastika itself, but some of these objects, spindle whorls especially, with a view to discover by similarity or peculiarity of form or decoration any relationship they may have had with each other when found in distant countries and used by different peoples. Thus, we may be able to open the way to a consideration of the question whether this similarity of Swastikas or other decorations, or of the objects on which they were placed, resulted from the migration of or contact or communication between distant peoples, or was it accidental and the result of independent discoveries and duplicate inventions --- an evidence of the parallelism of human thought?

Dr. Brinton, in a communication before the American Philosophical Society, (1) starts out with a polemical discussion upon the subject of the migration of the Swastika and its possible American migration, as follows:

My intention is to combat the opinion of those writers who, like Dr. Hamy, M. Beauvois, and many others assert that because certain well-known Oriental symbols, as the Ta Ki, the Triskeles, the Svastika, and the cross, are found among the American aborigines, they are evidence of Mongolian, Buddhistic, Christian, or Aryan immigrations previous to the discovery by Columbus, and I shall also try to show that he position is erroneous of those who, like William H. Holmes, of the Bureau of Ethnology, maintain "that it is impossible to give a satisfactory explanation of the religious significance of the cross as a religious symbol in America."

In opposition to both these views, I propose to show that the primary significance of all these widely extended symbols is quite clear, and that they can be shown to have arisen from certain fixed relations of man to his environment, the same everywhere, and hence suggesting the same graphic representations among tribes most divergent in location and race, and, therefore, that such symbols are of little value in tracing ethnic affinities or the currents of civilization.

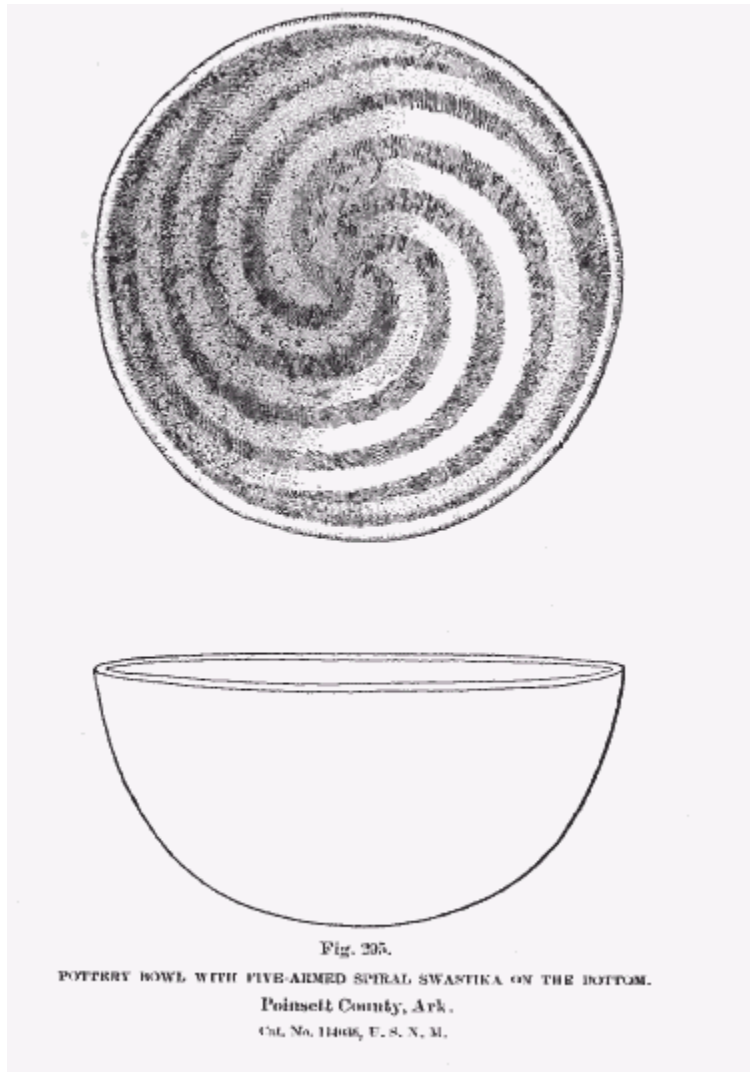
I am sorry to be compelled to differ with Dr. Brinton in these views. I many not attempt much argument upon this branch of the subject, but whatever argument is presented will be in opposition to this view, as not being borne out by the evidence. Of course, the largest portion of the discussion of this subject must consist of theory and argument, but such facts as are known, when subjected to an analysis of reason, seem to produce a result contrary to that announced by Dr. Brinton.

It is conceded that the duplication of the cross by different or distant peoples is no evidence of migrations of or contact between these peoples, however close their relations might have been. The sign of the cross itself was so simple, consisting of only two marks or pieces intersecting each other at a right or other angle, that we may easily suppose it to have been the result of independent invention. The same conclusion has been argued with regard to the Swastika. But this is a *non sequitur*.

First, I dispute the proposition of fact that the Swastika is, like the cross, a simple design --- one which would come to the mind of any person and would be easy to make. For evidence of this, I cite the fact that it is not in common use, that it is almost unknown among Christian peoples, that it is not included in any of the designs for, nor mentioned in any of the modern European or American works on, decoration, nor is it known to or practiced by artists or decorators of either country. (2) For the truth of this, I appeal to the experience of artists and decorators, and would put the question whether, of their own knowledge, by their own inventions, they have ever discovered or made Swastikas, or whether their brother artists have done so, and if they answer in the affirmative, I would ask whether those cases were not rare.

ENDNOTES:

1. Proc. Am. Philosoph. Soc. XXVI. p. 177.
2. For general lack of knowledge of Swastika in modern times, see Preface, p. 763.



It may be granted that when the Swastika has been seen by an artist or decorator it is easily understood and not difficult to execute, but, nevertheless, I insist that its invention and use among artists and decorators during the centuries since the Renaissance is rare.

It is argued by Zmigrodzki that the Swastika on so many specimens, especially the Trojan spindle-whorls, having been made regularly, sometimes turning one way, sometimes another, sometimes square, other times curved, goes to show the rapidity with which the sign was made, that it did not require an artist, that its use was so common that it had become a habit and was executed in a rapid and sketchy manner, as evidenced by the appearance of the marks themselves upon the whorls. He likens this to the easy and unconsidered way which men have of signing their names, which they are able to do without attention. He likens it also to the sign of the cross made by Roman Catholics so rapidly as to be unnoticed by those who are unaware of its significance. With this line of argument, Zmigrodzki reasons that the Swastika was in its time confined to common use and thus he accounts for the number of ill-formed specimens, but not for the great number, the mass of those well formed and

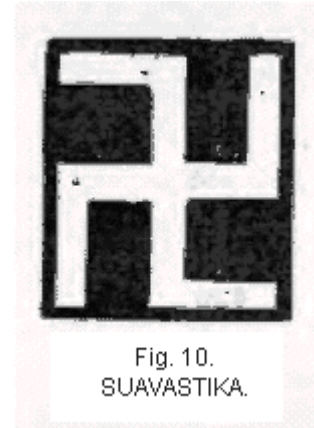


Fig. 10.
SUAVASTIKA.

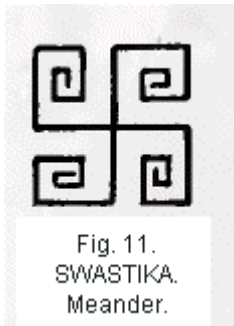


Fig. 11.
SWASTIKA.
Meander.

well drawn. Instead of the Swastika being a sign easily made, the experience of the writer is the contrary. A simple cross like the Latin, Greek, St. Andrew's, and other common forms may be very easy to make, but a really good specimen of the Swastika is difficult to make. Any one who doubts this had only to make the experiment for himself, and make correctly such a specimen as fig. 9. While it may be easy enough to make the Greek cross with two lines of equal length intersecting each other at right angles, and while this forms a large proportion of the Swastika, it is at its conclusion that the trouble of making a perfect Swastika begins. It will be found difficult, requiring care and attention, to make the projecting arms of equal length, to see that they are all at the same angle; and if it is bent again and again, two or three turns upon each other, the difficulty increases. If a person thinks that the Swastika, either in the square or the ogee curves or the spiral volutes, is easy to make, he has but to try it with paper and pencil, and, if that is his first attempt, he will soon be convinced of his error.

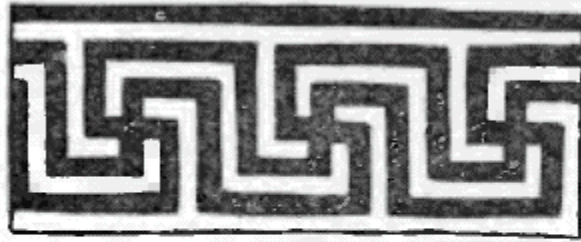


Fig. 139.

VARIATION OF THE GREEK FRET.

Continuous lines crossing each other at right angles forming figures resembling the Swastikas.

The artist who drew the spirals for this paper pronounced them to be the most difficult of all; the curves are parabolic, no two portions of any one are in the same circle, the circle continually widens, and no two circles nor any two portions of the same circle have the same center. To keep these lines true and parallel, the curve regular, the distances the same, and at the same time sweeping outward in the spiral form, the artist pronounces a most difficult work, requiring care, time, and attention (fig. 295). Even the square and meander Swastikas (figs. 10, 11) require rule and angle to make them exact. All this goes to show the intention of the artist to have been more or less deliberate; and that the object he made was for a special purpose, with a particular idea, either as a symbol, charm, or ornament, and not a meaningless figure to fill a vacant space.

Yet it is practically this difficult form of the cross which appears to have spread itself through the widest culture areas, extending almost to the uttermost parts of the earth. All this is foundation for the suggestion that the Swastika was not the result of duplicate invention or independent discovery, that it is not an illustration of parallelism in human thought, but that it was transmitted from person to person, or passed from one country to another, either by the migration of its people, by their contact or communication, or by the migration and transmission of the symbol and the sign itself. Pushing the argument of the difficulty of its making, to account for the rarity of the design, it is alleged that in modern times the Swastika is practically unknown among Christian peoples. It passed out of use among them nearly a thousand years ago and has been supplanted by every other imaginable geometric form. The fret, chevron, herringbone, crosses, and circles of every kind, spirals, volutes, ogees, moldings, etc., have all remained in use since Neolithic times, but no Swastika.



Fig. 30.
Japanese Potter's mark on porcelain. DeMertillet. "Museum Prehistorique," fig. 1248

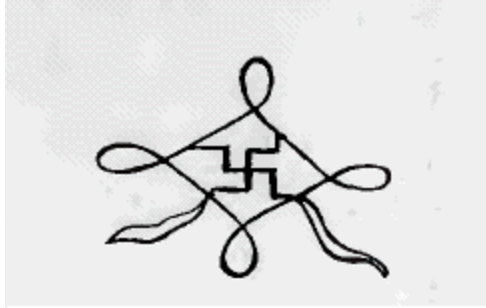


Fig. 31.
POTTERS MARK ON PORCELAIN.
China.
Tablet of honor, with Swastika.
Prime, "Pottery and Porcelain," p. 254

The latest use mentioned in the literature upon this subject appears to have been in the arch-Episcopal chair in the cathedral at Milan, which bears the three ancient Christian crosses, the Latin cross, the monogram of Christ, and the Swastika, of which the first and last are carved in alternates around the pedestal of the chair. Yet the knowledge of the Swastika has been perpetuated in some countries and its use has not died out all over the world; therefore, examples of its use in modern times should be noted in order to prevent misapprehension and contradiction. The double Greek fret made with two continuous lines (fig. 139) forms a pseudo Swastika at each intersection, although we have seen that this is not real but only an apparent Swastika (p. 783).

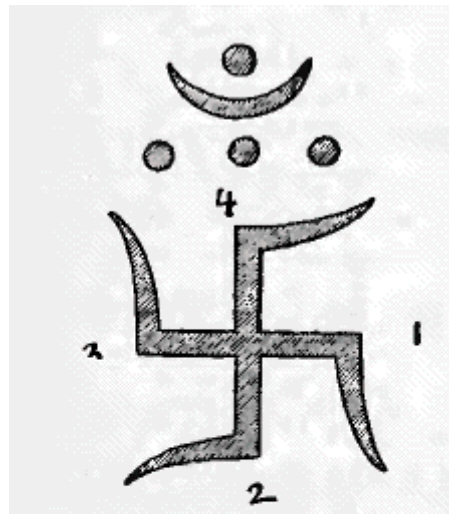
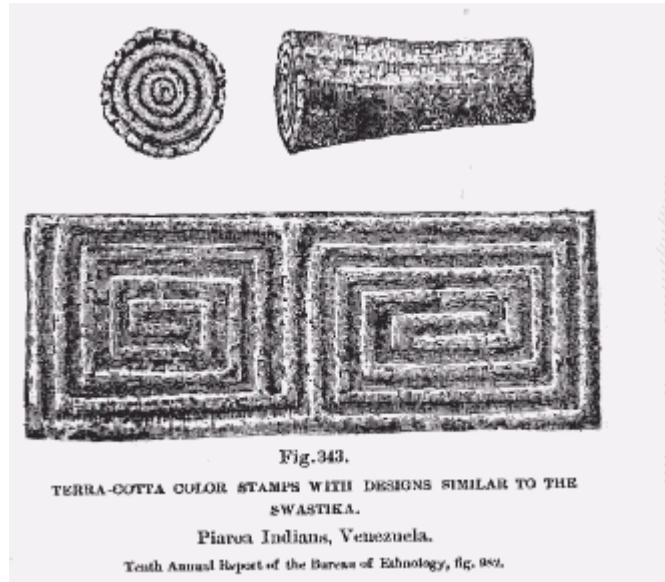


Fig. 33.
EXPLANATION OF THE JAIN
SWASTIKA, ACCORDING TO
GANDHI
(1) Archaic or protoplasmic life; (2) Plant and animal life; (3) Human life; (4) Celestial life.

This is used in modern times by carpet and linen weavers as borders for carpets and tablecloths, and by tile makers in similar decoration. The Swastika mark has continued in use among the Orientals; the Theosophists have adopted it as a seal or insignia; the Japanese (fig. 30), the Koreans (p. 799), the Chinese (fig. 31), the Jains (figs. 33, 34), and , among the North American Indians, the Navajo (pl. 17), and those of the Kansas Reservation (pl. 15 and 16). It is not used by European peoples in modern times, except in Lapland and Finland. The National Museum has lately received a collection of modern household and domestic utensils from Lapland, some of which bear the marks of the cross and one a churn, the lid of which bears a possible Swastika mark. Through the kindness of Professor Mason and Mr. Cushing, I have received a drawing of this (fig. 344). Theodore Schvindt, in "Suomalaisia koristeita," (1) a book of standard national Finnish patterns for the embroideries of the country gives the Swastika among others; but it is classed among "oblique designs" and no mention is made of it as a Swastika or of any character corresponding to it. Its lines are always at angles of 45 degrees, and are continually referred to as "oblique designs."



