

THE ROYAL ETHNOGRAPHICAL MUSEUM IN STOCKHOLM

ARCHÆOLOGICAL RESEARCHES

IN

COSTA RICA

BY

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I.

THE GREAT MOUND AND WALLED ENCLOSURE AT MERCEDES.

On my arrival in the beginning of May, the rainy season had already set in. The only thing to be done was to select a field somewhere along the railroad. To enter the forests with men and beasts, without a guide, in quest of fields for archaeological research, would have been a hopeless undertaking. As the most promising ground I turned to the ancient remains near the hacienda of Mercedes, where one of my native informants stated that an extensive mound and other marks of ancient habitation existed. When the railroad was being constructed, this ancient centre for Indian culture attracted attention, and several large stone idols had been removed and presented by Mr. MINOR C. KEITH to the National Museum in Washington. -

The mound is situated about 300 m. west of the Rio Novillo, an affluent of the Rio de la Reventazon, on the estate of the hacienda mentioned, at the very outskirts of the forests, which, from this spot, interrupted only by swamps and lagunas, stretch down to the Atlantic. Some twenty minutes' walk in a westerly direction brings one to another river, the Camarron, also a tributary of the Reventazon. Both rivers transmit considerable quantities of water all the year round; water, which, descending every day from the high altitudes of the Costa Rican table-land, is always cool and, as a rule, clear as crystal, except during the heaviest downpours of the rainy season. The rivers of these regions then rise to a great height, the water becomes muddy, carrying down immense masses of branches and fallen trees, both dead and living.

A thick undergrowth of bushes, creepers, and high green grass, which reached up to our shoulders, covered the whole mound and its surroundings.

Only after the »machete» and axe had done their work, and the ground had been partly cleared, could the ancient remains be more accurately observed, and measurements taken. With the help of three negroes, two Costa Rican natives, one Peruvian, and a German sailor, the work was started.

The preliminary clearings revealed a large truncated mound (*A* on the plan and Pl. 1, Fig. 1), which on three sides was surrounded by stone walls (*B*, *C*, *D* Fig. 1). The grass having been cut down at the base of the mound, a large stone figure (Pl. 3, Fig. 1) was exposed to view, lying on the ground (at *a* on the plan); close to the first, three more, badly mutilated stone-figures (at *c*, *d*, and *e*) were also to be seen.

The measurement of the almost circular, central mound gave a diameter at the base of about 30 m., at the top of 20 m., and a height of 6.5 m. Excava-

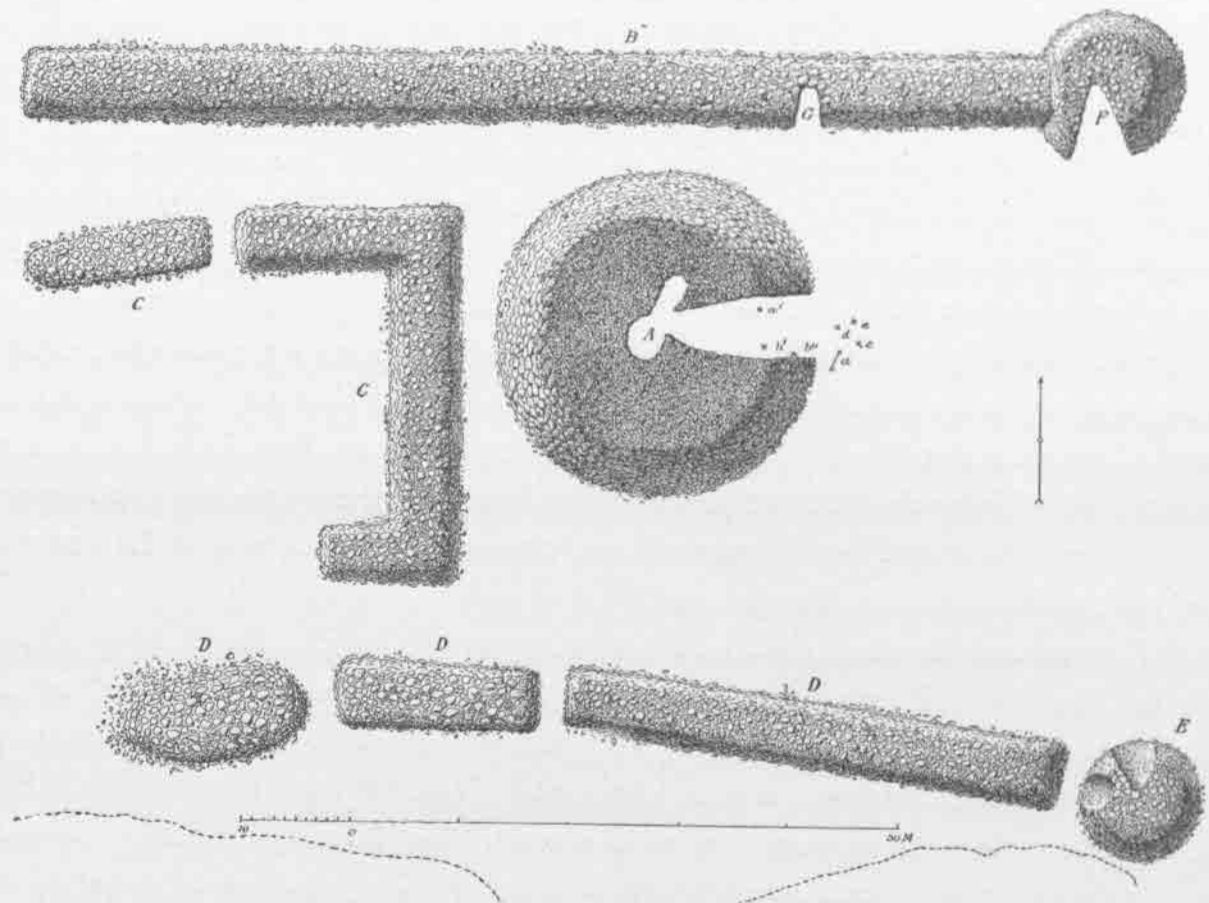


Fig. 1. Plan of the great mound and the stone walls at Mercedes.

tions were begun at this mound; the work could proceed but very slowly, as no large gang of men was obtainable, and heavy rains often interrupted the work. After the grass and a layer of soil, some 50–80 cm. thick, had been removed on the eastern slope, the spade struck a compact stone wall of oval, flat, river-worn stones, each from 30–60 cm. in length, placed in almost regular layers. These stones had evidently been selected for the purpose. This wall, of the

same height as the mound, and sloping at an angle of 50 degrees, surrounded the whole mound, being about 4 m. thick at the base. It was hard work to break through this compact mass in order to open a trench for the investigation of the interior. The second day after beginning the trench we met, on the slope of the mound, with the companion (Pl. 1, Fig. 2 and Pl. 3, Fig. 3) to the large statue at the base. This figure (at *b* on the plan) was almost covered with soil, and also mutilated. All these figures were previously known to the people living near. Judging from their present position on the slope, and at the base of the mound, it was apparent that they had originally stood on the platform of the mound. To ascertain the exact spot now seemed hopeless. But one circumstance, which I had at first considered very unfortunate, viz., the mutilation of the idols, gave the clue to determining where the two principal statues had stood. Inside the stone wall only black soil was met with, but close to the top, about 60 cm. from its surface and about 1.2 m. from the edge of the platform, the iron bar struck some heavy stones. When fully exposed to view, they proved to be a number of oblong stones, each about 1 m. long, set in a narrow square and very firmly fixed. Placed in an upright position in the centre of this socket (at *a'* on the plan) we found the broken part of the left leg of the statue (Pl. 3, Fig. 1), which was lying at the base of the mound, while 3 m. to the right of this socket, the corresponding socket (at *b'*) of the companion figure was met with, but the stones had, in this case, been partly disturbed by the fall. Only the first socket had proved absolutely firm and had kept the broken limb in its stony grip, when the unknown iconoclasts of the past desecrated the place.

Continued work on the trench, which was opened to the breadth of some 4.5 m. to the centre of the mound and from thence to both sides, revealed hardly anything but black humus containing a few scattered legs of earthenware vessels, potsherds, and broken stone implements, which had been thrown in with the soil. At about 1 m. distance from the ground, however, there was an almost continuous layer of the same kind of oval stones of which the wall was formed. Underneath this, there was again found black humus down to the bottom. Another find, for the *raison d'être* of which I could discover no explanation, was a layer of red ochreous soil, about 10 cm. thick which at the height of 4 m. above the base, passed through the mound, perhaps throughout the whole of it. Some burning had perhaps taken place here¹. The ground

¹ When, during the following year, I visited a famous burial-place, *Las Guacas* near Nicoya on the Pacific side, the laborers, who for years had excavated there, told me they had met with a similar layer of red soil running through a great portion of this cemetery.

underneath the mound was examined in several places, but the hard clay proved to be entirely intact. Interments might possibly have taken place in some other parts of the mound, but time and circumstances did not allow me to continue the seemingly fruitless task of digging through the whole mound, which, besides, would have been a very expensive undertaking.

This mound had been so constructed that the stone wall had been first built, and the interior had then been filled in with soil. The ground surrounding the whole enclosure was covered with a deep layer of black humus. When digging in this, water-worn stones of all sizes were met with in great abundance. For the wall of the mound, stones had been selected apparently only of a certain shape and size; oval, flat, and from 30—60 cm. long. The black soil had been carried in blankets, or baskets, and emptied inside the high wall. In the whole yard east of the mound not a single stone was left, and only a comparatively thin layer of humus, formed after the construction of the mound, now covered the hard, level floor. The purpose of this mound seems to have been to serve as a platform, or temple, for the large statues, which were placed with faces towards the rising sun. It is possible that the whole mound was then covered in with some kind of wooden structure with thatched roof. The flat stone walls apparently only served for enclosures. A number of rather large stones, found not far below the surface in the very centre of the mound, might possibly have served to support the main pillar of the roof.

DESCRIPTION OF THE STONE FIGURES.

a. LARGE HUMAN FIGURE (Pl. 3, Fig. 1), male, mutilated, standing with hands on hips. Height 1.8 m., breadth between the elbows 0.82 m. The head is disproportionately large. The face has a rather determined, calm expression, principally caused by the corners of the mouth being drawn down; the nose is large, with wide nostrils; the eyes oval; the ears are very large and prominent, the lobes adorned with ear-plugs. The figure is naked, except that the head is covered with a conical hat. The chest and back are crossed by two thick ropes, which pass over the shoulders and reach down to the hips. On his right wrist the figure supports a human head. The nails of the hands and feet are plainly indicated. The left leg was found standing in the socket, the stones of which reached almost to the knee of the figure.

The hat (Pl. 3, Fig. 2) of the aforementioned statue is decorated with four animal figures in bas-relief, each having a long nose, bent upwards, outstretched

tongue, and grasping with the right forefoot a queue-like extension from the vertex. Diam. of the hat about 38 cm. See Text-figure 2.

b. HUMAN FIGURE (Pl. 3, Fig. 3), male, mutilated, also standing with both hands on hips; resembles the former figure, but is somewhat larger, with heavier built trunk and limbs. Height of figure 1.85 m.; breadth between the elbows 1.07 m. The conical hat is smaller than that of the first figure, and without any ornament.

