

INDIAN NOTES AND MONOGRAPHS

EDITED BY F. W. HODGE



A SERIES OF PUBLICA-
TIONS RELATING TO THE
AMERICAN ABORIGINES

CUBA BEFORE COLUMBUS

BY

M. R. HARRINGTON

PART I

VOL. II

NEW YORK

MUSEUM OF THE AMERICAN INDIAN
HEYE FOUNDATION

1921

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Request of R. B. ...
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THIS series of INDIAN NOTES AND MONOGRAPHS is devoted primarily to the publication of the result of studies by members of the staff of the Museum of the American Indian, Heye Foundation, and is uniform with HISPANIC NOTES AND MONOGRAPHS, published by the Hispanic Society of America, with which organization this Museum is in cordial coöperation.

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CUBA BEFORE COLUMBUS

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M. R. HARRINGTON

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(VOLUME II)

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CHAPTER X

VILLAGE-SITE AND CAVES AT LA PATANA

AFTER establishing our temporary headquarters at Finca Sitges, the home of Sr Rey, our first task was to examine the situation at La Patana, a journey which had to be made on foot down over the cliffs, and the Mesa of La Papaya, which forms the highest step of the series before reaching the summit plateau of Gran Tierra de Maya, La Patana being the next large step below La Papaya. First we visited Sr Mosquera the elder, two of whose sons had worked for us, himself an old Spaniard, who had married an Indian woman and lived with their sons and daughters and their families, in a veritable little village of palm-thatched *bohios*, each occupied by one of the old couple's offspring. One of the sons was detailed to show us the prospects, and it took but little examina-

AND MONOGRAPHS

tion of the village-site and caves on our part to convince us that the place was well worth exploring.

TRAIL CUT TO LA PATANA

The problem then arose as to how to get our camp outfit in, for it was plain that no pack-mules could travel the steep trail over the two sets of cliffs by which we had come on foot from Gran Tierra. The Mosqueras had no horses or mules, for they raised most of their food at home, and sold only honey and beeswax which they carried out on their backs, and for this reason had never cut a mule trail out to civilization; so this task fell to us, and we were obliged to spend a number of days hewing, with axe and machete, a path wide enough for laden mules through miles of tropical forest along the mesa to the main trail from Gran Tierra to Maisi. Several rocky ledges had to be crossed also, and in these many dangerous holes had to be filled with rocks and earth before we were finally able to get our saddle-horses and pack-mules in and to set

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VILLAGE-SITE AT LA PATANA, MAISI

<p style="text-align: center;">LA PATANA SITE</p>	<p style="text-align: center;">249</p>
<p>up camp in a convenient spot about half-way between the caves and the village-site.</p> <p style="text-align: center;">THE WATER PROBLEM</p> <p>The fresh water problem we solved, as had the Indians and their successors the Mosqueras, by bringing our supply fresh every day from water-holes in the caves; groceries were brought from Sr Rey's store at Finca Sitges, while such things as sweet potatoes and <i>plátanos</i>, or cooking bananas, we bought from our neighbors.</p> <p style="text-align: center;">SURROUNDINGS AT LA PATANA</p> <p>On looking about us we found La Patana to be a narrow mesa or shelf, averaging a quarter of a mile wide, extending from the Ovando cañon northward to the brink of the cañon of the Rio Maya, bounded on the west by the base of a wall-like cliff containing many caves, to the east by the brink of another and lower precipice. In some spots there is quite a layer of soil, which seems rich; in other places nothing but the rough coral limestone may be seen, with just enough soil in its crevices to give foothold</p>	
<p style="text-align: center;">AND MONOGRAPHS</p>	

to a forest which seems to thrive equally well in the rocks as in the areas of real soil; a forest in which the only clearings now visible are the little fields of the Mosqueras.

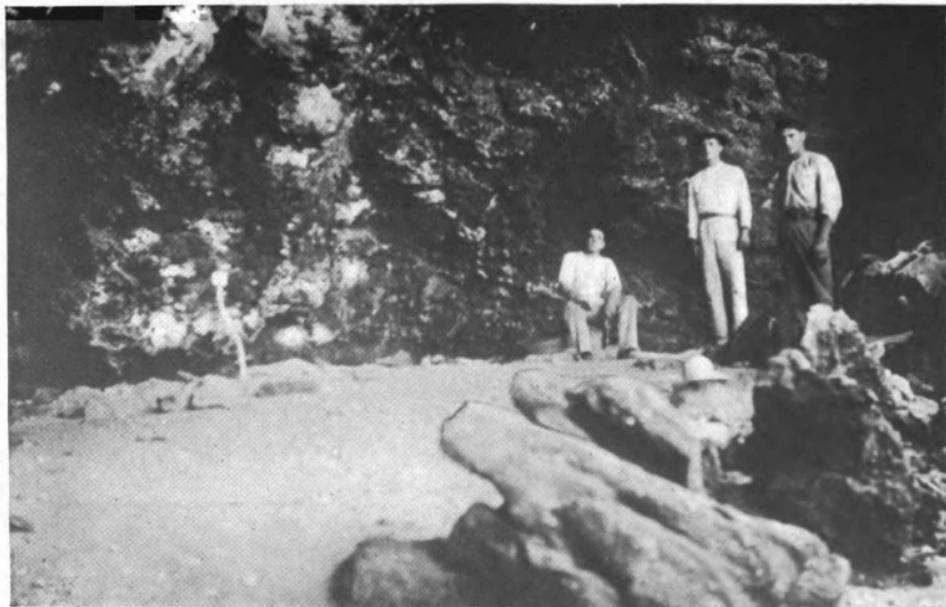
VILLAGE-SITE

The ancient village-site (No. 17, pl. XXVII), lies about half-way between the



FIG. 66.—Poisher with grotesque head (Taino) from village-site at La Patana, Maisi. (Length, 3 in.)