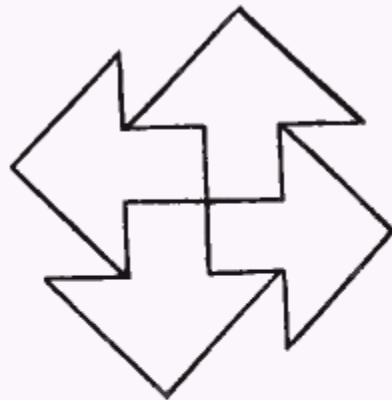


Fig. 344.

MODERN CHURN LID WITH DESIGN RESEMBLING SWASTIKA.

Lapland.

U. S. National Museum.

The Swastika ornaments Danish baptismal fonts, and according to Mr. J. A. Hjaltalin it "was used [in Ireland] a few years since as a magic sign, but with an obscured or corrupted meaning." It arrived in that island in the ninth century A. D. (2)

The Swastika mark appears both in its normal and ogee form in the Persian carpets and rugs. (3) While writing this memoir, I have found in the Persian rug in my own bedchamber sixteen figures of the Swastika. In the large rug in the chief clerk's office of the National Museum there are no less than twenty-seven figures of the Swastika. On a piece of imitation Persian carpet, with a heavy pile, made probably in London, I found also figures of the Swastika. All the foregoing figures have been of the normal Swastika, the arms crossing each other and the ends turning at right angles, the lines being of equal thickness throughout. Some of them were bent to the right and some to the left. At the entrance of the Grand Opera House in Washington I saw a large India rug containing a number of ogee Swastikas; while the arms crossed each other at right angles, they curved, some to the right and some to the left, but all the lines increased in size, swelling in the middle of the curve, but finishing in a point. The modern Japanese wisteria workbaskets for ladies have one or more Swastikas woven in their sides or covers.

Thus, it appears that the use of the Swastika in modern times is confined principally to Oriental and Scandinavian countries, countries which hold close relations to antiquity; that, in western Europe, where in ancient times the Swastika was most frequent, it has, during the last one or two thousand years, become extinct. And this in the countries which have led the world in culture.

If the Swastika was a symbol of a religion in India and migrated as such in times of antiquity to America, it was necessarily by human aid. The individuals who carried and taught it should have carried with it the religious idea it represented. To do this required a

certain use of language, at least the name of the symbol. If the sign bore among the aborigines in America the name it bore in India, Swastika, the evidence of contact and communication would be greatly strengthened. If the religion it represented in India should be found in America, the chain of evidence might be considered complete. But in order to make it so it will be necessary to show the existence of these names and this religion in the same locality or among the same people or their descendants as is found the sign. To find traces of the Buddhist religion associated with the sign of the Swastika among the Eskimo in Alaska might be no evidence of its prehistoric migration, for it might have occurred in modern times, as we know has happened with the Russian religion and the Christian cross.

While to find the Buddhist religion and the Swastika symbol together in America, at a locality beyond the possibility of modern European or Asiatic contact, would be evidence of prehistoric migration yet it would seem to fix it at a period when, and from a country where, the two had been used together. If the Swastika and Buddhism migrated to America together it must have been since the establishment of the Buddhist religion, which is approximately fixed in the sixth century B. C. But there has not been as yet in America, certainly not in the localities where the Swastika has been found, any trace discovered of the Buddhist religion, nor of its concomitants of language, art, or custom. Adopting the theory of migration of the Swastika, we may therefore conclude that if the Swastika came from India or Eastern Asia, it came earlier than the sixth century, B. C.

If a given religion with a given symbol, both belonging to the Old World, should both be found associated in the New World, it would be strong evidence in favor of Old World migration --- certainly of contact and communication. Is it not equally strong evidence of contact to find the same sign used in both countries as a charm, with the same significance in both countries?

The argument has been made, and it has proved satisfactory, at least to the author, that throughout Asia and Europe, with the exception of the Buddhists and early Christians, the Swastika was used habitually as a sign or mark or charm, implying good luck, good fortune, long life, much pleasure, great success, or something similar. The makers and users of the Swastika in South and Central America, and among the mound builders of the savages of North America, having all passed away before the advent of history, it is not now, and never has been, possible for us to obtain from them a description of the meaning, use, or purpose for which the Swastika was employed by them. But, by the same line of reasoning that the proposition has been treated in the prehistoric countries of Europe and Asia, and which brought us to the conclusion that the Swastika was there used as a charm or token of good luck, or good fortune, or against the evil eye, we may surmise that the Swastika sign was used in America for much the same purpose. It was placed upon the same style of object in America as in Europe and Asia. It is not found on any of the ancient gods of America, nor on any of the statues, monuments, or altars, nor upon any sacred place or object, but rather upon such objects as indicate the common and everyday use, and on which the Swastika, as a charm for good luck, would be most appropriate, while for a sacred character it would be singularly inappropriate.

ENDNOTES:

1. Finnische Ornamente. 1. Stehornamente. Heft 1-4. Soumalaisen Kirjallisuuden Seura Helsingissä, 1894.
2. Karl Blind, "Discovery of Odinic songs in Shetland," *Nineteenth Century*, June, 1879. p. 1098, cited by Aldfred C. Haddon in "Evolution in Art." London, 1895, p. 285.
3. Miss Fanny D. Bergen, in *Scribner's Magazine*, September, 1894.

They theory of independent invention has been invoked to account for the appearance of the Swastika widely separated countries, but the author is more inclined to rely upon migration and imitation as the explanation.

When signs or symbols, myths or fables, habits or customs, utensils, implements or weapons, industries, tools or machinery, have been found in countries widely separated from each other, both in countries bearing characteristics so much alike as to make them practically the same objects or industries, and which are made in the same way, they present a question to which there are only two possible solutions: Either they are independent discoveries or inventions which, though analogous, have been separately conceived, or else they have been invented or discovered in one of the countries, and passed to the other by migration of the object or communication of the knowledge necessary to form it, or by contact between the two peoples. Of these inventions or discoveries said to have been made in duplicate, each of which is alleged to have sprung up in its own country as a characteristic of humanity and by virtue of a law of physics or psychology, it is but fair to say that in the opinion of the author the presumption is all against this. Duplicate inventions have been made and will be made again, but they are uncommon. They are not the rule, but rather the exception. The human intellect is formed on such unknown bases, is so uncertain in its methods, is swayed by such slight considerations, and arrives at so many different conclusions, that, with the manifold diversities of human needs and desires, the chances of duplicate invention by different persons in distant countries, without contact or communication between them, are almost as one to infinity.

The old adage or proverb says, "Many men of many minds," and it only emphasizes the difference between men in regard to the various phenomena mentioned. There are some things sure to happen, yet it is entirely uncertain as to the way they will happen. Nothing is more uncertain than the sex of a child yet to be born, yet every person has one chance out of two to foretell the result correctly. But of certain other premises, the chances of producing the same result are as one to infinity. Not only does the human intellect not produce the same conclusion from the same premises in different persons, but it does not in the same person at different times. It is unnecessary to multiply words over this, but illustrations can be given that are satisfactory. A battle, a street fight, any event happening in the presence of many witnesses, will never be seen in the same way by all of them; it will be reported differently by each one; each witness will have a different story. The jurors in our country are chosen because of the absence of prejudice

or bias. Their intellect or reason are intended to be subjected to precisely the same evidence and argument, and yet how many jurors disagree as to their verdict? We have but to consider the dissensions and differences developed in the jury room which are settled, sometimes by argument, by change of conviction, or by compromise. What would be the resources of obtaining justice if we were to insist upon unanimity of decision of the jury upon their first ballot or the first expression of their opinion and without opportunity of change? Yet these jurors have been charged, tired, and sworn a true verdict to render according to the law and evidence as submitted to them. There is no doubt but that they are endeavoring to fulfill their duty in this regard and while the same evidence as to fact, and charge as to law, are presented to all of them at the same time, what different impressions are made and what different conclusions are produced in the minds of the different jurors. Illustrations of this exist in the decision of our Supreme Court, wherein, after full argument and fair investigation, with ample opportunity for comparison of views, explanations, and arguments, all based upon the same state of facts, the same witnesses; yet, in how many cases do we find differences of opinion among the members of the court, and questions of the gravest import and of the most vital character settled for the whole nation by votes of 8 to 7 and 5 to 4? The author has examined, and in other places shown, the fallacy of the rule that like produces like. Like causes produce like effects is a law of nature, but when the decision rests upon the judgment of man and depends upon his reason and his intellect, our common knowledge testifies that this law has no application. When the proposition to be determined has to be submitted to individuals of widely separated and distinct countries between whom there has been neither communication nor contact, and how have received no suggestion as to their respective ideas or needs, or the means of satisfying them, it seems to the author that no rule can be predicated upon the similarity of human condition, of human reason, or of human intellect, certainly none which can be depended on to produce the same conclusion.

Consideration of the facility with which symbols, signs, myths, fables, stories, history, etc., are transmitted from one people to another and from one country to another, should not be omitted in this discussion. It many have slight relation to the Swastika to mention the migrations of the present time, but it will give an idea of the possibility of past times. In this regard we have but to consider the immense number of articles or objects in museums and collections, public and private, representing almost every country and people. We there find objects from all quarters of the globe, from the five continents, and all the islands of the sea. Some of them are of great antiquity, and it is a matter of wonderment how they should have made such long pas sages and have been preserved from destruction by the vicissitudes of time and space. We have but to consider how money passes from hand to hand and is always preserved to be passed on to the next. Every collection of importance throughout the world possesses a greater or less number of Greek and roman coins antedating the Christian era. We have an excellent illustration of these possibilities in the word "halloo," commonly rendered as "hello." A few years ago this work was peculiar to the English language, yet an incident lately occurred in the city of Washington, within sight of my own residence, by which this word, "hello," has traveled the world around, has spread itself over land and sea, has attached itself to and become part of most every spoken language of civilization,a and without much consideration as to its meaning; but being on the procrustean bed of imitation, there are

people, foreigners, who believe that the telephone can be only made to respond when the demand is made "hello!"

Migration Of Classic Symbols.

Count Goblet d'Alviella, in "La Migration des Symboles," traces many ancient symbols from what he believes to be their place or origin to their modern habitat. The idea he elucidates in his book is indicated in its title.

The sacred tree of the Assyrians. --- this he holds to be one of the oldest historic symbols; that it had its origin in Mesopotamia, one of the earliest civilized centers of the world. Beginning with its simplest form, the sacred tree grew into an ornate and highly complex pattern, invariably associated with religious subjects. Two living creatures always stand on either side, facing it and each other. First they were monsters, like winged bulls or griffins, and after became human or semihuman personages --- priests or kings, usually in the attitude of devotion. The Count says the migration of both these types can be readily traced. The tree between the two monsters or animals passed from Mesopotamia to India, where it was employed by the Buddhists and Brahmins, and has continued in use in that country to the present time. It passed to the Phoenicians, and from Asia Minor to Greece. From the Persians it was introduced to the Byzantines, and during the early ages, into Christian symbolism in Sicily and Italy, and even penetrated to the west of France. The other type --- that is, the tree between two semi-human personages -- - followed the same route into India, China, and eastern Asia, and, being found in the ancient Mexican and Maya codices, it forms part of the evidence cited by the Count as a pre-Columbian communication between the Old World and the New. He argues this out by similarity of the details of attitude and expression of the human figure, the arrangement of the branches of the sacred tree, etc.

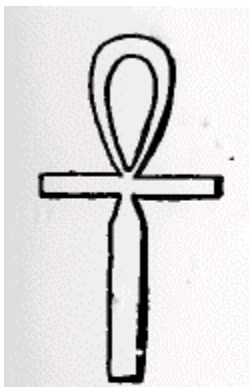


Fig. 4.
EGYPTIAN CROSS
(Crux ansata).
The Key of Life.

The sacred cone of Mesopotamia. --- This was worshipped by the western Semites as their great goddess, under the image of a conical stone. Its figurative representation is found alike on monuments, amulets, and coins. On some Phoenician monuments there is to be seen, superadded to the cone, a horizontal crossbar in the middle of which rests a handle. This shape bears a striking resemblance to the *Crux ansata* (fig. 4), and, like it, was a symbol of life in its widest and most abstract meaning. The resemblance between them is supposed to have caused them to have been mistaken and employed one for the other in the same character of symbol and talisman. It is alleged that the Ephesian Artemis was but the sacred cone of Mesopotamia anthropomorphized, although, with the halo added to Artemis, the allegation of relationship has been made in respect of the *Crux ansata*.

The Crux ansata, the key of life. This is probably more widely known in modern times than any other Egyptian symbol. Its hieroglyphic name is *Ankh*, and its signification is "to live." As an emblem of life, representing the male and female principle united, it is always borne in the hands of the gods, it is poured from a jar over the head of the king in a species of baptism, and it is laid symbolically on the lips of the mummy to revive it.

From Egypt the *Crux ansata* spread first among the Phenicians, and then throughout the whole Semitic world, from Sardinia to Susiana.

The winged globe. --- This was widely spread and highly venerated Egyptian symbol. From Egypt it spread, under various modifications, throughout the Old World. It is formed by a combination of the representations of the sun that have prevailed in different localities in Egypt, the mythology of which ended by becoming a solar drama. Two uræus snakes or asps, with heads erect, are twisted round a globe-shaped disk, behind which are the outstretched wings of a hawk, and on its top the horns of a goat. It commemorates the victory of the principle of light and good over that of darkness and evil. It spread readily among the Phenicians, where it is found suspended over the sacred tree and the sacred cone, and was carried wheresoever their art was introduced --- westward to Carthage, Sicily, Sardinia, and Cyprus, eastward to Western Asia. Very early it penetrated on the north to the Hittites, and when it reached Mesopotamia, in the time of Sargonidæm, the winged circle assumed the shape of the wheel or rosette, surmounted by a scroll with upcurled extremities and with a feathered tail opening out like a fan, or a human figure in an attitude sometimes of benediction, sometimes warlike, was inscribed within the disk. Then it was no longer exclusively a solar emblem, but served to express the general idea of divinity. From Mesopotamia it passed to Persia, principally in the anthropoid type. It was, however, never adopted by Greece, and it is nowhere met with in Europe, except, as before stated, in the Mediterranean islands. When Greece took over from Asia symbolic combinations in which it was originally represented, she replaced it by the thunderbolt.

ENDNOTES:

H. Mis. 90, pt. 2-----61

But the aureaole, or halo, which is the present coat of arms of the King of Belgium. The story is thus told in Burke's "Peerage" (1895): Agnes de Percy married Joceline of Louvain, brother of Queen Adeliza, second wife of Henry I, and son of Godfrey Barbalus, duke of Lower Brabant and Count of Brabant, who was descended from the Emperor Charlemagne. Her ladyship, it is stated, would only consent, however, to this great alliance upon condition that Joceline should adopt either the surname or arms of Percy, assumed, and retained his own paternal coat in order to perpetuate his claim to the principality of his father, should the elder line of the reigning duke become extinct. The matter is thus stated in the old pedigree at Sion House: "The ancient arms of Hainault this Lord Jocelyn retained, and gave his children the surname of Percy."