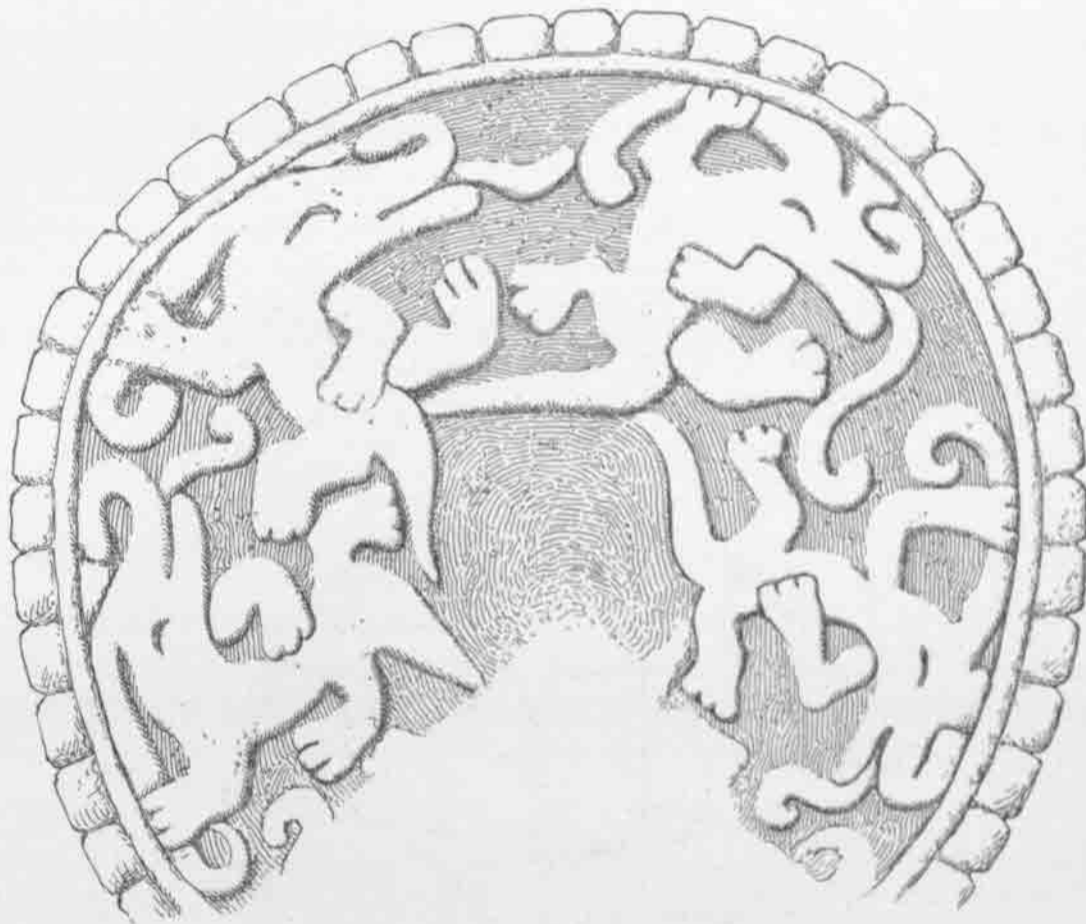


Fig 2. (1/2).

c. HUMAN FIGURE (Pl. 2, Fig. c), male, almost of natural size; legs and right arm missing; the left hand held against the chest, grasping by its plait a small female head with eyes closed, which hangs down on the shoulder of the figure. Length of the whole mutilated body 1.1 m. Height of the female head (Pl. 4, Fig. 2) 14 cm.

d. HUMAN FIGURE (Text-figure 3 and Pl. 2, Fig. d), male; head, legs, and right arm missing. The figure bears in its left hand a small human head. The limbs are decorated with double-spiral tattoo-marks, or paintings. Length of the mutilated body 0.75 m. This representation of the double-spiral ornament 1

later found painted on several clay vessels in the graves of the highland plains. Its derivation from a combination of two birds can be traced on these paintings.

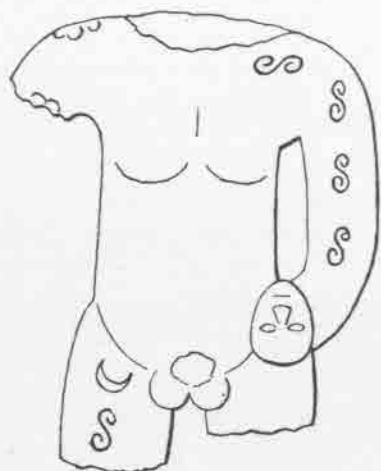


Fig. 3. ($1/15$).
From sketch in the field.

e. ALLIGATOR (Pl. 2, Fig. *e*); head missing; tail short, turned in between the legs. Length of the trunk 0.9 m.

Only the two large images (*a* and *b*) were with the kind permission of Mr. KEITH added to the collection and are now in the Museum of Stockholm; the three others were left, except the above mentioned woman's head, which, contrary to my express orders, was cut off by one of my workmen.

Leaving the large mound to be completely explored by some future investigator, I turned my attention to the smaller mound (F on the plan) at the end of the northern stone wall. This mound measured at the base about 14 m. in diam., and the truncated top about 8 m. in diam.; its height was 3.5 m. In this case also a trench was opened to the very centre, passing close to the ground.

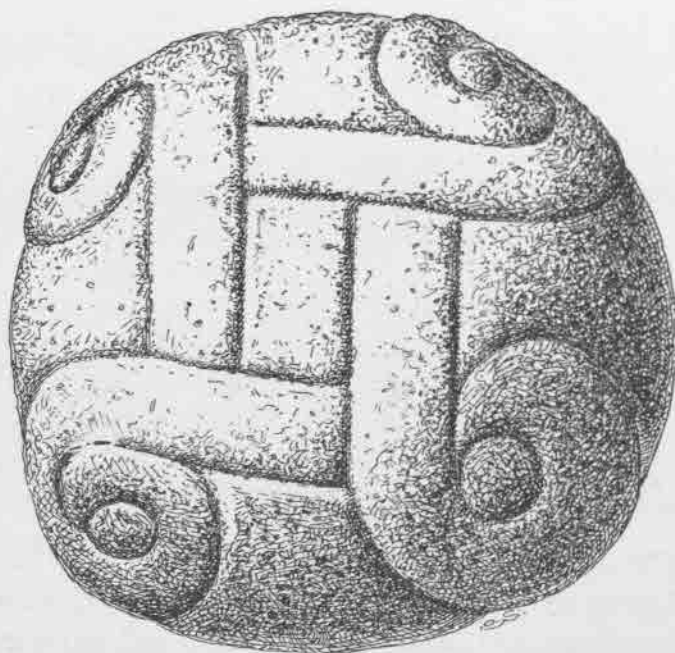


Fig. 4 ($1/4$).

This mound proved to be built entirely of stones of varying sizes. On the top of the platform an oblong water-worn, natural boulder of peculiar shape was lying. It was about 1.5 m. in length, and very heavy. Among the stones near the top we found a *human head* of stone (Pl. 4, Fig. 3), which had been broken

off from a trunk, now missing. This head, which is of almost natural size, has very prominent jaws, the teeth being clearly distinguishable, the eyeteeth very large; the vertex engraved with a characteristic ornament, a kind of swastika (Text-figure 4). Height of the head 23 cm., breadth of the face 16 cm.

The opposite mound (E) at the end of the southern wall (D) had been opened some years ago in two places; on, or near the surface of the same, two stone idols had been found and removed. This mound measured at the base some 10 m. in diam., at the top 8 m.; its height was 2.5 m., being also built entirely of stones. The last figure obtained on this spot was still lying in the mud of the pig-sty, underneath the »corps de logis» of the hacienda and was added to my collection. It is the figure of a man, with legs mutilated (Pl. 4, Fig. 1), 42 cm. high from the knee, breadth across the shoulders 22 cm. The right hand covers the lower part of the abdomen; the left is held on the back; the hair is laid in ridges; mouth protruding; ears prominent.

The material of all these figures is a very hard basalt lava, the surface of which, when long exposed to the elements, plainly shows its cellular structure.

A short trench opened to the centre of the wall (B) at the point (G) proved it to be built entirely of stones. A few small fragments of red pottery, resembling those from the central mound, were met with, scattered between the stones.

Of the smaller objects aforementioned, found scattered in the soil of the large mound, the following, being of greater interest, are reproduced among the illustrations.

a. Rubbing or grinding stone (Pl. 4, Fig. 4) of basalt lava, oblong, flat, 14 cm. in length.

b. Fragment of a rubbing stone (Pl. 4, Fig. 5).

c. Ball of stone, (Pl. 4, Fig. 6) river-worn pebble, greenstone, 9 cm. in diam.

d. Ball of stone (Pl. 4, Fig. 7), small, river-worn pebble, probably for polishing, 5 cm. in diam.

e. Polished celt of greenstone, with elliptical section; 9.5 cm. long. (Pl. 4, Fig. 8).

f. Fragment of a celt of greenstone. (Pl. 4, Fig. 9).

g. Head of a bird (parrot?) of clay, 3 cm. broad. (Pl. 4, Fig. 10).

II. GRAVES AT MERCEDES.

In the thick forest, bordering on the aforesaid enclosure, there were a number of graves which had been previously opened. The heavy stone slabs, which had covered the graves, were thrown aside, the once emptied space being now half filled with soil and dead leaves. We cleared a few of these graves without finding anything but a few fragments of broken pottery. The graves were all of the same shape — oval or rectangular — and with the walls formed by layers of flat, oval, water-worn stones. The search for any unopened grave was, for several days, in vain. The extremely luxuriant tropical vegetation which often excludes even the sunlight, hides almost everything from sight. The 'machete' but slowly opens, step by step, a narrow path to the traveller, who finds the ground covered with a thick carpet of humus and dead leaves. Therefore, as a rule, no traces of potsherds, or flakes of stone-implements, are visible on the ground. Similar finds, as is well known, in regions with a drier climate, are always the surest signs of the proximity of ancient settlements, or places of sepulture. Only after many a long search in the thorny thicket, beneath the gigantic forest trees, some graves were discovered, which had not previously been opened.

They were arranged in small groups inside a common and almost circular platform, or enclosure, usually of about half a metre in height, the slopes of which were formed of stones of various sizes. These stone borderings, however, were now to a great extent covered with soil and grass.

The following groups, or platforms were excavated and duly recorded.

Group I (Fig. 5).

At about 300 metres distance from the great mound, the first group of graves was found which had previously not been disturbed. The low platform

(Fig. 5) was situated on a somewhat elevated slope near a small creek. It was almost circular in shape, about 10 m. in diameter. The height above

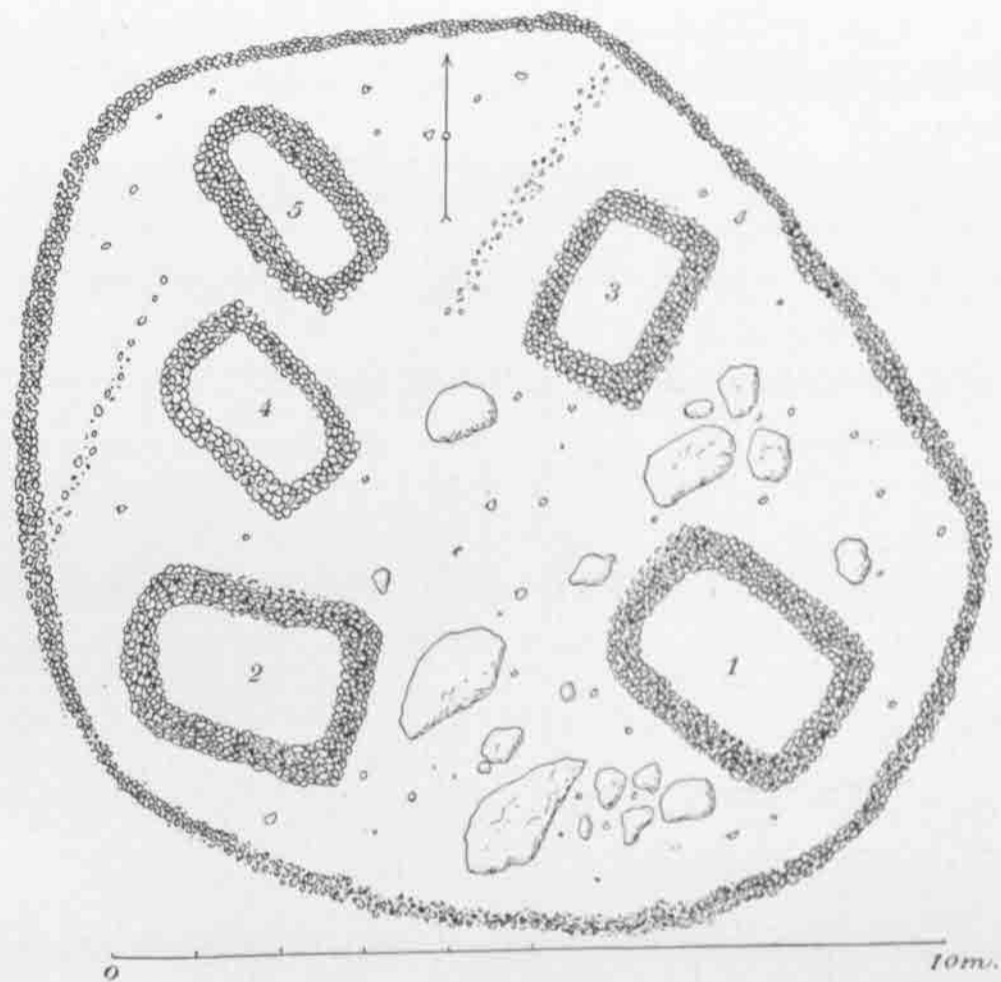


Fig. 5. Group of graves. 1. Mercedes.

the ground was on the southern and western side almost half a m.; on the other two sides it was on a level with the surrounding ground. The slop-

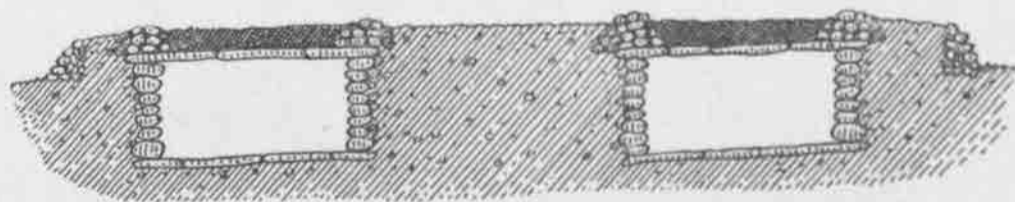


Fig. 6. Section of a platform with two graves. Mercedes.

ing sides were formed by a wall of oval, flat, water-worn stones. The surface of the ring was strewn with large and small stones of all sizes. A thick undergrowth of thorny bushes and creepers had to be cleared away before the five oblong graves could be plainly seen.