The migration of this lion rampant is interesting. It was in the twelfth century the coat of arms of the King of Albania. Phillippe d'Alsace, the eldest son of Thierry d'Alsace, was Count of Flanders, sixteenth in succession, tracing his ancestry back to 621 A. D. the original and ancient coat of arms of the Counts of Flanders consisted of a small shield in the center of a larger one, with a sunburst of six rays. Phillippe d'Alsace reigned as Count of Flanders and Brabant from 1168 to 1190 A. D. He held an important command in two

crusades to the Holy Land. During a battle in one of these crusades, he killed the King Albania in a hand-to-hand conflict, and carried off this shield with its escutcheon of the lion rampant, which Phillippe transferred to his own shield, took as his own coat of arms, and it has been since that time the coat of arms of the Counts of Flanders and Brabant, and is no that of Belgium. The lion in the escutcheon can thus be traced by direct historic evidence through Northumberland, Flanders and Louvain back to its original owner, the King of Albania, in the twelfth century. Thus is the migration of the symbol traced by communication and contact, and thus are shown the possibilities in this regard which go far toward invalidating, if they do not destroy, the presumption of separate invention in those cases wherein, because of our ignorance of the facts, we have invoked the rule of separate invention.

Greek art and architecture. --- It has come to be almost a proverb in scientific investigation that we argue from the known to the unknown. We might argue from this proverb in favor of the migration of the Swastika symbol and its passage from one people to another by the illustration of the Greek fret, we might extend the illustration to all Greek architecture. It is a well-known fact, established by numberless historic evidences, that the Greek architecture of ancient times migrated --- that is, passed by communication and contact of peoples, and by transfer of knowledge from one man to another, and from one generation to the succeeding generation, until it became known throughout all western countries. The architects of Rome, Vicenza, Paris, London, Philadelphia, Washington, Chicago, and San Francisco derive their knowledge of Grecian architecture in its details of Doric, Ionic, and Corinthian styles by direct communication, either spoken, written or graphic, from the Greek architects who practiced, if they did not invent, these styles.



Fig. 133.

FRAGMENT OF GREEK VASE DECORATED WITH FIGURES OF SACRED ANIMALS AND SWASTIKAS, ASSOCIATED WITH GREEK FRET.

Naukratis, Ancient Egypt.

Petrie, Sixth Memoir of the Egypt Exploration Fund, part 2, pl. 6, fig. 1.

The Greek fret. --- This has migrated in the same manner. As to its invention or origin, we have little to do in the present argument. Whether the fret was the ancestor or the descendant of the Swastika is of no moment to our present question. It has been demonstrated in the early part of this paper that both it and the Swastika had a common existence in early if not prehistoric Greece, and that both were employed in perfected form on the same specimen of Archaic Greek pottery. Figs. 133 and 134 demonstrate that these two signs migrated together from Greece to Egypt, for the particular specimen mentioned was found at Naukratis, Egypt. From this high antiquity the Greek fret has migrated to practically every country in the world, and has been employed during all historic time by the peoples of every civilization. The fret is known historically to have passed by means of teachers, either through speaking, writing, or drawing, and never yet a suggestion that its existence or appearance in distant countries depended upon separate invention or independent discovery.

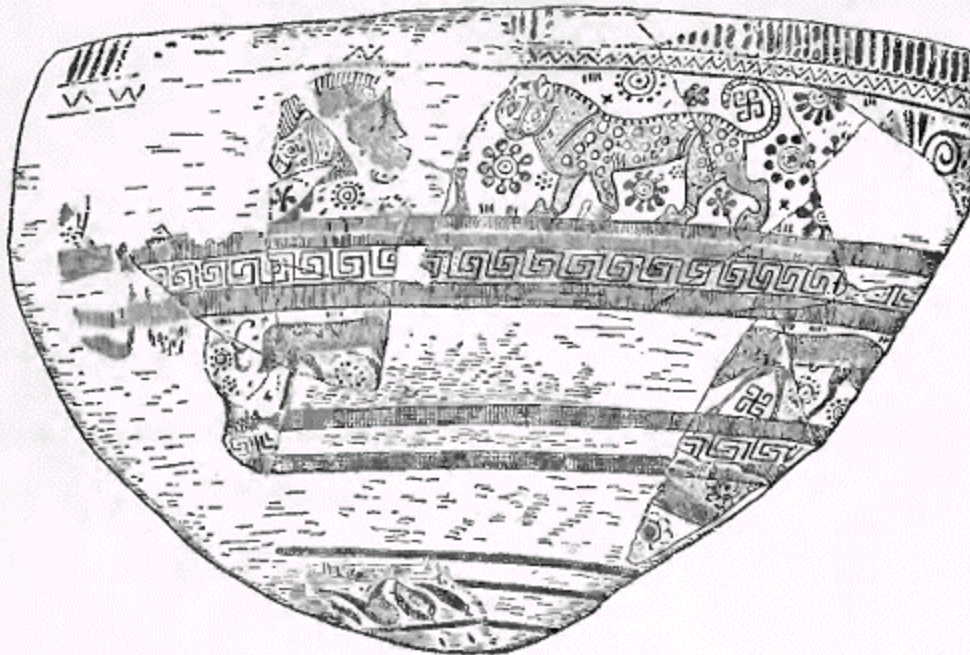


Fig. 134.

FRAGMENT OF GREEK VASE WITH FIGURES OF ANIMALS, TWO MEANDER SWASTIKAS, AND GREEK FRET.
Naukratis, Ancient Egypt.

Petrie, Sixth Memoir of the Egypt Exploration Fund, part 2, pl. 8, fig. 1, and Goodenow, "Grammar of the Lotus," pl. 30, fig. 10.

Why strain at the goat of independent invention of the Swastika when we are compelled to swallow the camel of migration when applied to the Greek fret and architecture? The same proposition of migration applies to Greek art, whether of sculpture, engraving, or gem carving. These ancient Grecian arts are so well known in all quarters of the civilized globe at the present day as they were in their own country, and this was all done by communication between peoples either through speaking, writing, or drawing. So far from being separate inventions, the modern sculptor or engraver, with full historic knowledge of the origin or, at least, antiquity of these arts and with an opportunity for inspection and study of the specimens, is still unable to reproduce them or to invent original works of so high an order. The imaginary and newly invented theory that culture is the result of the psychologic nature of man manifesting itself in all epochs and countries, and among all peoples, but the evolution of some new discovery made to fit a human need --- that as all human needs in a given stage are the same, therefore all human culture must, *per se*, pass through the same phases or stages --- is a theory to which I refuse adhesion. It receives a hard blow when we take down the bars to the modern sculptor, but permitting him to use, study, adapt, and even servilely copy the great Greek art works, and we know that with all these opportunities and advantages he can not attain to their excellence, nor reach their stage or art culture.

[page missing]

which encircles the heads of her divinities, and which Christian art has borrowed from the classic, was directly derived from it.

The caduceus. --- This is one of the interesting symbols of antiquity. It appears in many phases and is an excellent illustration of the migration of symbols. Its classic type held in the hand of Mercury and used today as a symbol of the healing art --- a winged rod round which two serpents are symmetrically entwined --- is due to the mythographers of later times, and is very remote from its primitive form. In the Homeric hymn it is called "the golden rod, three-petaled of happiness and wealth," which Phœbus gave to the youthful Hermes, but on early Greek monuments the three leaves are represented by a disk surmounted by an incomplete circle. In this shape it constantly appears on Phœnician monuments; and at Carthage, where it seems to have been essentially a solar emblem, it is nearly always associated with the sacred cone. It is found on Hittite monuments, where it assumes the form of a globe surmounted by horns. Numerous origins and manifold antecedents have been attributed to it, such as an equivalent of the thunderbolt, a form of the sacred tree, or a combination of the solar globe with the lunar crescent. Some examples seem to indicate a transition from the sacred tree surmounted by the solar disk, to the form of the caduceus of the Hittites. Our author believes it was employed originally as a religious or military standard for flag, and that it was gradually modified by coming in contact with other symbols. Some Assyrian bas-reliefs display a military standard, sometimes consisting of a large ring placed upon a staff with two loose bandelets attached, sometimes of a winged globe similarly disposed. This Assyrian military standard may be the prototype of the labarum, which Constantine, after his conversion to Christianity, chose for his own standard, and which might equally well have been claimed by the sun worshipers. Under its latest transformation in Greece, a winged rod with two serpents twined round it, it has come down to our own times representing two of the functions of Hermes, more than ever in vogue among men, industry and commerce. It has survived in India under the form of two serpents entwined, probably introduced in the track of Alexander the Great. It was also met with in that country in earlier times in its simpler form, a disk surmounted by a crescent, resembling our astronomical sign for the planet Mercury. This earliest type of the caduceus, a disk surmounted by a crescent, appears at a remote date in India, and seems to have been confounded with the trisula.

The trisula. --- This form of the trident peculiar to the Buddhists was of great importance in the symbolism of the Hindus; but whether it was an imitation of the type of the thunderbolt seen on Assyrian sculptures, or was divided by them spontaneously, is uncertain. Its simplest form, which is, however, rarely met with, is an omicron (\omicron) surmounted by an omega (ω). Nearly always the upper portion is flanked by two small circles, or by two horizontal strokes which often take the appearance of leaves or small wings. The points of the omega are generally changed into small circles, leaves, or trefoil; and the disk itself is placed on a pedestal. From its lower arc there fall two spires like serpents' tails with the ends curving, sometimes up and sometimes down. This is a very complex symbol. None of the Buddhist texts give any positive information in regard to its origin or meaning, and few symbols have given rise to more varied explanations. The upper part of the figure is frequently found separated from the lower; sometimes this is plainly a trident superposed upon a disk-shaped nucleus. The trident may possibly have symbolized the flash of lightning, as did Neptune's trident among the Greeks, but more

probably it is the image of the solar radiation. Among the northern Buddhists it personifies the heaven of pure flame superposed upon the heaven of the sun. Though undoubtedly a Hindu emblem, its primitive shape seems to have early felt the influence of the caduceus, while its more complex forms exhibit a likeness to certain types of the winged globe. Still later the trisula was converted by Brahmanism into an anthropoid figure, and became the image of Jagenath. The vegetable kingdom was also laid under contribution, and the trisula came into a resemblance of the tree of knowledge. Although we have learned the probable signification of its factors in the creeds that preceded Buddhism, we know very little about its meaning in the religion that used it most, but it is a symbol before which millions have bowed in reverence. The plastic development of the trisula shows with what facility emblems of the most dissimilar origin may merge into each other when the opportunity of propinquity is given, and there is sufficient similarity in form and meaning.

The double-headed eagle on the escutcheon of Austria and Russia. --- Count D'Alviella tells the history of the migration of the symbol of the double-headed eagle on the escutcheon of Austria and Russia. It was originally the type of the Garuda bird of southern India, found on temple sculptures, in carved wood, on embroideries, printed and woven cloths, and on amulets. It first appears on the so-called Hittite sculpture at Eyuk, the ancient Pteria in Phrygia. In 1217 it appeared on the coins and standards of the Turkoman conquerors of Asia Minor.

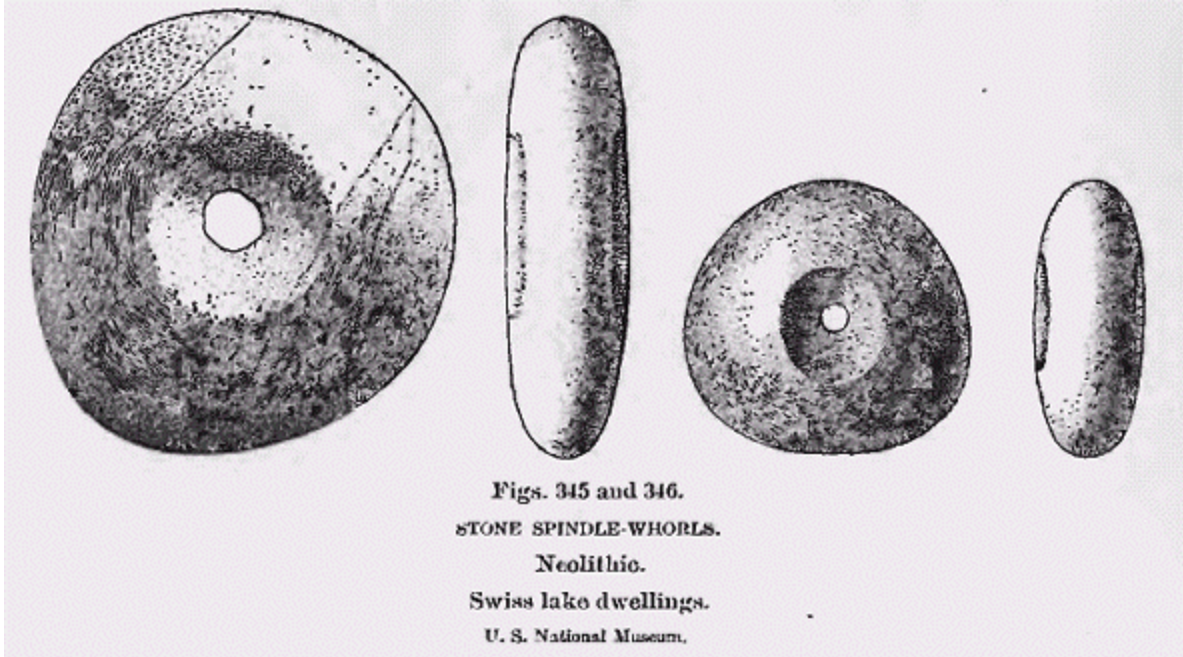
In 1227-28 the Emperor Frederick II undertook the sixth crusade, landing at Acre in the latter year, and being crowned King of Jerusalem in 1299. Within thirty years from these dates the symbol appeared on the coins of certain Flemish princes, and in 1345 it replaced the single-headed eagle on the armorial bearing of the holy Roman Empire. Thus, the historic evidence of the migration of this symbol, from the far east to the nations of the west by direct contact, would seem complete.

The lion rampant of Belgium. --- This lion was incorporated into the Percy or Northumberland escutcheon by the marriage of Joceline of Louvain, the second son of Godfrey, the Duke of Brabant, to Agnes, the sister and heir of all the Percys. The Counts of Flanders, Brabant, and Louvain bore as their coat of arms the lion rampant facing to the left.

VII. --- Prehistoric Objects Associated With the Swastika, Found In both Hemispheres, and Believed to Have Passed by Migration.

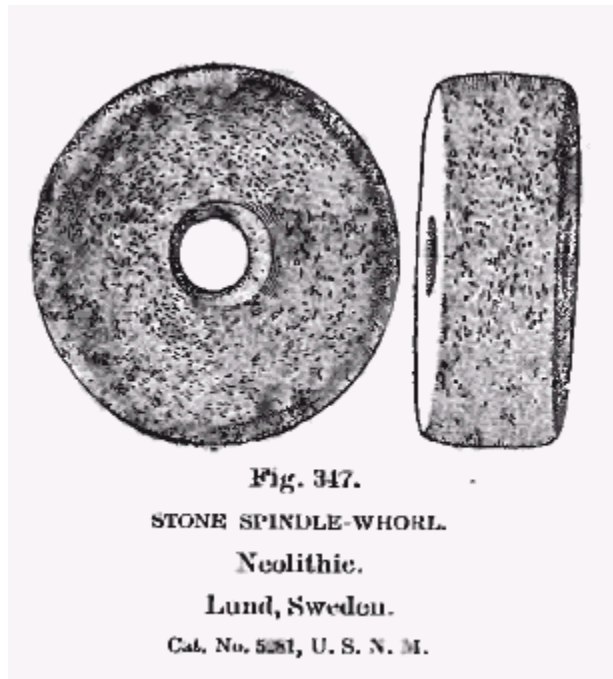
Spindle-Whorls.

Spindle-whorls are first to be considered. These are essentially prehistoric utensils, and are to be found in every part of the world where the inhabitants were sufficiently cultured to make twisted threads or cords, whether for hunting or fishing, games, textile fabrics, or coverings either for themselves, their tents or other purposes.



Figs. 345 and 346.
STONE SPINDLE-WHORLS.
Neolithic.
Swiss lake dwellings.
U. S. National Museum.

In western Asia, all of Europe, in the pueblos of North America, and among the aborigines --- by whatever name they are called --- of Mexico, Central America, and north and west coast of South America, wherever the aborigines employed cord, cloth, or giber, the spindle-whorl is found. Where they used skins for the coverings of themselves or their tents, the spindle-whorl may not be found. Thus, the Eskimo land, and among certain of the North American savages, spindle-whorls are rarely if ever found.



The spindle-whorl was equally in use in Europe and Asia during the Neolithic Age as in the Bronze Age. It continued in use among the peasants in remote and outlying districts into modern times. During the Neolithic Age its materials were stone and terra cotta; during the Bronze Age they were almost exclusively terra cotta. They are found of both materials. Recently a Gallo-Roman tomb was opened at Clermont-Ferrand and found to contain the skeleton of a young woman, and with it her spindles and whorls. (1)

The existence of spindle-whorls in distant and widely separated countries affords a certain amount of presumptive evidence of migrations of peoples from one country to another, or of contact or communication between them. If the people did not themselves migrate and settle the new country, taking the spindle-whorls and other objects with them, then the spindle-whorl itself, or the knowledge of how to make and use it, must in some other way have gotten over to the new country.

This argument of migration, contact, or communication does not rest solely on the similarity of the whorls in the distant countries, but equally on the fact of spinning thread from the fiber; and this argument is reinforced by the similarity of the operation and of the tool or machine with which it was done.

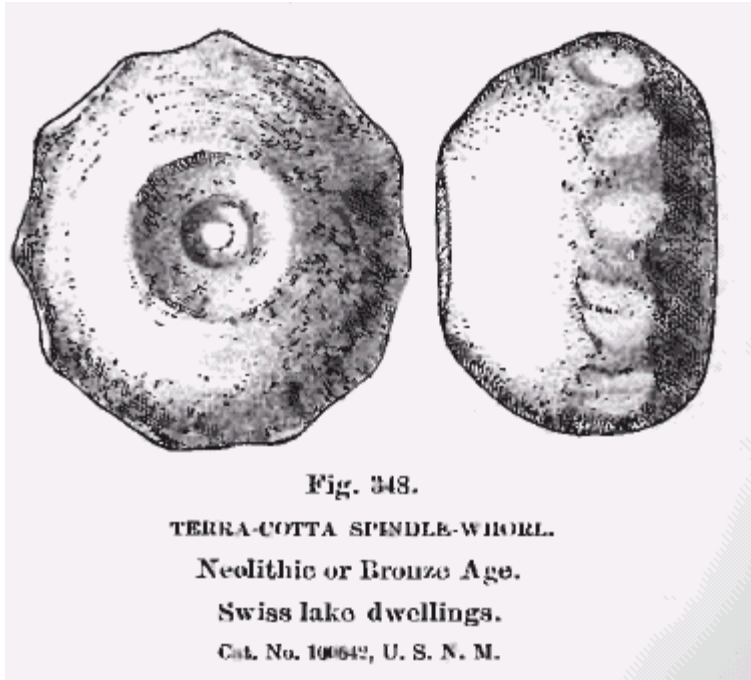


Fig. 348.

TERRA-COTTA SPINDLE-WHORL.

Neolithic or Bronze Age.

Swiss lake dwellings.

Cat. No. 100642, U. S. N. M.

It has been said elsewhere that the probability of communication between widely separated peoples by migration or contact depended for its value as evidence, in some degree, upon the correspondence or similarity of the object considered, and that this value increased with the number of items of correspondence, the closeness of similarity, the extent of the occurrence, and the difficulty of its performance. So we pass to the similarity in size, appearance, mode of manufacture, and, finally, the use of the whorls of the two continents.

Europe.

Switzerland --- Lake dwellings. --- Figs. 345 and 346 show stone spindle-whorls from prehistoric Swiss lake dwellings. These are in the U. S. National Museum, and with them are dozens of others of the same kind and style from all other parts of Europe. Fig. 347 shows a stone spindle-whorl from Lund, Sweden. It is the U. S. National Museum and was contributed by Professor Jilsson. Figs. 348, 349, and 350 represent terra-cotta spindle-whorls from the Swiss lakes. These specimens were selected to show the different patterns, to illustrate their unlikeness instead of their likeness, to give an understanding of the various kinds of whorls rather than that they were all one kind, a fact which should be kept in mind during this argument.



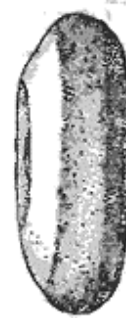
Fig. 349.

TERRA-COTTA SPINDLE-WHORL.
Neolithic or Bronze Age.
Swiss lake dwellings.
Cat. No. 100642, U. S. N. M.



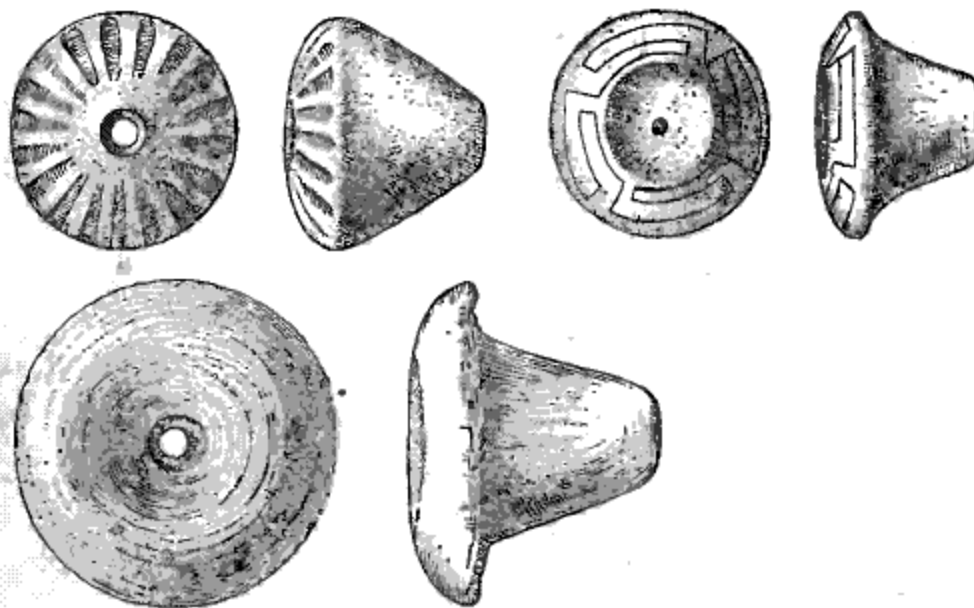
Fig. 350.

TERRA-COTTA SPINDLE-WHORL.
Swiss lake dwellings.
Cat. No. 100647, U. S. N. M.



ENDNOTES:

1. Bull. Soc. d'Anthrop., Paris, October, 1893, p. 600.

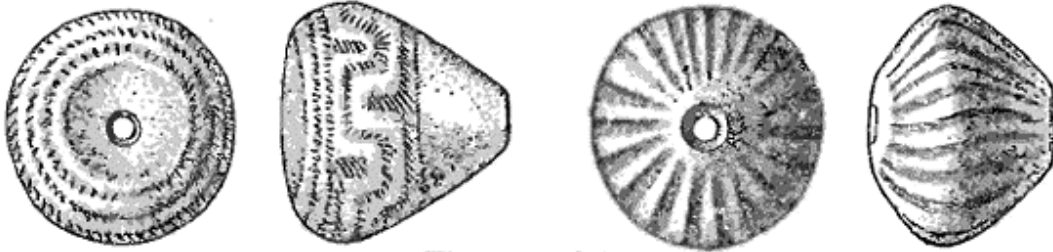


Figs. 351, 352, and 353.

PREHISTORIC TERRA-COTTA SPINDLE-WHORLS.
Orvieto, Italy.
Cat. Nos. 101671, 101672, U. S. N. M.

Italy. --- Figs. 351, 352, and 353 show terra-cotta spindle-whorls from Orvieto, Italy, 78 miles north from Rome. Figs. 354 and 355 represent the different kinds. There are

thousands of these whorls found in Italy. In the Archæological Exposition at Turin, 1884, the number was so great that they were twined about the columns, thereby providing a place of storage as well as a place of display.



Figs. 354 and 355.
PREHISTORIC SPINDLE-WHORLS.
Corneto, Italy.
Cat. No. 101773, U. S. N. M.

Wurtemberg. --- Dr. Charles Ran procured for, and there is now in, the U. S. National Museum a spindle ([fig. 356](#)) with its whorl which had been in use for spinning from 1860 to 1870, and which he obtained in Wurtemberg, Germany, from the woman who had used it.

France. --- The author has seen the French peasants in Brittany spinning their thread the same way, and once took a photograph of one in the hamlet of Pout-Aven, Morbihan, but it failed in development.

In 1893 Mr. Harle purchased at St. Gerons, Ardeche, a merchant's entire stock of modern porcelain spindle-whorls. The manufactory was located at Martres-Tolosane, and the trade extended throughout the Pyrences. He presented a series to the Société d'anthropologie at Paris, July, 1893. (1)



Fig. 356

MODERN SPINDLE AND
WHORL USED FOR SPIN-
NING THREAD.

Wurtemberg, Germany.

The U. S. National Museum has lately received, through the Kindness of Ecole d'Anthropologie, a series of nine of these porcelain whorls (pl. 21). The wheel and modern machines for spinning have penetrated this corner of the world and these whorls are the last emblem of an industry dating slightly after the advent of man on earth and already old in that locality when Roland crossed the mountain pass near there and sounded his "Oliphant," calling for help from Charlemagne. These are the death chant of the industry of hand spinning in that country.

North America --- Pre-Columbian Times.

The North American Indians employed rushes and animal skins as the principal coverings for themselves and their tents. They used sinews and thongs for thread and cord, and thus avoided largely the necessity for spinning fiber or making textiles; for these or possibly other reasons, we find few spindle-whorls among them compared with the number found in Europe. Yet the North American Indians made and used textile fabrics, and there are pieces of woven cloth from mounds in Ohio now in the Department of Prehistoric Anthropology, U. S. National Museum. The Pueblo Indians spun thread and wove cloth in pre-Columbian times, and those within the States of Colorado and Utah and the adjoining Territories of Arizona and New Mexico, particularly the Navajoes, have been long noted for their excellence in producing textile fabrics. Specimens of their looms and thread are on display in the National Museum and have been published in the reports. Special attention is called to that by Dr. Washington Matthews in the Third Annual Report of the Bureau of Ethnology, 1881-82. Dr. Matthews is of the opinion that the work of the Pueblo Indians antedated that of the Navajoes, that the latter learned the art from the former since the advent of the Spaniards; and he remarks that the pupils now excel their masters in the beauty and quality of their work. He declares that the art of weaving has been carried to greater perfection among the Navajoes than among any native tribe in America north of the Mexican boundary; while with none in the entire continent has it been less influenced by contact with Europeans.

ENDNOTES:

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1. Bull. Soc. d'Anthrop., Paris, pp. 461-462.

The superiority of the Navajo to the Pueblo work results not only from a constant advance of the weavers' art among the former, but from a deterioration of it among the latter. This deterioration among the Pueblo Indians he attributes to their contact with the whites, their inclination being to purchase rather than to make woven fabrics, while these influences seem not to have affected the Navajoes.

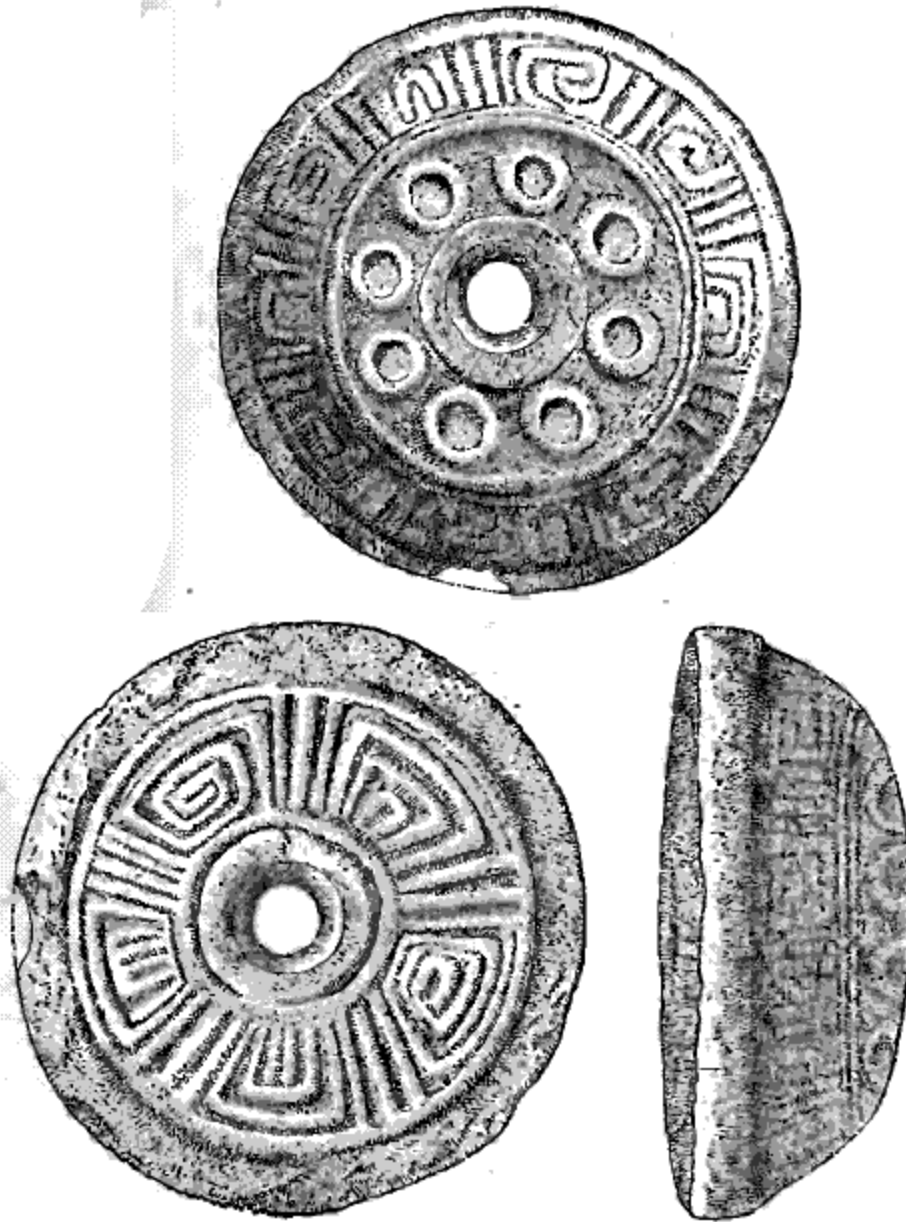


Fig. 357.