Grave I. (Figs. 7—9).

Almost rectangular bordering of stones, protruding about 10 cm. above the level of the ground. The space inside the bordering was filled with soil. Length of bordering 3 m., breadth 2.2 m. About 60 cm. below the surface, we struck

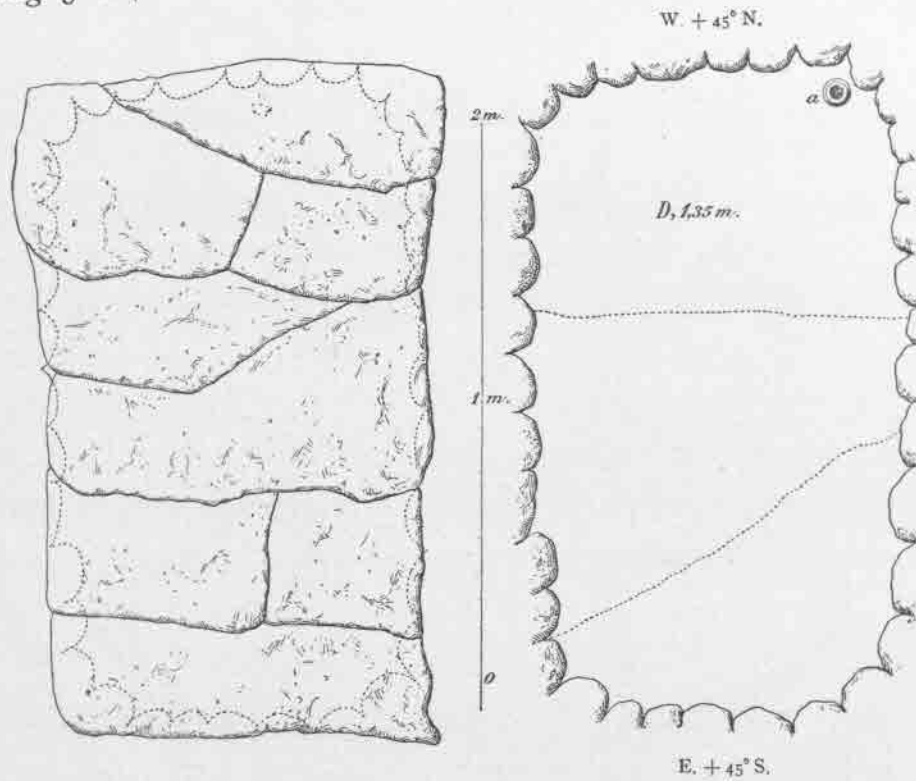


Fig. 7. Roof of Grave I.

Fig. 8. Interior of Grave I.

the roof of the grave consisting of several large slabs (Fig. 7) which closed upon each other without the use of any cement. These slabs were from 15—20

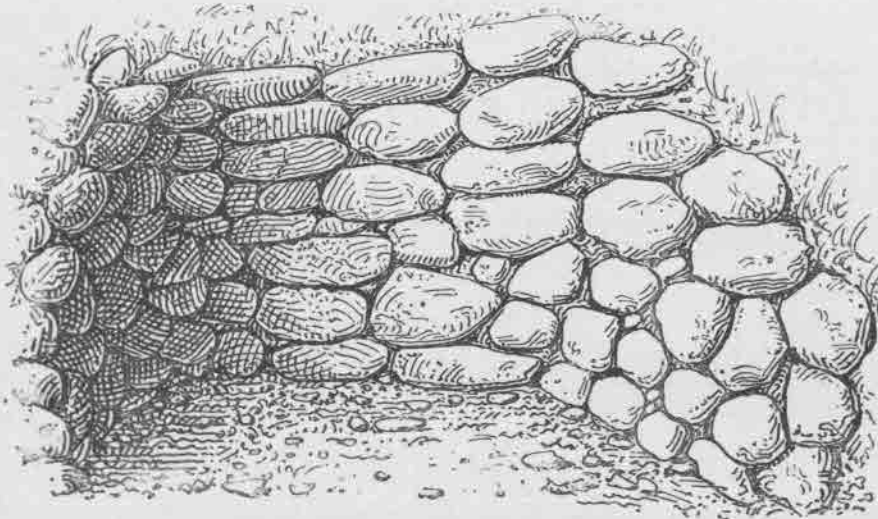


Fig. 9. Side-view of the interior of Grave I.

cm. thick. The grave (Fig. 8), seen from above, was formed by walls of flat water-worn stones, placed in more or less regular layers. These stones, as a rule,

were about 25—30 cm. long, 6—8 to 10 cm. thick. The grave was filled with loose soil, which near the bottom was of considerably darker color. Length of grave 2.25 m., breadth 1.3 m., depth 1.35 m. The bottom consisted of three large slabs of the same kind as those forming the roof. Pieces of charcoal and a few pebbles were scattered in the soil. A small earthen vessel (*a*) was found standing near the N. corner, 1.05 m. below the roof.

a. (Pl. 5, Fig. 1). Flattened globular vessel with narrow mouth; a rounded, raised ridge encircling the shoulder. The rim is almost horizontal. The ware is rather thick, painted a reddish-yellow. Height of vessel 8 cm., diameter 10 cm., do. of orifice 5 cm. Thickness of ware 1 cm.

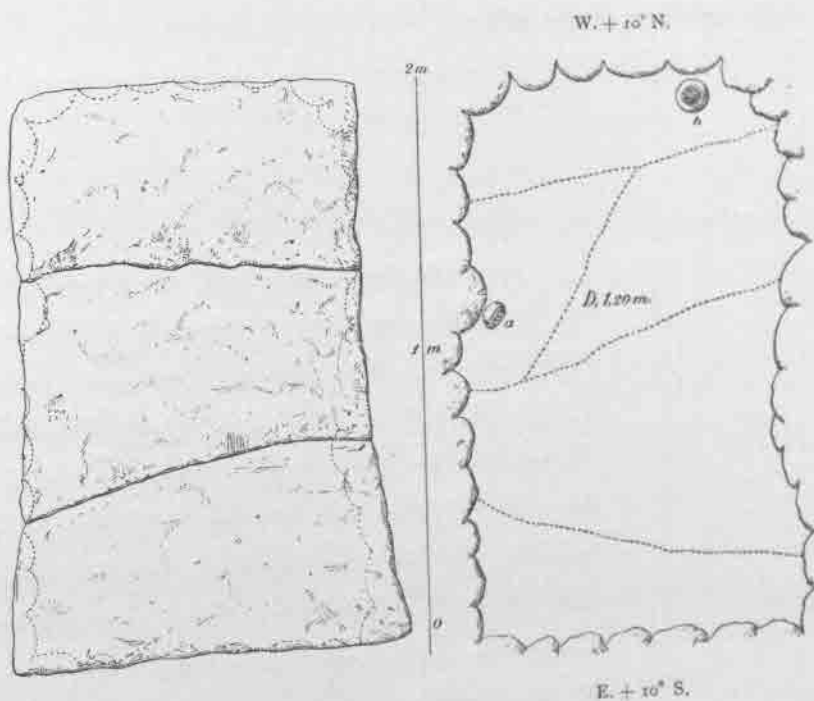


Fig. 10. Roof of Grave 2.

Fig. 11. Interior of Grave 2.

Grave 2. (Figs. 10, 11).

Rectangular bordering of stones, protruding about 15 cm. above the surface of the platform. Length of bordering 3 m., breadth 2.1 m. About 60 cm. below, the roof of the grave was struck, consisting of three large, rectangular slabs (Fig. 10), about 20 cm. thick. The uncovered grave (Fig. 11) was 2 m. in length, 1.2 m. in breadth and 1.2 m. in depth.

The walls were formed exactly in the same manner as those of Grave 1. The bottom consisted of several slabs. The grave was filled to 5 cm. below the roof with soft soil, which, near the bottom, was obviously darker and contained one small vessel (*a*), standing near the S. wall, 60 cm. below the roof, and one

somewhat larger pot (*b*) in N.W. corner close to the wall, 90 cm. below the roof. Both these vessels contained soil with traces of charcoal.

a. (Pl. 5, Fig. 2). Almost globular bowl with wide mouth and narrow, flaring rim. The bowl, of a reddish-yellow color, was covered with soot which had become almost indelible, showing that the vessel for some considerable time was used as a cooking utensil. The ware is fragile and thin, being only 0.4 cm. in thickness. Height of vessel 7.1 cm., diam. 10.3 cm.

b. (Pl. 5, Fig. 3). Almost globular, broken, very roughly manufactured vessel, with walls of varying thickness (0.3—0.6 cm.) High, flaring rim. The whole vessel was covered with soot. The clay is rather coarse. The vessel was filled with soil, which contained traces of charcoal. Height 12.6 cm., diam. 12.8 cm.

Grave 3. (Fig. 12).

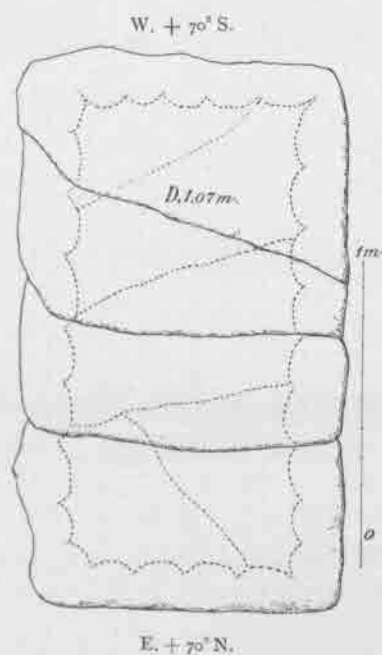


Fig. 12. Grave 3.

Rectangular bordering of stones, about 20 cm. higher than the surface of the platform. Length of bordering 2.3 m., breadth 1.65 m. The roof of the grave was met with 30 cm. below the surface and consisted of four large slabs. The grave was 1.65 m. in length, 0.8 m. in breadth, and 1.07 m. in depth. It was filled with loose soil, darker near the bottom, containing soot and small pieces of charcoal. No other contents. The bottom consisted of five slabs.

Grave 4. (Figs. 13, 14).

Almost rectangular bordering of stones widening at the N. W. end, protruding about 15 cm. above the platform. Length of bordering 2.4 m., breadth at the S. E. end 1.4 m., at the opposite end 1.6 m. At the depth of 75 cm. the roof (Fig. 13) was met with, consisting of four very large heavy slabs, about 25 cm. thick. The grave (Fig. 14) was 1.8 m. long, at the S. E. end 0.9 m. and at the opposite end 1.1 m. broad, depth 1.05 m. The bottom consisted of a number of slabs of various shapes. In the W. corner,

we found two vessels standing, the first (*a*), 65 cm., and the other (*b*), 72 cm.

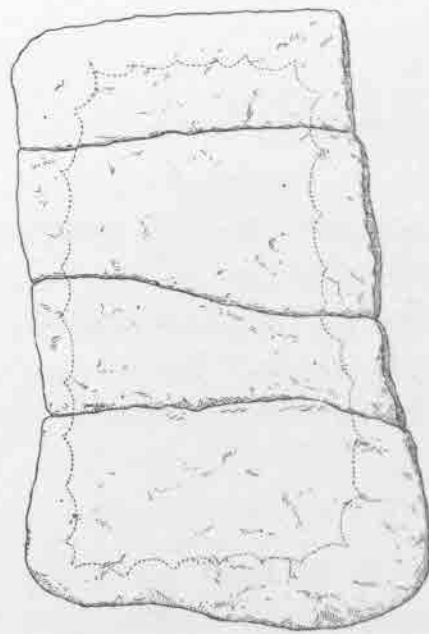


Fig. 13. Roof of Grave 4.

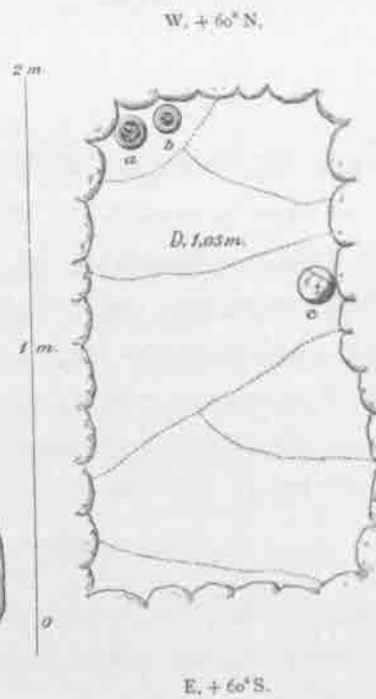


Fig. 14. Interior of Grave 4.

below the roof; close to the N. E. wall was placed a third vessel (*c*), turned upside down 45 cm. below the roof.

a. (Pl. 5, Fig. 5). Flattened globular, wide-mouthed, broken bowl of coarse clay, very roughly manufactured, without signs of a smoothing process. The whole vessel was covered with soot. Rim almost gone. Height of bowl 3.5 cm., diam. 12.8 cm., thickness about 0.5 cm.

b. (Pl. 5, Fig. 6). Flattened globular vessel with a double-twined cord encircling the shoulder. The ears are formed by two degenerate animal heads, perforated, having each three small punctate markings, representing the mouth and eyes. The color is of the same reddish-yellow as that observed in the vessels above. The whole is covered with soot. The bottom retains marks of three missing feet. The circular spots are now covered with soot, showing that the bowl, even after the loss of the feet has been used as a cooking utensil. Ware, fragile, thin. Height of vessel 7.3 cm., diam. 10.5 cm.

c. (Pl. 5, Fig. 4). Pot, almost globular, very roughly and carelessly made, with rather high rim. On the shoulder are placed at intervals five oblong nodes, ornamented with from two to three parallel rows of punctate markings. The vessel was covered with soot and shows only traces of the red-yellowish

paint. It was filled with soil, containing fragments of charred corn-cobs. Height of vessel 11.2 cm., diam. 13.5 cm., diam. of the mouth 8.5 cm.

Grave 5. (Figs. 15, 16).

Almost oblong bordering of stones protruding 20 cm. above the surface of the platform. Length of bordering 2.55 m., breadth about 1.4 m. About 60 cm. below the surface, the roof (Fig. 15), was met with, composed of several large slabs of various shapes, partly overlapping each other; thickness as usual. The grave (Fig. 16) was 1.8 m. in length, 1.05 m. in breadth at the S. E., and 0.75 m. at the opposite end; depth 1.35 m. The bottom consisted of

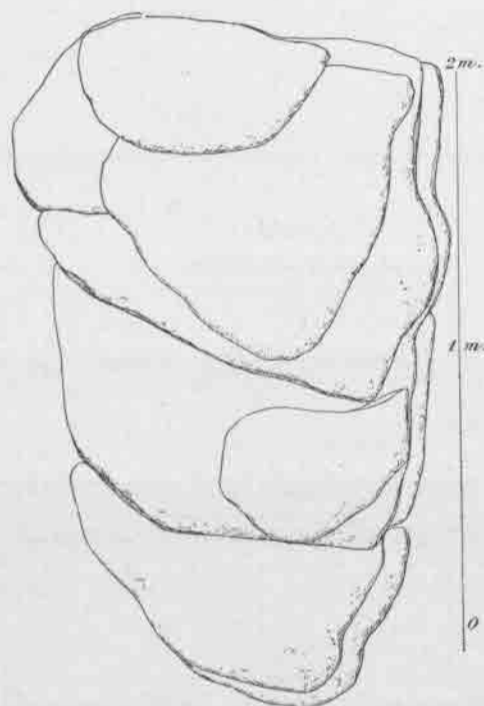


Fig. 15. Roof of Grave 5.

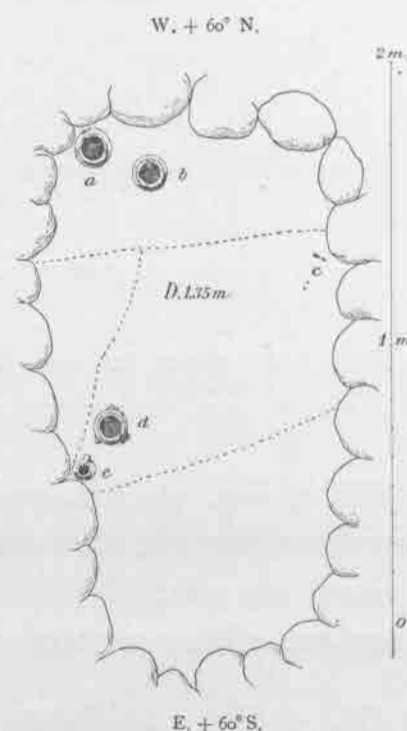


Fig. 16. Interior of Grave 5.

four slabs. In the W. corner, close to the wall, 90 cm. below the roof, we found a bowl, *a*, (Pl. 5, Fig. 10) and at 24 cm. distance from the S. E. end, at the same depth, another vessel *b*, (Pl. 5, Fig. 9). Close to the latter a few very small fragments of bone in almost meal-like condition were traceable. At 6 cm. distance from the N. E. wall, at *c*, 84 cm. below the roof, an oblong bead of blue glass, broken into pieces (Pl. 5, Fig. 7) was found. At 20 cm. distance from the S. W. wall, 75 cm. below the roof, stood a tripod vase, *d*, (Pl. 5, Fig. 8) and close to the same, but 12 cm. deeper, a small jar, *e*, (Pl. 5, Fig. 11). At the depth of about 90 cm. we distinguished an obviously darker layer of soil, containing traces of bone and reaching to the bottom. The grave was filled

to the roof with soil at the S. E. end, but from about the middle of the grave, under the roof, there was an open space 8—10 cm. high towards the other end.

a. Flattened globular, wide-mouthed bowl (Pl. 5, Fig. 10), ornamented on the shoulder with four semicircular fillets, each having a double row of punctate markings. One of these fillets is turned upside down. Between the fillets there are rectangular fields, ornamented by scratching. One of these rectangular fields contains two crosses; the other is intersected by irregular lines. Vessel covered with soot. Color originally reddish. Height 9 cm., diam. 13.5 cm.

b. Globular vessel (Pl. 5, Fig. 9) with rather wide mouth and flaring rim, somewhat damaged. This vessel, of the same color as the last, is also covered with soot. The soil in the vessel contained traces of charred corn. Height 12 cm., diam. 12.6 cm., thickness about 0.5 cm.

c. Oblong, broken bead (Pl. 5, Fig. 7) of bluish-green glass, more than 4.5 cm. long, (central part missing) of a quadratic section, each side measuring 0.6 cm. Both ends have the four corners ground off, thus showing small, triangular facets. This bead consists of three different layers: first a rather thick central tube or hollow rod of light-green color, then a thin layer of opaque white, and last, a somewhat thicker of bluish-green color, forming the surface.

This bead undoubtedly belongs to the »Millefiori» beads (misnamed Aggry beads)¹, although simpler in appearance and construction than the so-called »normal» forms, where the layers are stellated. Later on I discovered a number of this kind in a grave at Orosi in the highlands.

The once important industry of »Millefiori» beads flourished in Venice during the latter part of the 15:th century and from this city the artistic products of manufacture were distributed to various parts of the globe. The archaeologists know at least the normal forms from finds in several European countries, from Egypt and Nubia, from the two Americas, and islands near New Guinea.

The simple form represented by the specimen found at Mercedes has also been discovered in Nicaragua, by Dr. E. FLINT. The Peabody Arch. Museum now owns these specimens, labelled »Dead Man's Island, Lake Nicaragua, found during the year 1883 in a jar, in a burial place, surrounded by stones». Identical beads have also been found in Indian graves in various parts of the United States.

¹ TISCHLER, M. O. Ueber Aggry-Perlen und die Herstellung farbiger Gläser im Alterthums. — Sitz. Ber. d. Phys. oekon. Ges. zu Königsberg 1886, p. 5—15: — See also Congr. intern. des Americanistes à Berlin 1888, p. 97—104.

d. Tripod vase (Pl. 5, Fig. 8) with flaring rim and two handles in the shape of very degenerate animal heads. Below the rim are two encircling lines of punctate markings, the margin of the rim itself being ornamented with vertical impressions. The legs are hollow and have the form of grotesque animal figures. Each leg has a vertical slit underneath and contains a small ball of hard clay, which rattles when the vessel is shaken. The color is reddish-brown. The vessel shows no signs of having been used for cooking. Height 9.7 cm., diam. 12 cm.

e. Globular jar (Pl. 5, Fig. 11), with narrow neck; rim almost upright vertical handle on the shoulder. Traces of soot outside. Color, reddish-brown. Height 9 cm., diam. 8.6 cm., diam. of the aperture 3.5 cm.

Group II. (Fig. 17).

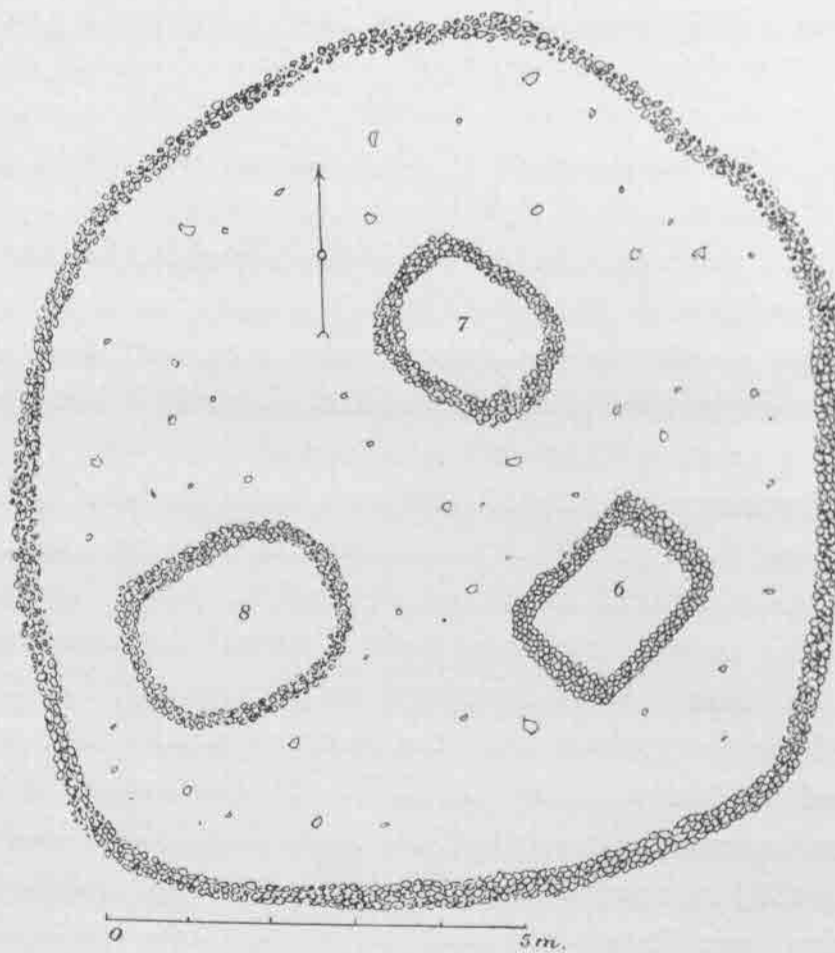


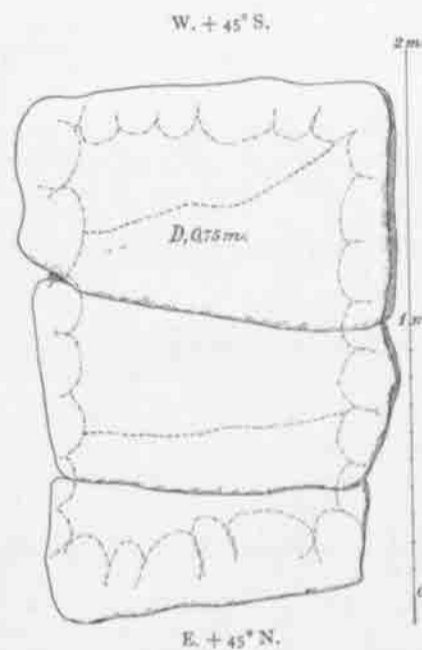
Fig. 17. Group II. Mercedes.