TERRA-COTTA SPINDLE-WHORL WITH DESIGN SIMILAR TO SWASTIKA.

Valley of Mexico.

Cat. No. 97875, U. S. N. M.

He represents a Navajo woman spinning (see [pl. 22](#) of the present paper). She is seated, and apparently whorls the spindle by rubbing it on her leg. The spindle is of wood, as are all other spindles, but the whorl is also of wood. In this these people are peculiar and perhaps unique. The whorl, among most other savage or prehistoric peoples, as we have already seen, was of stone or clay. These wooden whorls are thinner and larger, but otherwise they are the same. An inspection of the plate will show that with it the spinning apparatus forms the same machine, accomplishes the same purpose, and does it in the

same way. The sole difference is in the size and material of the whorl. The difference in material accounts for the difference in size. It is not improbable that the Indian discovered that the wooden whorl would serve as well as a stone or pottery one, and that it was easier made. The machine in the hands of the woman, as shown in the figure, is larger than usual, which may be accounted for by the thread of wool fiber used by the Navajo being thicker and occupying been discovered that a large whorl of wood served their purpose better than a small one of stone. Stone whorls of large size might be too heavy. Thus may be explained the change from small stone or pottery whorls to large wooden ones.

Mexico. --- Fig. 357 represents the two sides and edge of a potter terra-cotta spindle-whorl. It is the largest of the series of six (Cat. Nos. 27875-27880) from the valley of Mexico, sent to the U. S. National Museum by the Mexican National Museum in 1877. Fig. 358 also represents one of a series from Mexico, obtained by W. W. Blake, July, 1886 (Cat. Nos. 99051-99059). The National Museum possesses hundreds of these from Mexico, as well as the small ones from Peru.

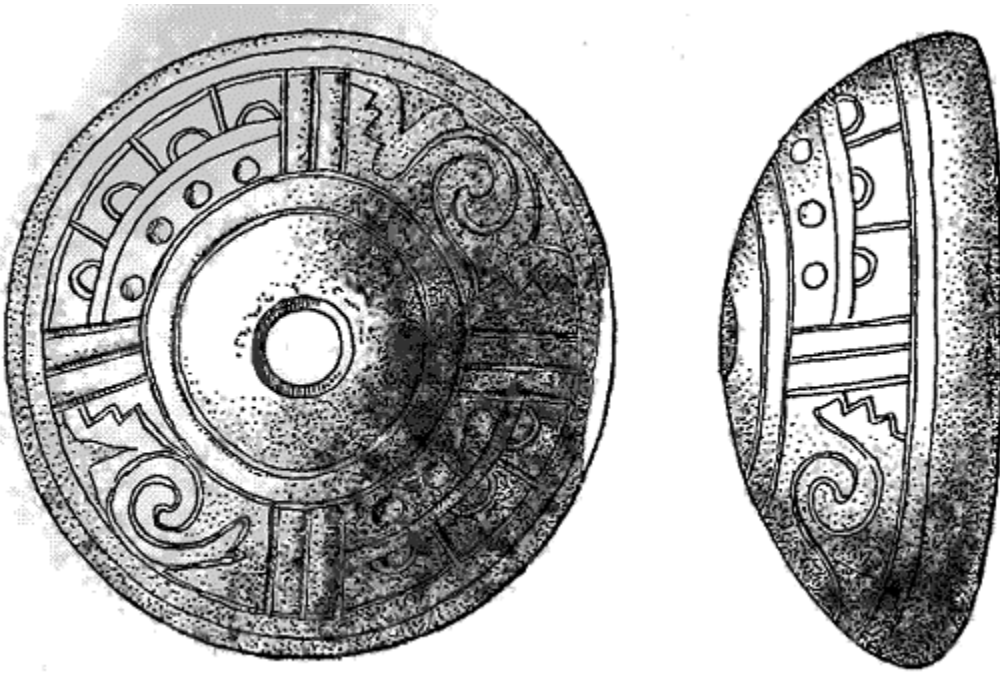
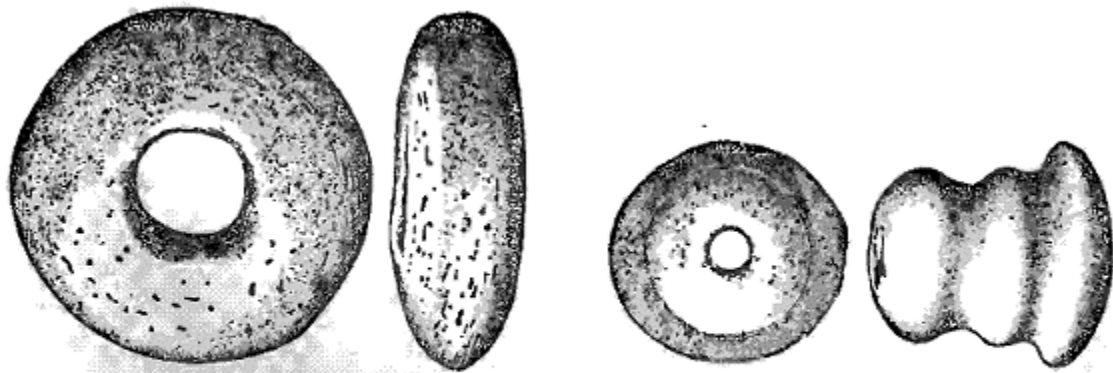


Fig. 358.

MEXICAN TERRA-COTTA SPINDLE-WHORL WITH DESIGN SIMILAR TO SWASTIKA.

These specimens are chosen because they are the largest and most elaborately decorated. It will be perceived at a glance how the style of decoration lends itself to the Swastika. It consists mostly of geometric figures, chief of which is the Greek fret, the labyrinth, the circle, and the volute, but as in the color stamps (pp. 946-947) there is no Swastika.



Figs. 359 and 360.

TERRA COTTA SPINDLE-WHORLS.

Omotepe Island, Nicaragua.

Cat. No. 2898, 2899, U. S. N. M.

Central America.

Nicaragua. --- The specimen shown in fig. 359, from Omotepe Island, Lake Nicaragua, is one of a series of pottery spindle-whorls, bearing, however, great resemblance to those of stone. Fig. 360 shows a specimen from the same locality. It is of pottery and bears much resemblance in form to the earliest whorls found by Schliemann on the site of Troy on the hill of Hissarlik. Both these were collected by Dr. J. F. Bransford, and are in the U. S. National Museum.

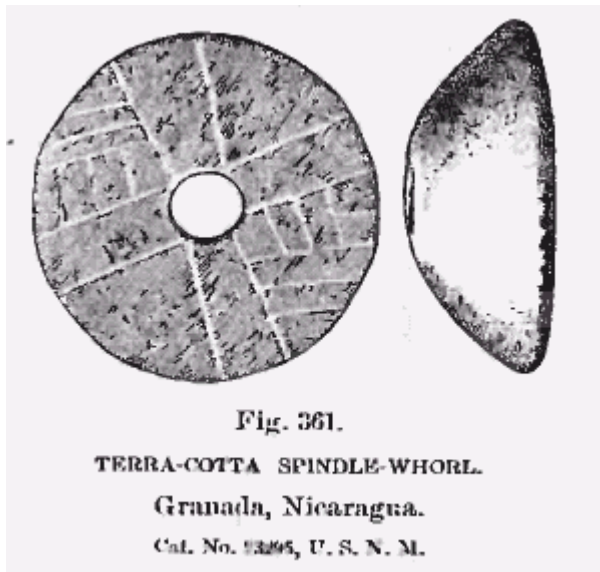


Fig. 361.

TERRA-COTTA SPINDLE-WHORL.

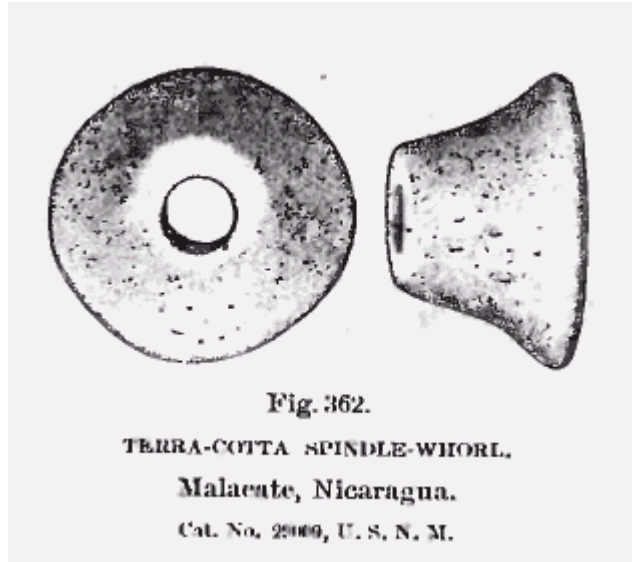
Granada, Nicaragua.

Cat. No. 53295, U. S. N. M.

Fig. 361 shows a specimen from Granada, Nicaragua. It is of the common shape of the European prehistoric spindle-whorl. Its flat surface is decorated with a Greek cross in the incised lines, two quarters of which are filled with hatch marks. Fig. 362 shows a terra-cotta spindle-whorl from Malacate, Nicaragua. It is cone-shaped. Both these specimens were collected by Dr. Earl Flint.

South America.

Chiriqui. --- Figs. 363, 364, and 365 show terra-cotta spindle-whorls from Chiriqui, the most northern territory in South America and adjoining the Isthmus of Panama. They are engraved natural size, with ornamentation similar to that on the pottery of that country.



Colombia. --- Fig. 366 shows a cone-shaped terra-cotta whorl from Manizales, Colombia, South America. It has a star-shaped design on the face and a three line zigzag or chevron pattern.

Peru. --- Plate 23 represents a series of spindles and whorls from Peru. They were furnished to the U. S. National Museum by I. V. Norton, of Plainville, N. Y. The whorls were originally considered to be beads, and were without further description. The spindles were not inserted in them as at present. The spindles, as well as whorls, are exceedingly small. Some of the whorls are decorated by incised lines in the clay, and many of the spindles are decorated in the middle with paint in different colors, in lines, scrolls, and chevrons. These are the only whorls from Peru which the U. S. National Museum has, though it possesses an extensive series of the spindles, several of which still have the spun thread wrapped upon them.

These are certain distinguishing peculiarities to be remarked when comparing the spindle-whorls from the Western Hemisphere with those from the Eastern hemisphere.

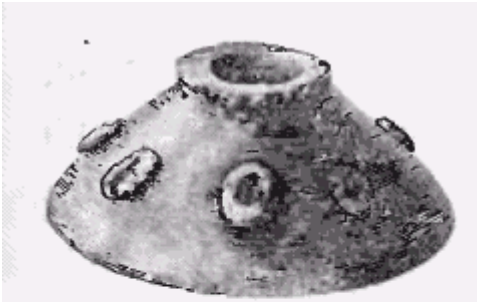


Fig. 363.

SPINDLE-WHORL MADE OF GRAY
CLAY AND DECORATED WITH
ANNULAR NODES.

Chiriqui

Sixth Annual Report of the Bureau of Eth-
nology, fig. 218.



Fig. 364.

SPINDLE-WHORL OF GRAY CLAY WITH
FIGURES OF ANIMALS.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology,
fig. 219.



Fig. 365.

SPINDLE-WHORL OF DARK CLAY WITH PERFORATIONS AND INCISED ORNAMENTS.

Chiriqui.

Sixth Annual Report of the Bureau of Ethnology,
fig. 290.

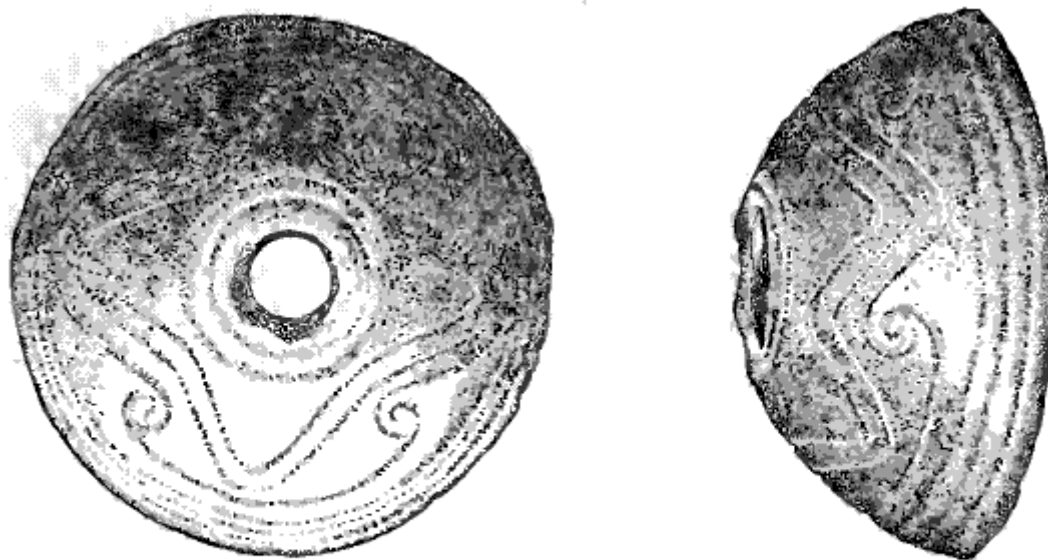


Fig. 366.

TERRA-COTTA SPINDLE-WHORL.