About 100 m. east of the first group, a second platform was found, almost circular in shape, some 10 m. in diam. Height of the southern half nearly one

metre, of the northern, hardly more than a quarter of a metre. The bordering was formed in the same way as that of the first circle. Three oblong stone borderings marked as many graves within the platform.

Grave 6. (Fig. 18).

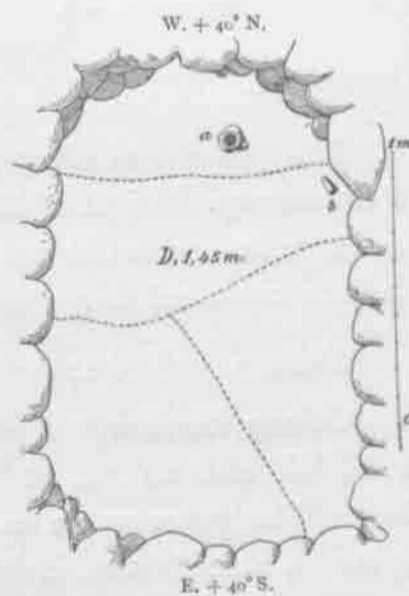
Oblong stone bordering about 15 cm. high. Length 2.3 m., breadth 1.7 m. About 45 cm. below the surface, three large, heavy stone slabs were met with, forming the roof of a grave 1.4 m. long, 1 m. broad, 0.75 m. deep. The bottom slabs were of the same number as those of the roof. It was filled with loose humus, the layer nearest the bottom being darkest, containing a few traces of charcoal, but no other objects.



E. + 45° N.
Fig. 18. Grave 6.

Grave 7. (Fig. 19).

Oblong stone bordering about 15 cm. high. Length 2.2 m., breadth 1.8 m. The roof — met with about 60 cm. below the surface — consisted of several irregular slabs. The grave was 1.7 m. in length, 1.1 m. in breadth, 1.45 m. in depth. The grave was filled with soil and contained one small vessel (*a*), standing 24 cm. from the N. W. end, 83 cm. below the roof, and also one small stone-celt (*b*) close to the N. E. wall, 90 cm. below the roof. In the soil a few fragments of broken pottery were found scattered about.



E. + 40° S.
Fig. 19. Interior of Grave 7.

a. (Pl. 6, Fig. 1). Asymmetrical vessel, possibly an imitation of a bird. The handle has, on the outside, a few parallel incisions, the body itself being decorated with some clumsily drawn parallel, vertical streaks of red color which now, however, are almost obliterated. The whole vessel covered with soot. It was filled with soil showing traces of charcoal. Height 9 cm., length about 12 cm., diam. 9.7 cm., diam. of aperture 4.5 cm.

b. (Pl. 6, Fig. 2). Celt of greenstone, smoothly polished; section almost elliptical. Length 7.5 cm., breadth 3.7 cm.

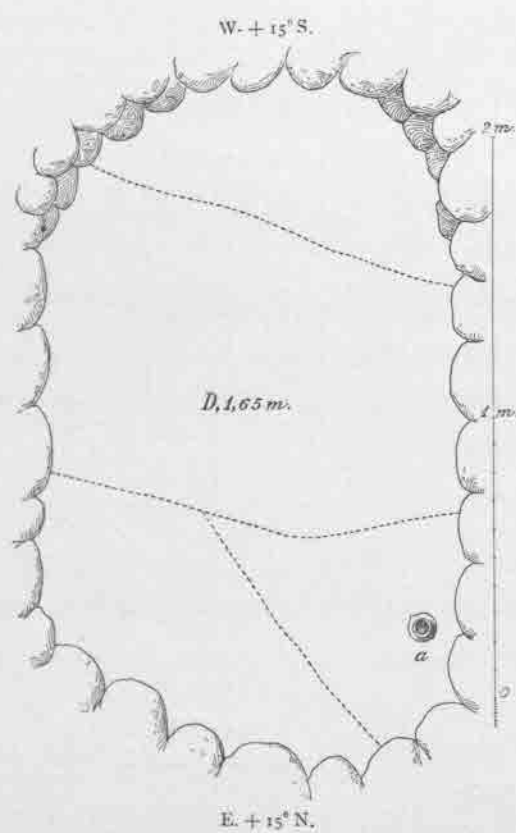


Fig. 20. Grave 8.

Grave 8. (Fig. 20).

Oblong bordering of stones, protruding 12 cm. above the platform. Length 2.8 m., breadth 2.1 m. Roof of large slabs was met with some 50 cm. below the surface. Length of grave 2.4 m., depth 1.65 m., breadth 1.5 m. The grave was filled with loose soil. In the N. E. corner near the N. wall, 1.2 m. below the roof, a small vessel was found. In the soil, thrown up from the bottom, a few meal-like traces of bone were discovered.

a. (Pl. 6, Fig. 3), Wide-mouthed vessel, ornamented with an elevated cord around the shoulder of the body, and a small degenerate animal head on each side. It is of thin, well-burned ware, of a pale yellowish color. Outside sooty. Height 7 cm., diam. 10 cm.

Group III.

This group was situated deeper in the forest, on what was almost an island in the swamp. Height of the platform about half a metre, diam. about 10 m. The sloping sides were formed by a layer of oval, flat, water-worn stones. The platform contained five oblong stone borderings, marking graves as usual.

Grave 9. (Fig. 22).

Oblong bordering of stones, about 15 cm. high. Length 2.4 m., breadth at S. W. end 1.3 m., at N. E. end 1 m. The roof was composed of large slabs. The grave was 2 m. in length, 1 m. in breadth at S. W. end; 0.35 m. at the N. E. end; 1 m. in depth. It was filled with loose soil to 10 cm. distance from the roof. It contained one bowl (*a*) standing in the S. corner, 77 cm. below the roof, 7 cm. from the wall, also a small whistle (*b*) 42 cm. from the S. W. end, 65 cm. below the roof.

a. (Pl. 6, Fig. 5). Jar with hemispherical bottom, the upper part of the body rising angularly in two sections of which the lower is occupied by two

opposing panels, limited by very roughly modelled cords and containing in the middle a grotesque frog-like relief figure, with limbs outstretched. Marks of

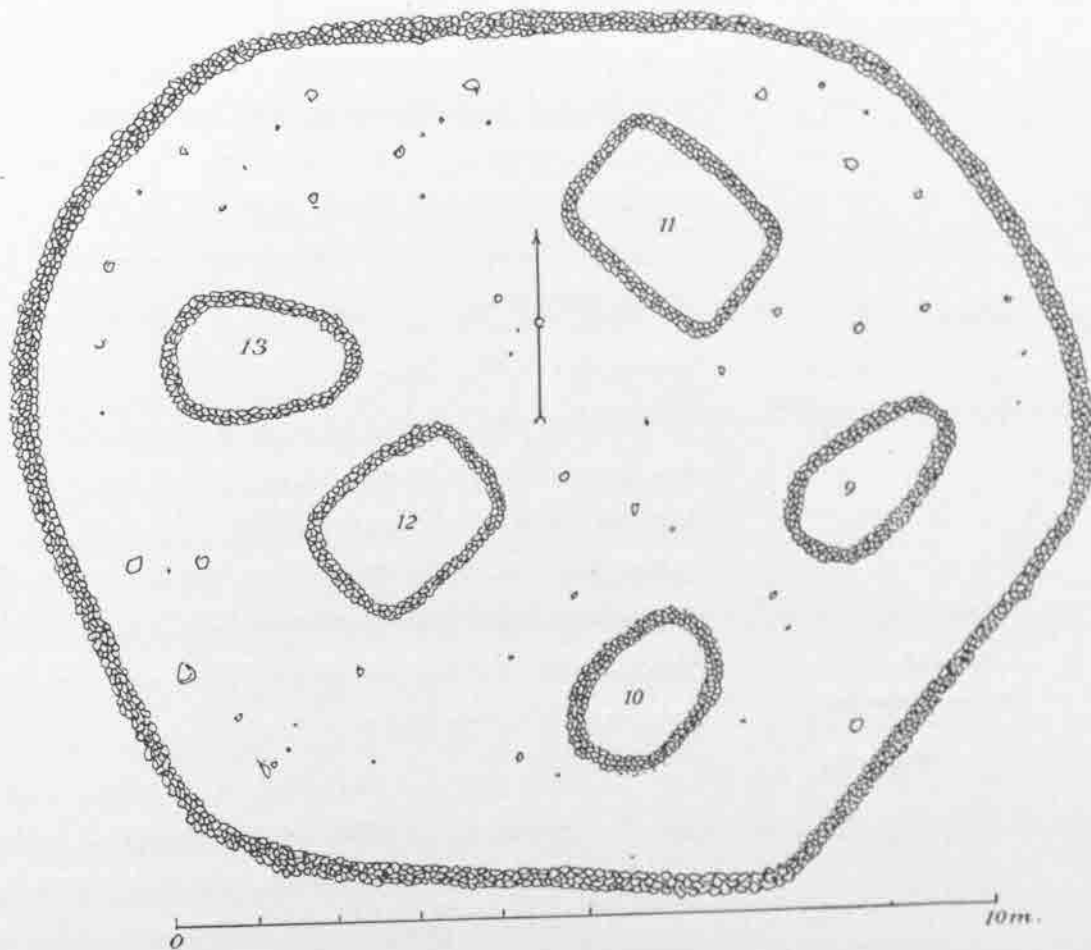


Fig. 21. Group III. Mercedes.

small handles remain. Filled with soil containing small pieces of charcoal. H. 7 cm., diam. 10 cm.

b. (Pl. 6, Fig. 6). Whistle, in the shape of a small bird, with one large air-hole underneath the tail, and two small ones on the breast. The neck is perforated laterally for suspension. The sound produced is shrill. Length 4 cm., greatest breadth 3 cm.

Grave 10. (Fig. 23).

Oblong bordering of stones, protruding about 15 cm. above the platform. Length 2.15 m., breadth 1.5 m. Roof of the grave composed of large slabs.

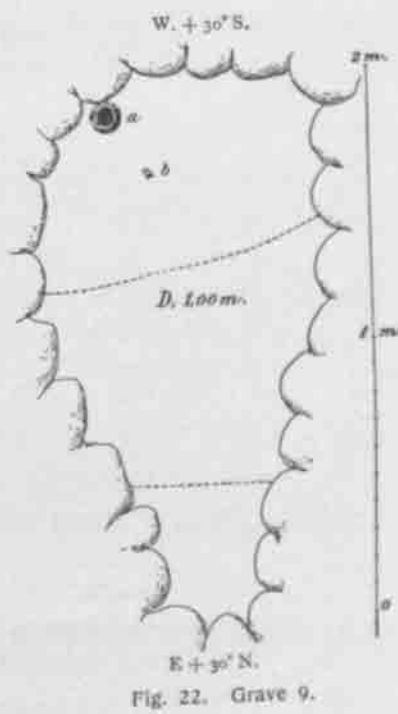


Fig. 22. Grave 9.

Length of grave 1.8 m., breadth 1.1 m., depth 1.2 m. The grave was almost filled with loose soil, containing a few scattered fragments of pottery, but nothing else.

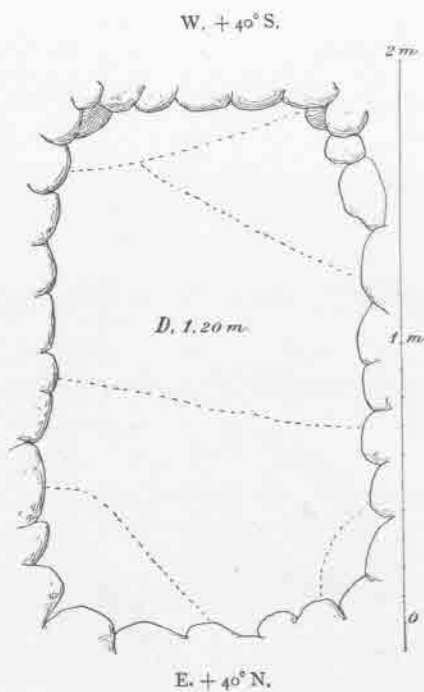


Fig. 23. Grave 10.