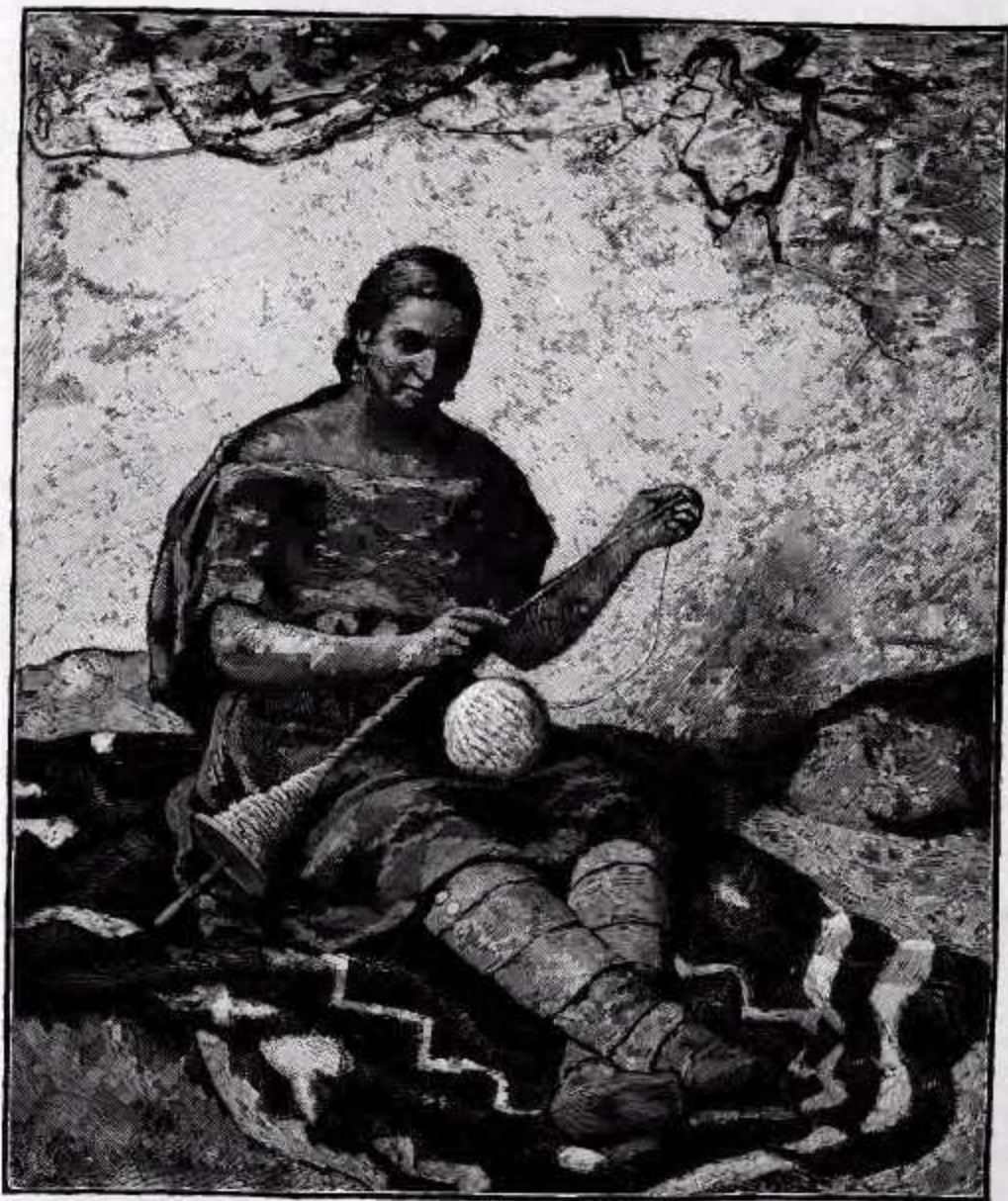
Manizales, Colombia.

Cat. No. 16438, U. S. N. M.



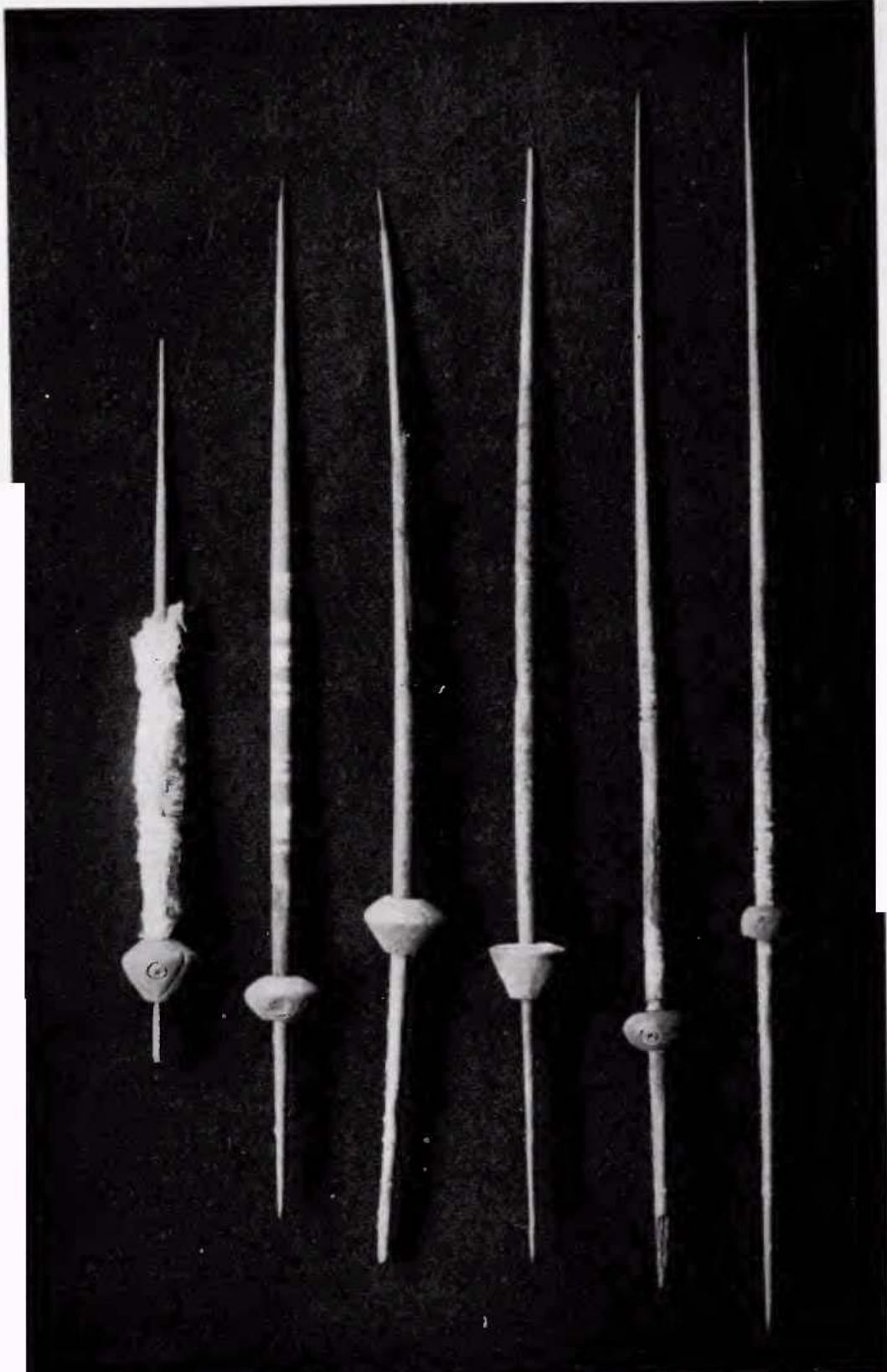


SPINDLE-WHORLS OF MODERN PORCELAIN FROM SOUTHERN FRANCE.
Cat. No. 160098, U. S. N. M.



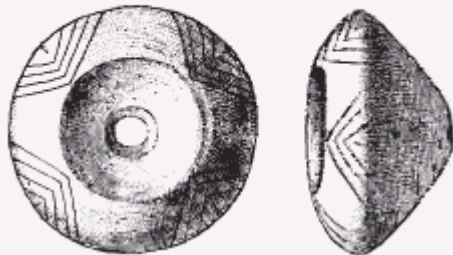
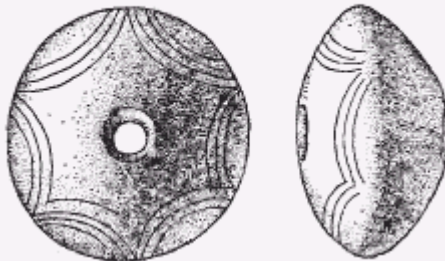
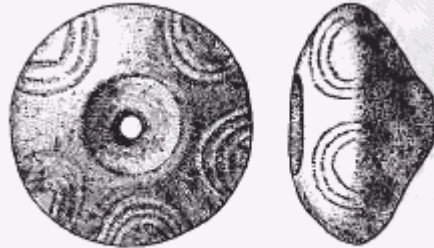
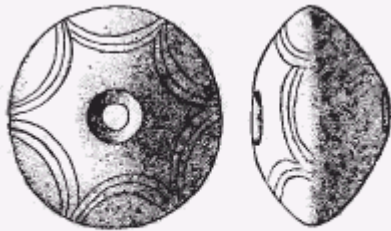
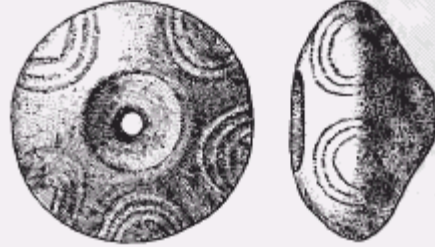
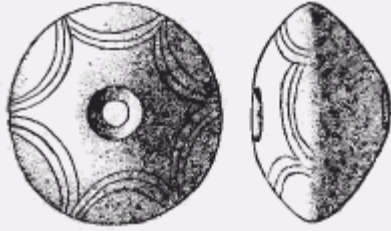
NAVAJO WOMAN USING SPINDLE AND WHORL.

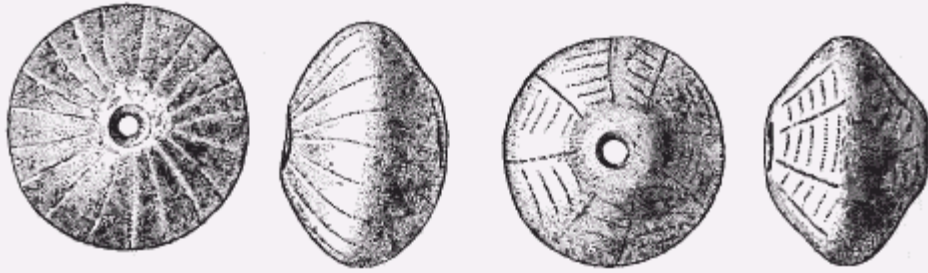
Dr. Washington Matthews, Third Annual Report of the Bureau of Ethnology, 1881-82, Pl. xxxiv.



There is greater diversity in size, form and decoration in the American than in the European whorls. A series of European whorls from any given locality will afford a fair representation of those from almost every other locality. But it is different with the American specimens. Each section in America has a different style, not only different from the European specimens, but different from those of neighboring sections. Among the eighteen thousand whorls found by Dr. Schliemann on the hill of Hissarlik, there is scarcely one so large as those here shown from Mexico, while, on the other hand, there were only a few as small as the largest of the series from Peru. The difference in size and material in the Pueblo whorls has already been noticed. The ornamentation is also peculiar in that it adopts, not a particular style common to the utensil, but that it adopts the styles of the respective countries. The Mexican whorl has a Mexican style of ornamentation, etc. the Nicaragua specimens resemble the European more than any other from America in their forms and the almost entire absence of decoration.

The foregoing are the differences; but with all the number and extent of these differences the fact remains that the whorls of the two hemispheres as to be the same invention. The whorls, when put upon their spindles, form the same machine in both countries. They were intended for and they accomplish the same purpose, and the method of their performance is practically the same. While the similarity of the art of spinning and the mechanism (*i. e.*, the spindle and whorl) by which it is accomplished may not prove conclusively that it migrated from Eastern Hemisphere, nor yet show positive connection of communication between the two peoples, it goes a long way toward establishing such migration or communication. The similarity in the art and its mechanism appears to the author to show such resemblance with the like culture in the Eastern Hemisphere, and is so harmonious with the theory of migration or contact or communication, that if there shall be other objects found which either by their number or condition would prove to be a well-authenticated instance of migration from or contact or communication between the countries, the evidence of the similarity of the spindle-whorls would form a valuable addition to and largely increase the evidence to establish the main fact. Until that piece of well-authenticated evidence has been obtained, the question must, so far as concerns spindle-whorls, remain only a probability. The differences between them are of manner, and not of matter; in size and degree, but not in kind, and are not other or greater than might easily arise from local adaptation of an imported invention. Compare the Navajo spindle (pl. 22) with that from Wurtemberg, Germany (fig. 356), and these with the spindles and whorls from Peru (pl. 23). These facts are entirely in harmony with the possibility that the spindle and whorl, as a machine for spinning, was a single invention, and that its slight differentiations resulted from its employment by different peoples --- the result of its intertribal migrations. For purposes of comparison, and to show the similarity of these objects in Europe, the author has introduced a series of spindle-whorls from Troy, Hissarlik (pls. 24 and 25). These belong to the U. S. National Museum, and form part of the valuable collection from Mme. Schliemann, the gift by her talented husband to the people of the United States as a token of is remembrance and grateful feelings toward them.



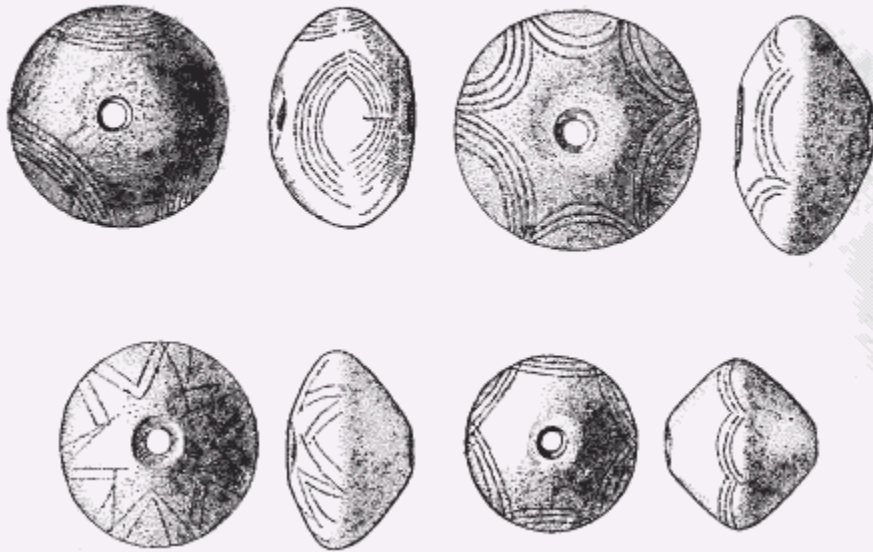


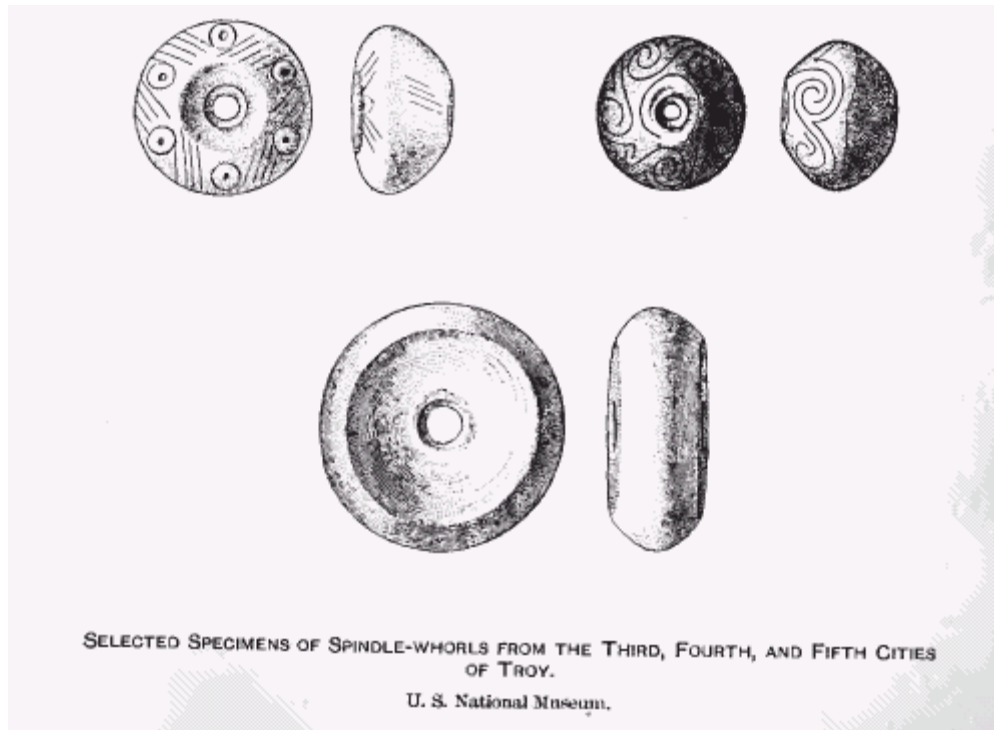
SELECTED SPECIMENS OF SPINDLE-WHORLS FROM THE THIRD, FOURTH, AND FIFTH CITIES OF TROY.