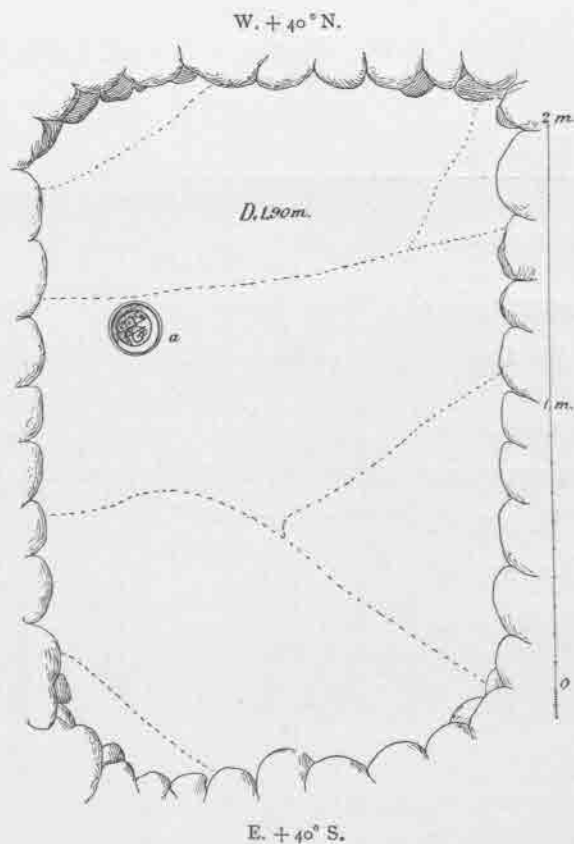


Fig. 24. Grave 11.

Among the stones scattered on the surface near the western end of this grave, was found the remarkably well-executed stone head of a tapir or »danta», (Pl. 7, Fig. 1). The search for the body was in vain, but it is very likely hidden among the numerous stone heaps in the neighborhood.

Grave 11. (Fig. 24).

Oblong bordering of stones protruding 6—8 cm. above the platform. Length 2.6 m., breadth 1.9 m. Roof of large slabs. Length of the grave 2.4 m., breadth 1.65 m., depth 1.9 m. The grave was filled with loose soil and contained one large bowl (*a*) at 30 cm. from the S. W. wall, 1.3 m. below the roof.

a. (Pl. 6, Fig. 4, a, b). Large, shallow, tripod bowl, painted yellow, with red ornaments, showing two conventionalized birds (?) surrounded by two encircling bands. H. 12 cm., diam. 20 cm.

Grave 12. (Fig. 25).

Stone bordering, 15 cm. high. Length 2.3 m., breadth 1.8 m. Roof of slabs. The grave 2 m. long, 1.5 m. broad, 1.9 m. deep, filled with soil to 10 cm. from the roof; it contained one small bowl (*a*) standing 15 cm. from the S. E. wall, 1.2 m. below the roof, and another similar vessel (*b*) 30 cm. from the same wall, 1.3 m. below the roof.

a. (Pl. 6, Fig. 7). Small tripod vase, painted red, with two handles (animal

figures) uniting the edge of the rim with the shoulder of the vessel. Height 8.5 cm., diam. 12 cm.

b. (Pl. 6, Fig. 8). Small, globular vessel of red color, stained with soot. Height 6.5 cm., diam. 6.5 cm.

Grave 13. (Fig. 26).

Stone bordering on the surface 10—20 cm. high. Length 2.4 m., breadth about 1.5 m. Grave roofed, 2.3 m. long, 1 m. broad, 1.05 m. deep. Contained a small broken pot (*a*) standing close to the N. wall, 0.42 m. below the roof.

a. Badly damaged, hemispherical vessel with two cloven vertical handles. Color yellowish-red with reddish-brown patches on the shoulders. Height 9 cm.

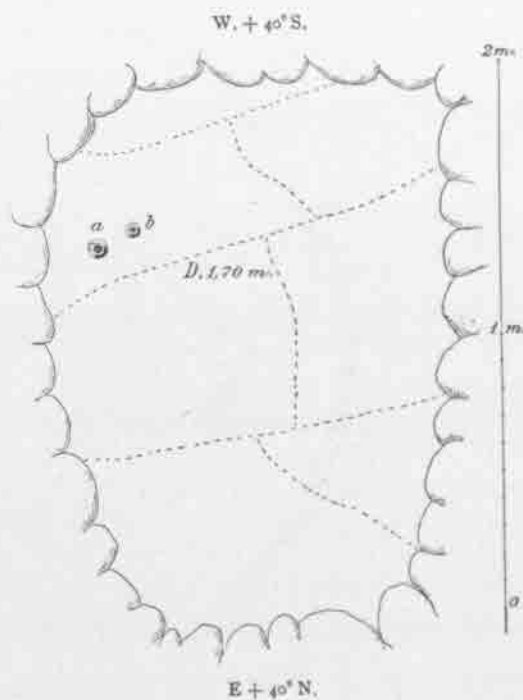
Group IV. (Fig. 27).

This almost circular platform was situated in the forest, only 100 m. from the large mound. It contained four graves, three of which (15—17) had been previously opened and ransacked. Height of the platform about half a metre, diam. about 9 m. A bordering of stones, similar to those of the previous groups, surrounded this platform.

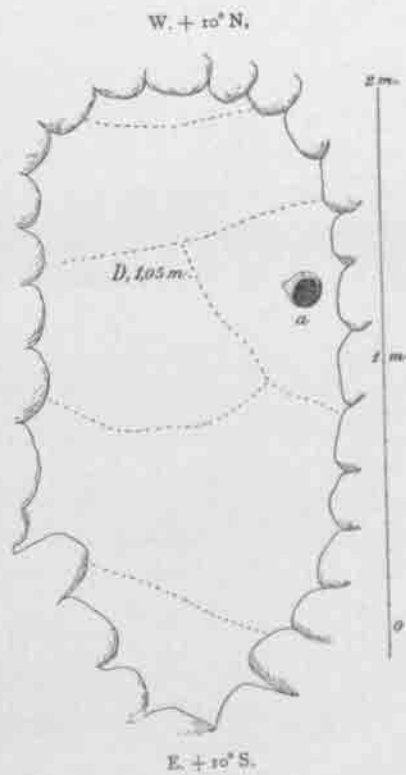
Grave 14. (Fig. 28).

Stone bordering on the surface about 12 cm. high. Length 1.9 m., breadth at S. W. end 1.15 m., at N. E. end 0.8 m. Roof of slabs as usual. Length of grave 2 m., breadth 1.10 m. at the N. E. end, 0.75 m. at the S. W., depth 1.35 m. Filled with loose soil containing a few small potsherds.

During the excavations of the graves a number of smaller objects of stone and clay, also fragments of a similar kind, were found scattered in the soil of



E + 40° N.
Fig. 25. Grave 12.



E + 10° S.
Fig. 26. Grave 13.

the platforms and their neighborhood. Of these the following are reproduced in the illustrations.

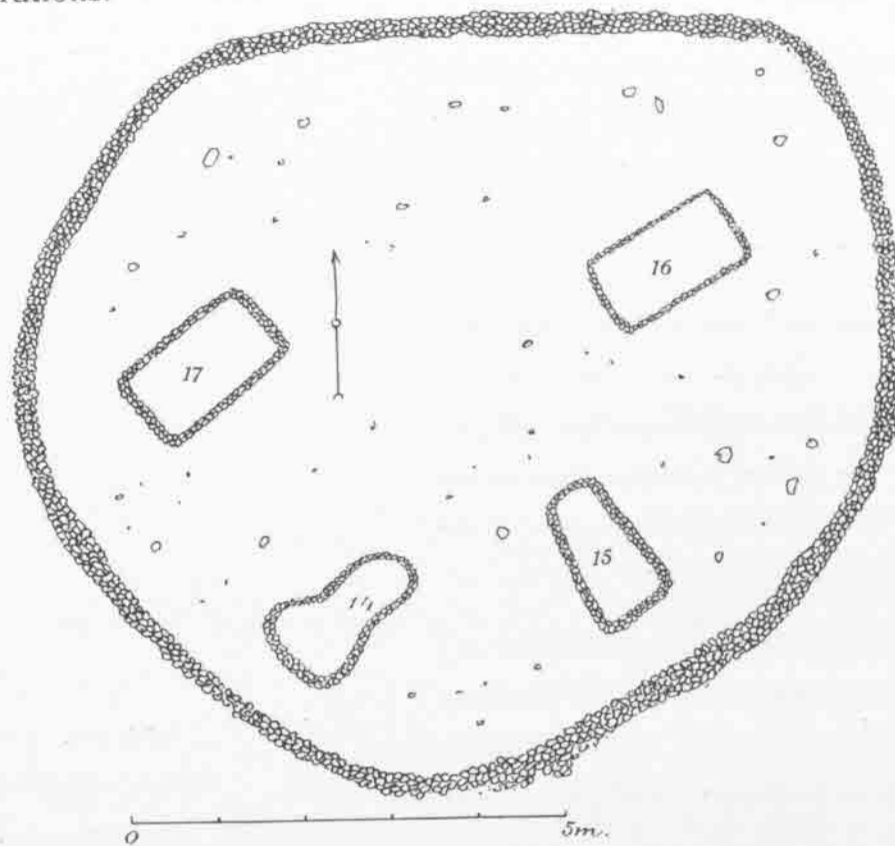


Fig. 27. Group IV, Mercedes.

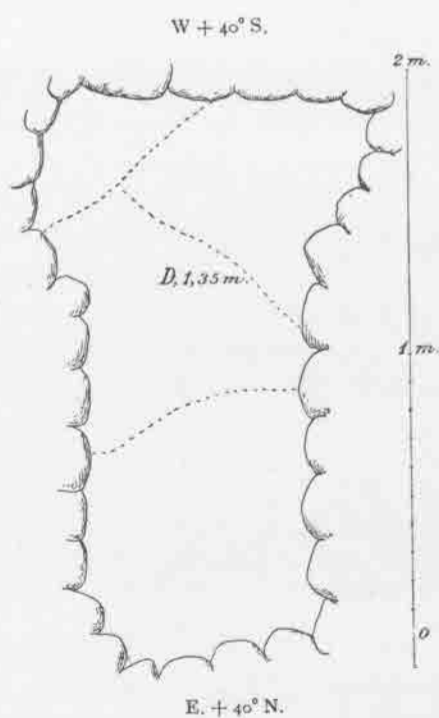


Fig. 28. Interior of grave 14.

a. Celt of greenstone, 7.5 cm. long (Pl. 7, Fig. 3).

b. Circular clay disc (Pl. 7, Fig. 2) with an incised cross on one side. Diam. 5 cm.

Summary.

All the graves opened at Mercedes were constructed in one and the same way. The walls were built very durably, being still in perfect condition when not disturbed by the roots of large trees. The slabs, which formed the roof and bottom, were of limestone and, as a rule, large and heavy, some having formed burdens for several men. They were often chipped from the middle becoming thinner towards the sides.

Only in one grave traces of bone were found, but too moulded to admit of determination. The layer of darker soil, nearer the bottom, seemed to prove

that the body or bodies had been placed there. In some graves this soil contained charcoal and soot, but no traces of burned bones to prove that burning of the dead had taken place.

Most of the graves, as we have seen, contained vessels of clay, or other objects deposited therein. The majority of these vessels show signs of wear and are covered with soot, proving that they were employed as cooking utensils. Others look quite fresh and have probably served other purposes in the household.

As no skeletons were found here, it was of course impossible to ascertain the position of the objects with respect to the bodies. The vessels found were met with at varying depths, most of them about half-way from the bottom, but some close to it. They were placed in different parts of the grave but, as a rule, nearer to the end turning towards the centre of the platform. To judge from analogy, the heads of the corpses were placed at this end. The excavations of the graves of the same people (*Guätares*) afterwards carried out in the highlands proved that, as a rule, the deposited objects were placed near the head, chest, or arms.