U. S. National Museum.

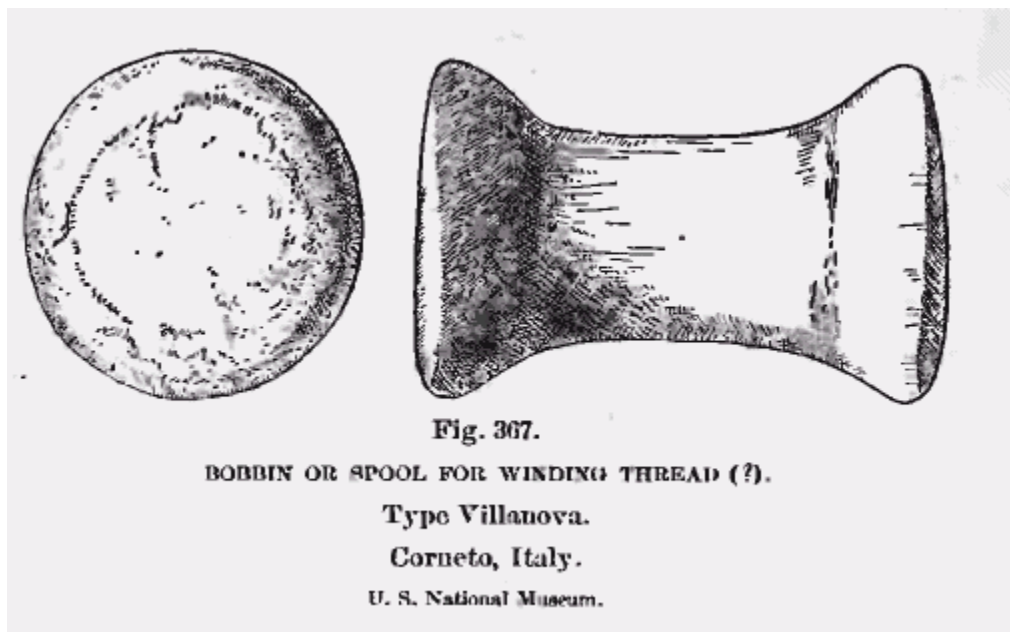
Report of National Museum, 1894.—Wilson.

PLATE 25.



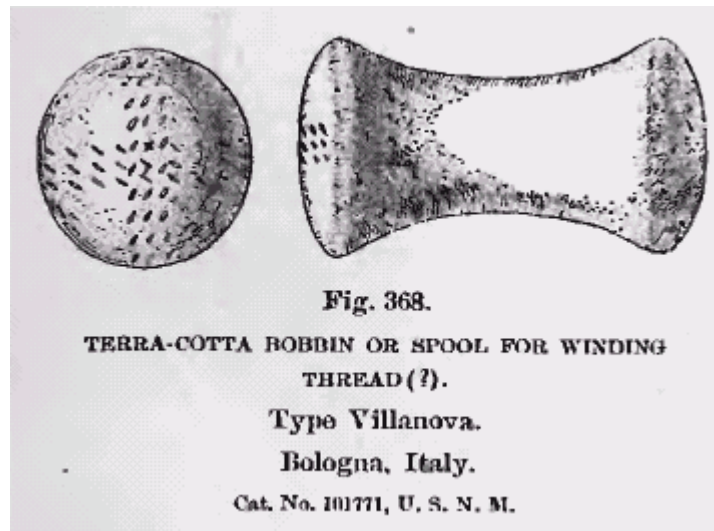


Bobbins.

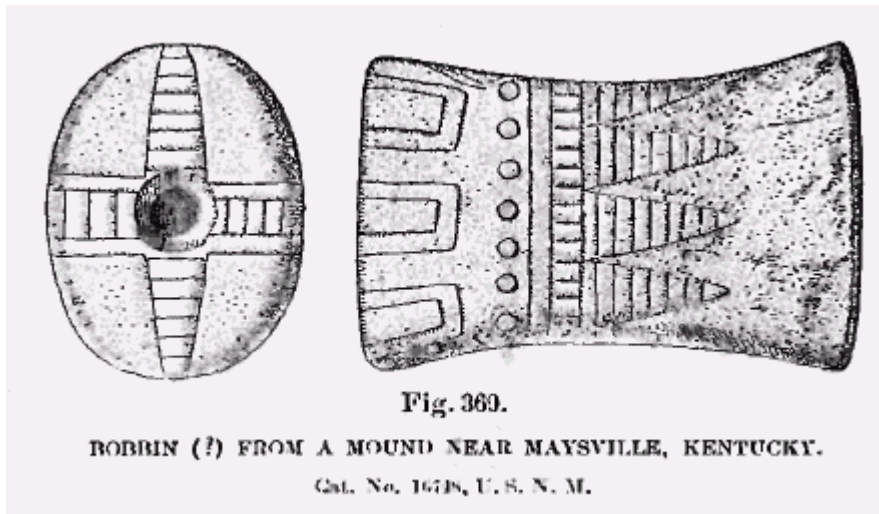


Europe.

We have already seen how an increase in the number of correspondences between objects from distant countries increases the weight of their evidence in favor of contact or communication between the peoples. If it should be found upon comparison that the bobbins on which thread is to be wound, as well as the spindle-whorls with which it is made, had been in use during prehistoric times in the two hemispheres, it would add to the evidence of contact or communication. The U. S. National Museum possesses a series of these bobbins, as they are believed to have been, running from large to small, comprising about one dozen specimens from Italy, one from Corneto and the others from Bologna, in which places many prehistoric spindle whorls have been found (figs. 367 and 368).



These are of type Villanova. The end as well as the side view is represented. The former is one of the largest, the latter of middle size, with others smaller forming a graduating series. The latter is engraved on the end by dotted incisions in three parallel lines arranged in the form of the Swastika on its end (fig. 193). (1) It was found by Count Gozzadini and forms part of his collection in Bologna.

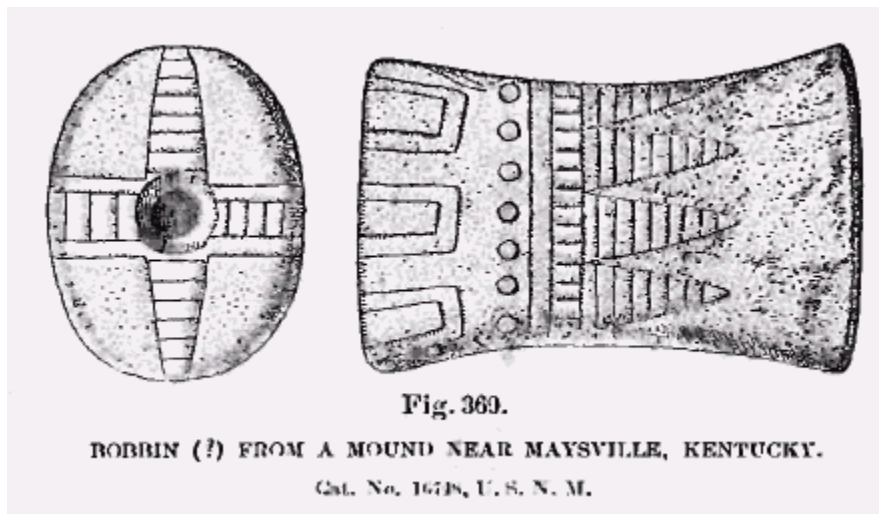


United States.

The three following figures represent clay and stone bobbins, all from the State of Kentucky. [Fig. 369](#) shows a bobbin elaborately decorated, from a mound near Maysville, Ky.

ENDNOTES:

1. De Mortillet, "Musée Préhistorique," fig. 1239.



It has a hole drilled longitudinally through the center. The end shows a cross of the Greek form with this hole in the center of the cross. Fig. 370 shows a similar object from Lexington, Ky., sent by the Kentucky University. It is of fine-grained sandstone, is drilled longitudinally through the center and decorated as shown. The end view shows a series of concentric circles with rows of dots in the intervals.

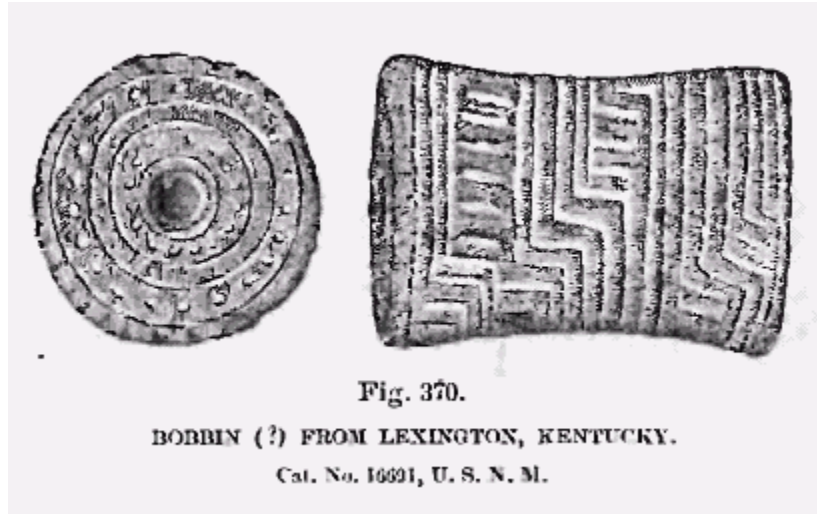
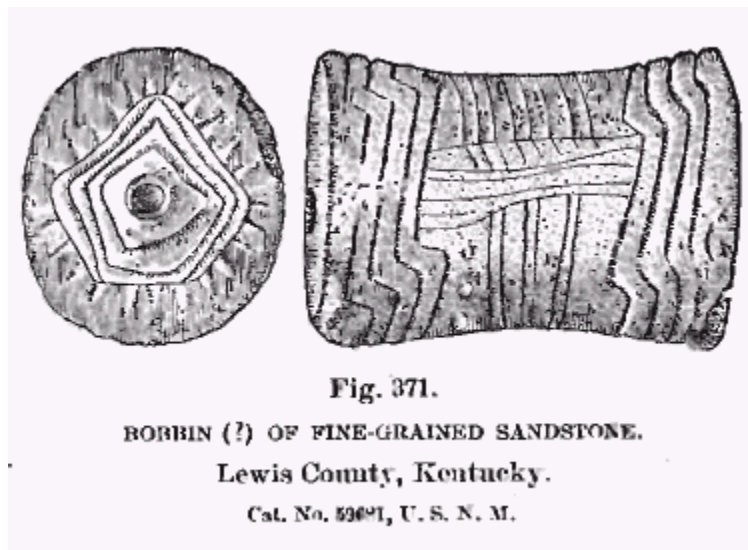
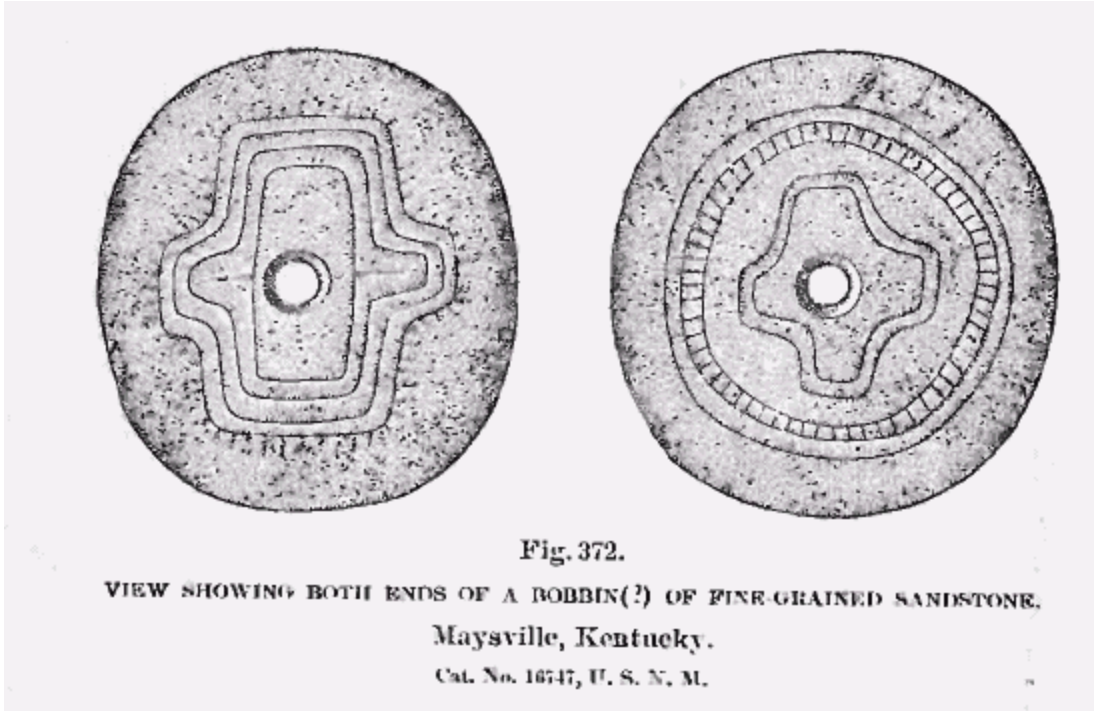


Fig. 371 shows a similar object of fine-grained sandstone from Lewis County, Ky. It is also drilled longitudinally, and is decorated with rows of zigzag lines as shown. The end view represents four consecutive pentagons laid one on top of the other, which increase in size as they go outward, the hole through the bobbin being in the center of these pentagons, while the outside line is decorated with spikes or rays extending to the periphery of the bobbin, all of which is said to represent the sun.



The specimen shown in fig. 372, of fine-grained sandstone, is from Maysville, Ky. the two ends are here represented because of the peculiarity of the decoration. In the center is a hole, next to it is a rude form of Greek cross which on one end is repeated as it goes farther from the center; on the other, the decoration consists of three concentric circles, one interval of which is divided by radiating lines at regular intervals, each forming a rectangle. Between the outer lines and the periphery are four radiating rays which, if completed all around, might form a sun symbol. Bobbins of clay have been lately discovered in Florida by Mr. Clarence B. Moore and noted by Professor Holmes.



Thus we find some of the same objects which in Europe were made and used by prehistoric man and which bore the Swastika mark have migrated to America, also in prehistoric times, where they were put to the same use and served the same purpose. This is certainly no inconsiderable testimony in favor of the migration of the sign.