All the objects found in the graves (with the exception of the charred fragments of corn and corn-cobs) were of durable material. Besides the vessels of clay, two stone-celts were met with and a bead of blue glass.

This latter was the only object of European manufacture found. It proves that the builders of the graves were still living here, and thus burying their dead after the advent of the white man; this as late as in the 16th century.

Very likely the low platforms containing the graves were originally foundations for the huts of the living; the custom of burying their dead inside the houses having prevailed in many parts of these regions.

Even nowadays this method of disposing of the dead is practised among people of a certain tribe in regions within the territory of Costa Rica, not so far off from the parts here described by me.

In the Costa Rican Gazette »La Union Catholica» of San José, Padre P. D. CARMONA who, in the capacity of secretary, accompanied Bishop B. A. THIEL on his mission to the *Guatusos*, has given an account of the present state of this tribe. He describes one of their communal houses, *Tojifo*, as quadrangular, each side measuring 17 'varas'¹, and in this house he found 26 men, 12 women, 9 children living, and there were 25 sepulchres; the house *Napoleon* was 30 'varas' long, 20 broad containing 8 men, 5 women, 3 children and 36 sepulchres;

¹ 1 vara = 84 cm.

the house *Margarita* was 43 'varas' long, 23 broad, housing 24 men, 13 women, 17 children, and containing 60 sepulchres; the house *Congo* was the home of 10 men, 3 women, 3 children, and contained 9 sepulchres.

In the well-known work of FRAY BARTOLOMÉ DE LAS CASAS, »*Historia de las Indias*», lib. II, cap. XXI reproductions are given from CHRISTOPHER COLUMBUS' journal of his fourth and last voyage, during which he discovered what is now called Costa Rica. This description contains detailed accounts of his first landing on the shores of Costa Rica and the encounter with aboriginals. In this important publication the following sentence contains interesting information about the burial methods of a village of the littoral: »The Admiral commanded that his brother, the Governor, should go ashore with some of the crew, to see the village and the manners and customs of the people of the place. There they found that inside the houses, which were of wood covered with cane, they had sepulchres in which were corpses, dried, with wide open eyes, and odorless, enveloped in blankets, or sheets of cotton. Above the sepulchres were boards upon which were cut the figures of animals, and, on some, the effigy of the person buried there; while with the dead were buried jewels, and articles which they considered most precious.»

During the excavations on the highland plains, later on, I found at Orosi a great number of circular stone-enclosures, probably also hut-rings and some of these contained graves, others however did not.

III.

CACHE. MERCEDES.

In the forest, some 100 m. from the large mound, on the slope of a creek, the rains had swept away the humus and uncovered a small portion of the roof of a stone chamber, containing a lot of pottery, but no proofs that it had been used as a grave. In construction, this chamber (Fig. 29) differed in more than one respect from the graves described above, the bottom consisting of a layer of oval, flat, water-worn stones, instead of slabs. It was also of less depth, being only 70 cm. deep. Its length was 1.4 m., the breadth 0.95 m. The interior, instead of being filled almost to the roof with black humus, contained to about two-thirds of its height only the subsoil of the place, yellow loam, mixed with gravel and stones of the size of a fist. Deposited in this bed, spread almost over the whole chamber, a great number of clay vessels, not less than sixteen in all, were found; some however badly broken. Intermingled with the soil were numerous pieces of broken pottery, including some of vessels not otherwise represented in the chamber. No sign of interment was found, neither was any charcoal to be seen. All search for any more similar cache-chambers in the neighborhood was in vain. No bordering of stones, or other sign above the ground, marked the position of the chamber described. The objects in this rich cache were all found pretty close to the bottom. Their position is best shown by the accompanying plan. The objects found were as follows:

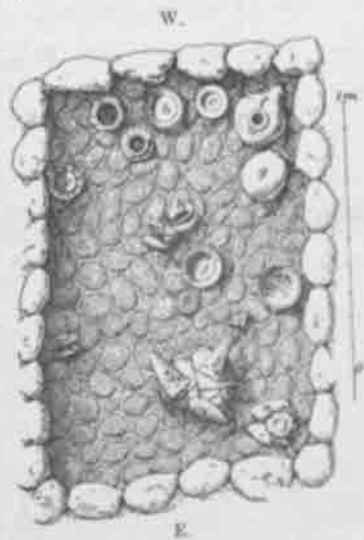


Fig. 29.

a. (Pl. 7, Fig. 7). Symmetrical, well-preserved tripod bowl of brownish-red color. The bottom is almost hemispherical; the upper part rises angularly. Two opposite sides of the vessel show panels formed by vertically placed, notched fillets of clay. The centre of one is occupied by the head and arms of a semi-human or simian figure in relief; the other shows a short tail. In the intervening spaces are two curved handles decorated with notches and rows of punctate markings. The flaring rim is 1.5 cm. broad with a notched edge. At the base of the rim, a double row of punctate markings encircles the neck. The legs are hollow, each containing a round ball of clay and having two longitudinal slots. Height 10 cm., diam. 14 cm.

b. Bowl, tripod, in shape almost similar to *c*, except as to legs being still more conventionalized, having lost the protruding eyes and other traits, characteristic of a mammal's head. Color yellowish, with a brown band round the margin. The outside is almost entirely occupied by a broad zone, ornamented with the pattern Fig. 30, thrice repeated. Height 10.2 cm., diam. 16.2 cm.



Fig. 30. Ornament on bowl *b*.

c. (Pl. 8, Fig. 3). Bowl; shallow tripod of yellow color. The inside of the rim is covered with a conventionalized, painted design, almost effaced, but apparently resembling Fig. 31. Height 7.8 cm., diam. 11.5 cm.

d. (Pl. 8, Fig. 4). Globular vase, with almost upright rim and three high, slender, solid legs. Color reddish-brown. Above each leg there is a small roughly-shaped animal head, the intervals being each adorned with three vertical notched fillets. Height of vessel 12.5 cm., diam. 11.5 cm.

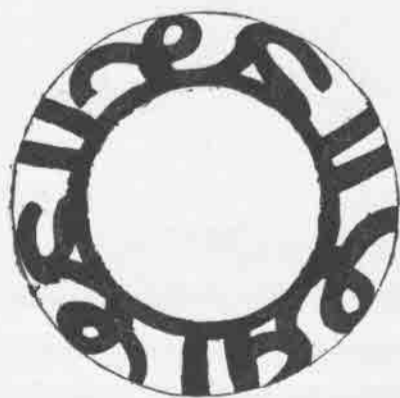


Fig. 31. Ornament inside bowl *e*.

e. (Pl. 8, Fig. 2). Bowl similar to *c*, but somewhat larger. Inside the rim a highly conventionalized red pattern (Fig. 31), showing three degenerate birds' heads with what is probably the rudiment of a wing or tail, each separated by two parallel, vertical lines. Height of vessel 9.2 cm., diam. 13.5 cm. — (Cf. Pl. 6, Fig. 4).

f. (Pl. 8, Fig. 1 and Pl. 9, Fig. 1). Globular, tripod vessel of whitish-yellow color, with narrow neck, adorned on one side with a mammal's head with flat, triangular nose. Another almost similar head protrudes from the opposite side of the vessel. The body is ornamented with a horizontal,

broad, red band; similar bands traverse the shoulders. The legs small, conical, and solid. Height 20 cm., diam. 21.3 cm., diam. of orifice 6 cm.

g. (Pl. 9, Fig. 2). Large egg-shaped, bright reddish-brown vessel with a small orifice, and flaring rim. Height of vessel 22 cm., diam. 17.6 cm., diam. of orifice 5.7 cm.

h. Vessel-stand, or annular base of clay, resembling *l*, for vessel with conical base; badly broken, only fragments. This stand is of yellow color with a few red streaks irregularly placed. Around the outside of the upper rim there is a row of degenerate animal heads in relief.

i. Vessel-stand, resembling the former, but somewhat larger; broken into fragments. Height 7.2 cm.

j. Broken, shallow, tripod bowl, resembling *e*. Color yellow. Height 10.3 cm., diam. 15.5 cm.

k. (Pl. 7, Fig. 8). Shallow, tripod bowl with rounded, hemispherical body. Color yellow. The bottom ornamented with three conventionalized birds' heads, painted in red color (Fig. 32). Height 10.2 cm., diam. 15.3 cm. — (Cf. Fig. 31).

l. (Pl. 7, Fig. 5). Vessel-stand of clay; around the upper rim a row of degenerate animal heads in relief and a roughly modelled cord around the neck. Height 9.7 cm., diam. 21 cm.

m. Large, simple tripod. Of the body only fragments are left, which have lost their color. Each well-preserved conical leg (Pl. 8, Fig. 5) represents a human face with eyes and mouth formed by circular holes, and containing the usual rattling clay ball. Height of the legs 18.5 cm.

n. Large vessel with globular body; broken into small fragments; it was not possible to reconstruct it.

o. A lump of clay.

p. (Pl. 7, Fig. 6). Circular disc of burnt clay. Diam. 8.5 cm. (Pl. 7, Fig. 2).¹



Fig. 32. Ornament inside bowl *k*.

¹ During my stay later on among the *Pipiles* of Salvador, I found similar discs of various sizes, obtained from pieces of pottery, usually of the *scomal*, used as playthings. The children fastened with bees' wax a small bunch

The practise of secreting household articles as well as food in pits or in caves etc. has from early days been observed among widely disseminated tribes of North America. In Mexico the Tarahumares, who as a rule change their homes with the seasons, select small caves often in the most inaccessible places of the »barrancas» or »cañons». And in these recesses they store provisions, mostly corn, apples, or the large clay-vessels not needed on excursions or during temporary change of abode. The caves are then often closed up by stones cemented together.

In the United States as is well-known the term »cache» is also used by the archæologists to denote those often very rich deposits of the raw material for or partly finished stone implements left by quarry-workers or traders.

In most countries the existence of similar »depôts» or »caches» must be taken into account, although many a time it will be difficult or impossible to decide when they were made for only practical temporary purposes as those mentioned, or as offerings of one kind or another.

of feathers, as a rule of a rooster, on the centre of a similar disc and then threw it up in the air. They called this toy »huitot» (pigeon, bird) or »gallito» (little rooster).

Clay discs of the same kind have been found in the United States also. In the 13.th Annual Report of the Bureau of Ethnol. in the article »Stone-Art» by GEORGE FOWKE, the following information is found: »From southeastern Tennessee and northwestern Georgia there are many fragments of pottery, small, thin and coarse, with the edges chipped and from northeastern Kentucky there are similar pieces, except that they have been fashioned from fragments of limestone and sandstone».

Amongst the Pipiles I also obtained thin, stone-discs (of slate) used in a throwing game — exactly the same I had before seen practised by the *Tepihuans* of Chihuahua, Mexico, under the name of »tutúvigai hólisi» or »juego del quatro». The aim in this game is to be the first of the party to get the set, numbering 4 stones, thrown from a certain distance into a small circular pit in the ground. The stone discs used by the *Tepihuans* and their neighbors the *Tarahumares* for the purpose are however much thicker and heavier than those of the Pipiles. Amongst the latter people this game nowadays is seldom if ever played. Only one old man in Comapa told me that this game, when he was a youth, was much esteemed in this town and he presented me with a set of stone discs.

IV.

STONE-CUTTERS' WORKING PLACE. MERCEDES.

While opening paths in the forest during the search for graves, I found one day in a thick dark jungle an oblong stone, protruding about 0.5 m. from the ground. It seemed possible that this stone had been raised by human hands. Examining it more closely, I noticed under the fine, green moss traces of spiral engravings on one side. Returning with a couple of men with tools, we cleared off the underbrush and creepers from a piece of ground, and began to open a trench. We found the whole ground almost filled with discarded figures, human and animal, as well as broken limbs of stone, and great quantities of chips of all sizes. It was an ancient place for the making of stone-gods that I had come across by mere accident. Over a surface of some 20 square metres and to the depth of about 1 metre the soil was intermingled with chips and partly finished idols. The photo, reproduced on Pl. 10, was taken after the finds had all been exhumed.