Fig. 373.

WOMAN'S WOOLEN DRESS FOUND IN AN OAK COFFIN
AT BORUM-ESHOI, DENMARK.

Bronze Age.

Report of the Smithsonian Institution (U. S. National Museum),
1892, pl. cv, fig. 2.

VIII. --- Similar Prehistoric Art, Industries, and Implements In Europe and America as Evidence of the Migration of Culture.

The prehistoric objects described in the foregoing chapter are not the only ones common to both Europe and America. Related to the spindle-whorls and bobbins is the art of weaving, and it is perfectly susceptible of demonstration that this art of weaving, and it is perfectly susceptible of demonstration that this art was practiced in the two hemisphere in prehistoric times. Woven fabrics have been found in the Swiss lake dwellings, in Scandinavia, and in nearly all parts of Europe. They belonged to the Neolithic and Bronze ages.

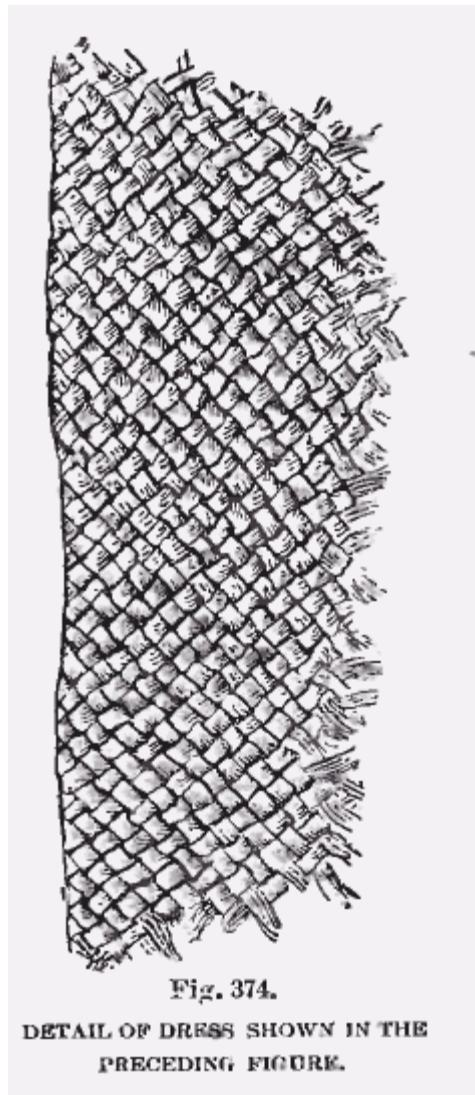
Figs. 373 and 374 illustrate textile fabrics in the Bronze Age. Both specimens are from Denmark, and the National Museum possesses another specimen (Cat. No. 136615) in all respects similar. While prehistoric looms may not have been found in Europe to be compared with the looms of modern savages in America, yet these specimens of cloth, with the hundreds of others found in the Swiss lake dwellings, afford the most indubitable proof of the use of the looms in both countries during prehistoric times.

Complementary to this, textile fabrics have been found in America, from the Pueblo country of Utah and Colorado, south through Mexico, Central and South America, and of necessity the looms with which they were made were there also. It is not meant to be said that the looms of the two hemispheres have been found, or that they or the textile fabrics are identical. The prehistoric looms have not been found in Europe to be compared with the looms of modern savages in America, yet these specimens of cloth, with the hundreds of others found in the Swiss lake dwellings, afford the most indubitable proof of the use of the looms in both countries during prehistoric times.

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ENDNOTES:

H. Mis. 90, pt 2-----62



The prehistoric looms have not been found in Europe, and those in Merica may have been affected by contact with the white man. Nor is it meant to be said that the textile fabrics of the two hemispheres are alike in thread, stitch, or pattern. But these at best are only details. The great fact remains that the prehistoric man of the two hemispheres had the knowledge to spin fiber into thread, to wind it on bobbins, and to weave it into fabrics; and whatever differences there may have been in pattern, thread, or cloth, they were finally and substantially the same art, and so are likely to have been the product of the same invention.

While it is not the intention to continue this examination among the prehistoric objects of the two hemispheres in order to show their similarity and thus prove migration, contact, or communication, yet it may be well to mention some of them, leaving the argument or proof to a future occasion.

The polished stone hatchets of the two hemispheres are substantially the same. There are differences of material, of course, for in each country the workman was obliged to use such material as was obtainable. There are differences in form between the polished stone hatchets of the two hemispheres, but so there are differences between different localities in the same hemisphere.

Scrapers have also been found in both hemispheres and in all ages. There are the same differences in material, form, and appearance as in the polished stone hatchet. There is one difference to be mentioned of this utensil --- *i. e.*, in America the scraper has been sometimes made with a stem and with notches near the base, after the manner of arrow and spear-heads, evidently intended to aid, as in the arrow and spearhead, in fastening the tool in its handle. This peculiarity is not found in Europe, or, if found, is extremely rare. It is considered that this may have been caused by the use of a broken arrow or spearhead, which seems not to have been done in Europe. But this is still only a difference in detail, a difference alight and insignificant, one which occurs seldom and apparently growing out of peculiar and fortuitous conditions.

The art of drilling in stone was known over an extended area in prehistoric times, and we find innumerable examples which must have been performed in both hemispheres substantially in the same manner and with the same machine.

The art of sawing stone was alike practiced during prehistoric times in the two hemispheres. Many specimens have been found in the prehistoric deposits of both.

The aboriginal art of making pottery was also carried on in the same or a similar manner in both hemispheres. The examples of this art are as numerous as the leaves on the trees. There were differences in the manipulation and treatment, but the principal fact remains that the art was the same in both countries. Not only were the products greatly similar, but the same style of geometric decoration by incised lines is common to both. Greater progress in making pottery was made in the Western than in the Eastern Hemisphere during prehistoric times.

The wheel was unknown in both hemispheres, and in both the manipulation of clay was by hand. True, in the Western Hemisphere there was greater dexterity and a greater number of methods employed. For example, the vase might be built up with clay inside a basket, which served to give both form and decoration; it was coiled, the damp clay being made in a string and so built up by a circular movement, drawing the side in or out as the string of clay was laid thereon, until it reached the top; it may have been decorated by the pressure of a textile fabric, real or simulated, into the damp clay. A few years ago it would have been true to have said that pottery decorated in this manner was peculiar to the Western Hemisphere, but Prince Pontjatine has lately found on his property, Bologoje, in the province of Novgorod, midway between Moscow and St. Petersburg, many pieces of prehistoric pottery which bear evidence of having been made in this manner, and while it may be rare in the Eastern Hemisphere, it is similar in these respects to thousands of pieces of prehistoric pottery in North America.

One of the great puzzles for archæologists has been the prehistoric jade implements found in both countries. The raw material of which these were made has never been found in sufficient quantities to justify anyone in saying that it is indigenous to one hemisphere and not to the other. But of this we have no evidence except the discovery in

both of implements made of the same material. This material is dense and hard. It is extremely difficult to work, yet the operations of sawing, drilling, carving, and polishing appear to have been conducted in both hemispheres with such similarity as that the result is practically the same.

Prehistoric flint-chipping was also carried on in both hemispheres with such similarity of results, even when performing the most difficult and delicate operations, as to convince one that there must have been some communication between the two peoples who performed them.

The bow and arrow is fairly good evidence of prehistoric migration, because of the singularities of the form and the intricacies of the machinery, and because it is probably the earliest specimen of a machine of two separate parts, by the use of which a missile could be sent at a greater distance and with greater force than if thrown by hand. It is possible that the sling was invented as early as the bow and arrow, although both were prehistoric and their origin unknown.

The bow and arrow was the greatest of all human inventions --- greatest in that it marked man's first step in mechanics, greatest in adaptation of means to the end, and as an invented machine it manifested in the most practical and marked manner the intellectual and reasoning power of man and his superiority over the brute creation. It, more than any other weapon, demonstrated the triumph of man over the brute, recognizing the limitations of human physical capacity in contests with the brute. With this machine, man first successfully made up for his deficiency in his contests with his enemies and the capture of his game. It is useless to ask anything of history about the beginnings of the bow and arrow; wherever history appears it records the prior existence, the almost universal presence, and the perfected use of the bow and arrow as a weapon. Yet this machine, so strange and curious, of such intricacy of manufacture and difficulty of successful performance, had with all its similarities and likeness extended in prehistoric times almost throughout the then inhabited globe. It is useless to specify the time, for the bow and arrow existed earlier than any time of which we know; it is useless for us to specify places, for it was in use throughout the world wherever the world was occupied by Neolithic man.

Imitative creature as was man, and slow and painful as were his steps in progress and in invention during his infancy on earth, when he knew nothing and had everything yet to learn, it is sufficiently wonderful that he should have invented the bow and arrow as a projectile machine for his weapons; but it becomes doubly and trebly improbable that he should have made duplicate and independent inventions thereof in the different hemispheres. If we are to suppose this, why should we be restricted to a separate invention for each hemisphere, and why may we not suppose that he made a separate invention for each country or each distant tribe within the hemisphere? Yet we are met with the astonishing but, nevertheless, true proposition that throughout the entire world the bow and arrow existed in the early times mentioned, and was substantially the same machine, made in the same way, and serving the same purpose.

Conclusion.

The Argument in this paper on the migration of arts or symbols, and with them peoples in prehistoric times, is not intended to be exhaustive. At best it is only suggestive.

There is no direct evidence available by which the migration of symbols, arts, or peoples in prehistoric times can be proved, because the events are beyond the pale of history. Therefore we are, everybody is, driven to the secondary evidence of the similarity of conditions and products, and we can only subject them to our reason and at last determine the truth from the probabilities. In proportion as the probabilities of migration increase, it more nearly becomes a demonstrated fact. It appears to the author that the probabilities of the migration of the Swastika to America from the Old World is infinitely greater than that it was an independent invention.

The Swastika is found in America in such widely separated places, among such different civilizations, as much separated by time as by space, that if we have to depend on the theory of separate inventions to explain its introduction into America we must also depend upon the same theory for its introduction into widely separated parts of America. The Swastika of the ancient mound builders of Ohio and Tennessee is similar in every respect, except material, to that of the modern Navajo and Pueblo Indian. Yet the Swastikas of Mississippi and Tennessee belong to the oldest civilization we know in America, while the Navajo and Pueblo Swastikas were made by men still living. A consideration of the conditions bring out these two curious facts: [1] That the Swastika had an existence in America prior to any historic knowledge we have of communication between the two hemispheres; but [2] we find it continued in America and used at the present day, while the knowledge of it had long since died out in Europe.

The author is not unaware of the new theories concerning the parallelism of human development by which it is contended that absolute uniformity of man's thoughts and actions, aims and methods, is produced when he is in the same degree of development, no matter in what country or in what epoch he lives. This theory has been pushed until it has been said, nothing but geographical environment seems to modify the monotonous sameness of man's creations. The author does not accept this theory, yet he does not here controvert it. It may be true to a certain extent, but it surely has its limitations, and it is only applicable under special conditions. As a general proposition, it might apply to races and peoples but not to individuals. If it builds on the hereditary human instincts, it does not take into account the will, energy, and reasoning powers of man. Most of all, it leaves out the egoism of man and his selfish desire for power, improvement, and happiness, and all their effects, through the individual, on human progress. In the author's opinion the progress of peoples through consecutive stages of civilization is entirely compatible with his belief that knowledge of specific objects, the uses of certain games, the possession of certain myths and traditions, and the carrying on of certain industries, passed from one country to another by migration of their peoples, or by contact of communication between them; and that the knowledge, by separate peoples, of the same things, within reasonable bounds of similarity of action and purpose, and with corresponding difficulty of performance, may well be treated as evidence of such migration, contact, or communication. Sir John Lubbock expresses the author's belief when he says, (1) "There

can be no doubt but that man originally crept over the earth's surface, little by little, year by year, just, for instance, as the weeds of Europe are now gradually but surely creeping over the surface of Australia." The word migration has been used by the author in any sense that permitted people, or any number thereof, to pass from one country to another country, or from one section of a country to another section of the same country, by any means or in any numbers as they pleased or could.

The theory (in opposition to the foregoing) is growing in the United States that any similarity of culture between the two hemispheres is held to be proof of migration of peoples. It appears to the author that these schools both run to excess in propagating their respective theories, and that the true condition of affairs lies midway between them. That is to say, there was certain communication between the two hemispheres, as indicated by the similarities in culture and industry, the objects of which could scarcely have been the result of independent invention; while there are too many dissimilar arts, habits, customs, and modes of life belonging to one hemisphere only, not common to them. These dissimilarities were inventions of each hemisphere independent of the other.

An illustration of the migration to America in the culture of Greece. We know that Greek art and architecture enter into and form an important part of the culture of Americans of the present day; yet the people of America are not Greek, nor do they possess any considerable share of Greek culture or civilization. They have none of the blood of the Greeks, nor their physical traits, nor their manners, habits, customs, dress, religion, nor, indeed, anything except their sculpture and architecture. Now, there was undoubtedly communication between the two countries in so far as pertains to art and architecture; but it is equally true that there has been no migration of the other elements of civilization mentioned.

The same thing may be true with regard to the migrations of prehistoric civilization. There may have been communication between the countries by which such objects as the polished stone hatchet, the bow and arrow, the leaf-shaped implement, chipped arrow and spear heads, scrapers, spindle-whorls, the arts of pottery making, of weaving, of drilling and sawing stone, etc., passed from one to the other, and the same of the Swastika; yet these may all have been brought over in sporadic and isolated cases, importing simply the germ of their knowledge, leaving the industry to be independently worked out on this side. Certain manifestations of culture, dissimilar to those of the Old World, are found in America; we have the rude notched ax, the grooved ax, stemmed scraper, perforator, mortar and pestle, pipes, tubes, the ceremonial objects which are found here in such infinite varieties of shape and form, the metate, the painted pottery, etc., all of which belong to the American Indian civilization, but have no prototype in the prehistoric Old World. These things were never brought over by migration or otherwise. They are indigenous to America.

Objects common to both hemispheres exist in such number, of such infinite detail and difficulty of manufacture, that the probabilities of their migration or passage from one country to another is infinitely greater than that they were the result of independent invention. These common objects are not restricted to isolated cases. They are great in number and extensive in area. They have been the common tools and utensils such as might have belonged to every man, and no reason is known why they might not have been used by, and so represent, the millions of prehistoric individuals in either hemisphere. This great number of correspondences between the two hemispheres, and

their similarity as to means and results is good evidence of migration, contact, or communication between the peoples; while the extent to which the common industries were carried in the two continents, their delicacy and difficulty of operation, completes the proof and forces conviction.

It is not to be understood in the few foregoing illustrations that the number is thereby exhausted, or that all have been noted which are within the knowledge of the author. These have been cited as illustrative of the proposition and indicating possibilities of the argument. If a completed argument in favor of prehistoric communications should be prepared, it would present many other illustrations. These could be found, not only among the objects of industry, utensils, etc., but in the modes of manufacture and of use which, owing to their number and the extent of territory which they cover, and the difficulty of accomplishment, would add force to the argument.

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