The following were added to the collection.

a. *Male figure* (Pl. 11, Fig. 2), in squatting position, with arms crossed and elbows resting on the knees. The head closely resembles that of a bear, the forehead being very low; the ears are large and placed far back; the eyes oval; nose broad, even at the base. Height 56 cm., breadth across the shoulders 28 cm.

b. *Male figure* (Pl. 11, Fig. 3), resembling the former as to position, holding an oblong object with both hands to his mouth. Height 56 cm., breadth across the shoulders 30 cm. The head, perhaps not quite finished, shows smaller

ears than those of the former figure. The form of the object held to the mouth cannot be clearly distinguished, but is probably a musical instrument, a flute of some kind. Excavations made at a later date in the highlands, in the territories of the same *Guätares*, brought to light a number of small stone-idols of the same shape as this one, all apparently blowing flutes. The extensive collections in the San José museum, and TROYOS' private museum in Cartago, also show an astonishing number of representations of this squatting, flute-blowing god. No other god is here so often represented in stone as this. But this specimen from the workshop is by far the largest hitherto found. Several representations in clay of this popular god are seen in relief on vessels from the graves on the highland plains. Head and arms of these latter figures have often a simian appearance.

c. Male figure (Pl. 12, Fig. 2), with legs drawn up and both hands pressed against the mouth, probably clasping a flute. This piece, sculptured out of a flat, rather thin stone, is apparently unfinished, as if the artist had been interrupted in his work. There is no split in the stone, nor any chip broken in a wrong place that might have caused the rejection of the figure. Height 68 cm., breadth at the shoulders 40 cm., thickness of the stone about 19 cm.

d. Male figure (Pl. 12, Fig. 3). This very clumsy figure was probably rejected owing to a fatal split in the face. On being transported through the forest, several more fragments scaled off. Height 65 cm., breadth across the chest 33 cm.

e. Human head (Pl. 11, Fig. 1), placed in vertical position on a clumsy, roughly cut, oblong boulder. It was separated from the trunk which proved too heavy for transport. Length of head 35 cm., width of face 26 cm.

f. Human head (Pl. 12, Fig. 1), broken off. No trunk found at the place. The hair is dressed in a peculiar fashion. Badly damaged. Height of head 29 cm.

g. Human head (Pl. 13, Fig. 3), small, broken off, well-executed. The hair is combed down and transversally cut in front. Height 9.3 cm.

h. Trunk of human body (Pl. 13, Fig. 1). Height 24 cm., breadth 22 cm.

i. Arm embracing a small human head (Pl. 13, Fig. 2). Was broken off from a mutilated trunk. Length 17 cm.

j. *Human leg* with foot (Pl. 13, Fig. 5). The ankle is adorned with a double anklet. Diam. at the ankle 9 cm.

k. *Human leg* with foot (Pl. 13, Fig. 4). Length 33 cm.

l. *Human foot*; instep marked (Pl. 14, Fig. 4). Length 11 cm.

m. *Human foot*; instep marked (Pl. 14, Fig. 5). Length 12 cm.

n. *Animal head*, probably representing a puma (Pl. 14, Fig. 3). Length 18 cm.

o. Broken part of an object of unknown shape (Pl. 13, Fig. 6). Height 14 cm.

Among the large, mutilated figures seen on Pl. 10, which were left on the spot, the headless trunk of an alligator (?) can be distinguished.

Single discarded figures or crude boulders with initiatory work are pretty often found. Everywhere in the museum-collections numerous clumsy and crude stone figures are met with, which have perhaps often been considered as proofs of the low state of culture and art of the people, instead of being — what they presumably often are — discarded and unfinished figures left by the sculptor. The comparatively large number discovered on this single spot, shows how often the ancient artist in stone found his material unsuitable, how easily some flake or chip was split at the stroke of the celt in the wrong place, and thus spoiled the work. The number of similar crude unfinished stone-idols scattered in the regions of ancient stone-art in America is, perhaps, very considerable.

No celt or other tool was found among the stone-refuse in this place, but lack of time, in consequence of the heavy rains, hindered me from making any thorough search among the heaps of chips and earth thrown up.

In another part of the forest, in the neighborhood of the graves, I found standing quite alone and two-thirds sunk in the black humus, the splendid, large cylindrical »seat» seen on Pl. 14, Fig. 1. It measures 62 cm. in diam. at the top and 33 cm. in height. Near the upper rim there runs a circular band; below that a row of 23 small animal heads. The purpose of this object is unknown. It shows no wear, or signs of grinding on the upper surface.

Close to the house at Mercedes another similar but smaller »seat» (Pl. 14, Fig. 2), which had been found near the large mound, was standing. It was

used as a support for a large piece of sandstone, on which the peons of the hacienda used to sharpen their machetes. This stone was, however, now partly broken and was left in its place. It measured 42 cm. in diam. at the top, 30 cm. in height, being ornamented with 19 small animal heads. Only three stones of this peculiar shape have I seen. The third, probably also obtained from this place, now belongs to the National Museum of Washington.

V.

CLAY-PIT AT MERCEDES.

While working at the great mound one of the natives informed me that once, when hunting on the hills above, he had met with a large pit dug by human hands, »Goldmines perhaps», he suggested. I accompanied him to the spot about half a mile up the river. The ground in this dense forest, consisted of red clay and was almost bare. No humus nor any herbaceous vegetation was seen, only a layer of dead leaves spread over spots of the sterile soil. Here, on the almost flat top of a forest-clad hill, a pit had been sunk in the ground, about 10 m. deep and some 25 m. in diameter. It was evidently the work of man. Potsherds, too, were found in this same pit. In the neighborhood, nevertheless, no sign of any settlement nor other remains could be found.

Undoubtedly the Indians of the ancient settlements below had obtained from this place their supply of clay for »sochete» — to use the adopted Aztec word in vogue in Costa Rica — for the plaster which covers the pallsade work of their walls.

While excavating in the vicinity of the large mound, in several places I found samples of similar »sochete», which had been burnt and now preserved the impressions of the poles of the pallsade wall. Pl. 15, Fig. 5 represents a fragment of similar plaster.

VI.

OBSERVATIONS DURING VISITS TO VARIOUS PLACES.

Before leaving the East Coast I visited every station on the road, in order to obtain information about all the ancient remains noticed by the people living at the haciendas.

Near Columbiana Station, at the hacienda of WILLIAMSBURG, the remains of an extensive, ancient settlement is crossed by the railway. The ground at this place is comparatively high and open, at present consisting of wide green pasture lands and banana plantations. Close by, in full view of the railroad, groups of small enclosures of stone, almost circular, varying to quadrangular — similar to those at Mercedes — are scattered over several acres of the green slopes along the river. Some irregular pits had recently been dug in some of the enclosures, and stone slabs and soil (red clay) had been thrown up. The treasure-seekers had, however, been disappointed, only a few small, broken pots had been found. In the heaps of soil and on the surrounding ground, I picked up quite a number of potsherds, plain, of red, yellow, brown, or black color, also a number with painted designs, as well as others engraved or with designs in relief. A few crude stone implements and one grinding stone were also added to the collection. All these objects and fragments show the same types and same ornaments as those observed at Mercedes. In consequence of the absence of the owner, I never had any opportunity of starting excavations at this place, as had been my intention.

On the opposite bank of the river, in an open meadow, close to the forest, there was a large, almost square enclosure, formed by four flat walls, about 9—11 m. long, 3 m. broad and 1 m. high, built of oval, flat water-worn stones (Fig. 33).

In the river below there was a large oblong boulder, which had been fashioned by the ancients into something of human shape. A photo of the stone, taken some years ago by a photographer of San José, is given below (Pl. 15, Fig. 1). At the time of my visit this boulder was lying in some depth of water, and I could not get at it to examine it. I ascertained, however, that it had been used for grinding, the flattened circular stomach, 42 cm. in diam.,

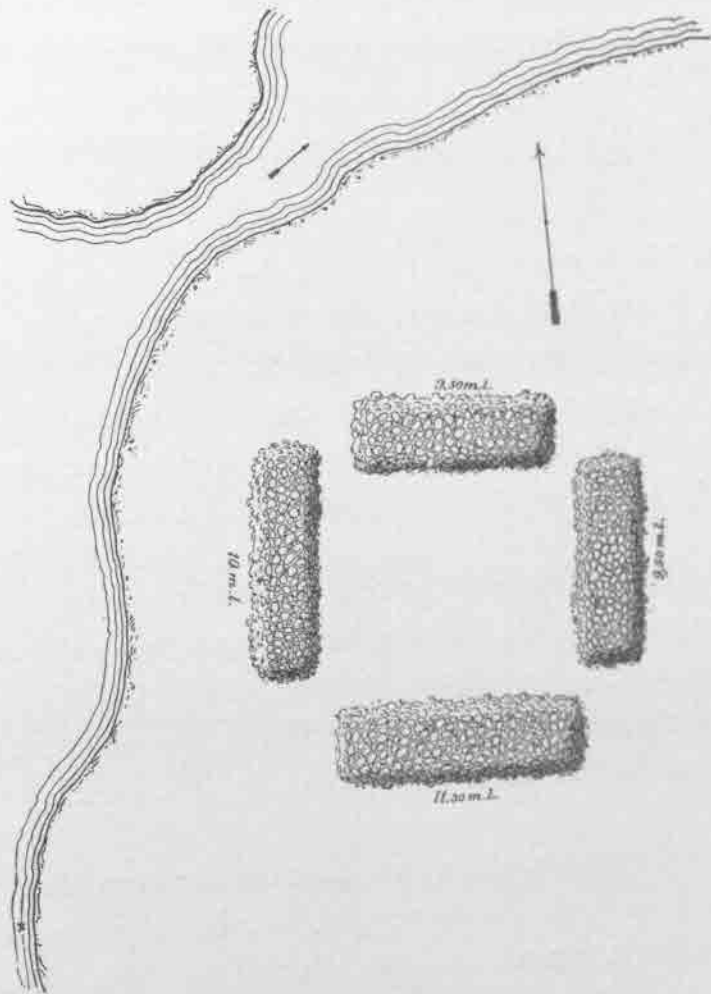


Fig. 33. Square stone enclosure at Williamsburg.

having served for the purpose. The head of the figure was broken off and missing. During my stay at Mercedes this stone was shipped to New Orleans by an American physician.

About 50 m. below this stone there were two large boulders in the river, marked with some crude pictographs (Pl. 15, Figs. 2, 3). Those on the boulder in Fig. 2 are with one exception fragmentary curves; the one completed figure has a length of 83 cm. The pictographs on the boulder in Fig. 3 are

more or less circular outlined figures with a number of dots. The whole in each case resembling possibly a human face.

At SIQUIRRES about a dozen graves were opened during my stay at Mercedes by a native LORENZO MASÍS, who later on became my chief digger. I visited the place and found that the graves exactly resembled those at Mercedes. A few small broken pots and some stone celts had been found in the graves. Mr. SCHÄFER, an old German settler, owner of the extensive hacienda of Siquirres, told me that, some years before, he had opened a similar grave and found a very large stone ball. Later on, when excavating on the highland plains, I discovered several of these large stone balls in the ancient burial ground of Orosí.

At STA ROSA, one of the planters, an Austrian, had opened several graves when the ground was being prepared for banana culture. The description he gave me of these graves coincides with the character of the graves at Mercedes, with the exception that, in a few cases, a second grave or story had been found under the bottom slabs. A few small pots had also been found.

On the northern side of the Mercedes Station I visited

GUASIMO. An English roadmaster, who had resided there for many years, showed me a spot where the railway had crossed a small place of sepulture. A number of small clay vessels of various shapes had been found in these graves. He still kept two of them (Pl. 9, Figs. 5, 6) and presented them to me. The graves were all of the construction formerly described.

JIMENEZ. In the forest, about two hours' walk from the station, numerous graves had been met with. In one spot four large graves were placed in a huge, almost circular, truncated mound, about 4 m. high. Near it, mutilated stone-idols in human shape were still lying on the ground. Other similar mounds were seen that had not been opened. Time, however, did not allow of my beginning any excavations there.

Later on, in Cartago and San José, I had the opportunity of consulting several pioneers, who had passed several years in various places along the East Coast. Among these was a German, a Civil Engineer, C. SCHURZ, who had spent half his life in these regions and, as the head of Government surveys and expeditions, had enjoyed opportunities of seeing more of these virgin forests than any other man in the Republic. He told me he had never met with any »ruins» in the Costa

Rican forests. The only ancient remains he had seen were burial grounds and a few mounds; but nowhere had he come across mounds or remains of a size to compare with those I had selected at Mercedes for my first excavation. These were the most important known on the Atlantic Coast. At several points along the river banks Mr. SCHURZ had met with ancient burial grounds, and he had always found the sepulchres constructed in the same manner as those described above. Only in one single place, close to a burial ground, had he found a large stone-idol standing in the forest.