base of the western cliff and the brink of the eastern, mainly in one of these little



VIEW IN BURIAL CAVE NO. 1, LA PATANA, MAISI

fields, but runs off into a new clearing, where most of the excavations were made, and into the adjoining woods (pl. LI). Remains of fairly high middens were ob-



FIG. 67.—Potsherd with grotesque figure (Taino) from village-site at La Patana, Maisi. (Length, 7 in.)

served in the field, but so dug to pieces by the Mosqueras that their forms could not be traced, while outside the field there were no distinct middens, but simply village refuse

in patches, sometimes reaching a depth of fifteen inches and covering, including the part within the field, about an acre and a half.

The Deposit.—Specimens Found.—The refuse deposit was composed, as usual, of

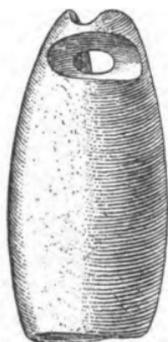
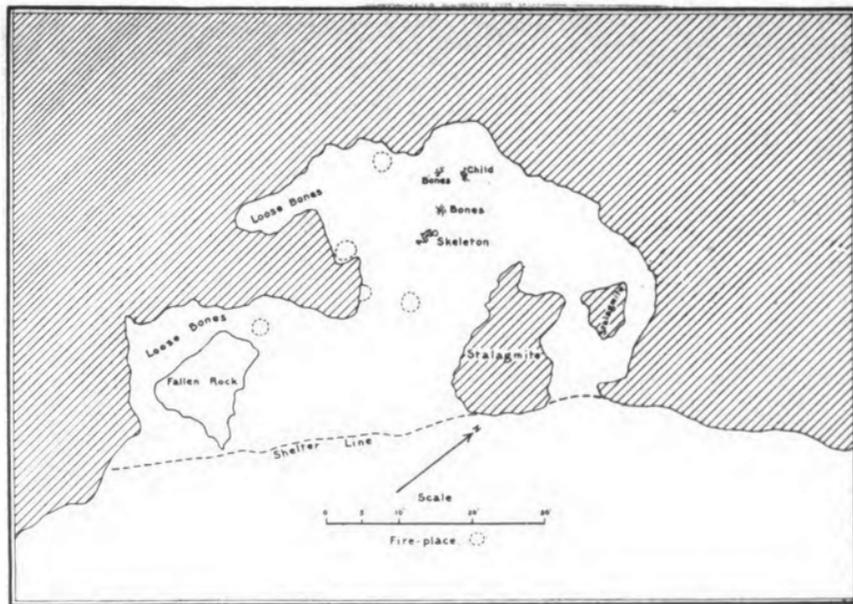


FIG. 68.—Jingler of shell (Taino) from village-site at La Patana, Maisi. (Length, 2 in.)



FIG. 69.—Ear-plug of shell (Taino) from village-site at La Patana, Maisi. (Diameter, .6 in)

soil mixed with ashes, charcoal, and terrestrial and marine shells, and contained potsherds (in several instances, restorable vessels), many of them highly decorated and bearing grotesque heads (figs. 66, 67), ornaments of shell, including pendants and jinglers (fig. 68), and ear-plugs (fig. 69).



PLAN OF BURIAL CAVE NO. 1, LA PATANA, MAISI

stone and shell beads, fragments of curious small clay idols or dolls, one of which (restored) is shown in fig. 70, an unusually



FIG. 70.—Doll or fetish of clay (Taino), restored from fragments, from village-site at La Patana, Maisi. (Height, about 5 in.)

good pestle of coralline stone; a fragment of a dish made from the bone of some large cetacean, showing fine carving, celts of petaloid type.—and the rubbing stones used

in making them,—in short, a typical collection of the Taino culture. The usual bones of *juitas*, fish, and turtles were also unearthed, representing the animal foods of the ancient inhabitants. It should be remembered also that the beautiful wooden platter shown in the frontispiece, mentioned in Chapter VIII, one of the finest pieces of Taino art, was found in a cave not far from this village-site.

BURIAL CAVE 1

While the major part of La Patana collection came from this village-site, the most interesting and unusual results were derived from the caves (No. 18), the first of which, called in our notes Burial Cave 1 (pl. LIII), was found by one of the Mosqueras not far south of the village-site. Encountering a dry cave, he scratched therein and unearthed a piece of skull to which still clung a wisp of faded black hair.

Our digging showed the floor to be a yellowish loam, full of disintegrated limestone, about twenty inches deep to rock-bottom and slanting gently upward toward the



TAINO BURIAL, CAVE NO. 1, LA PATANA, MAISI
(*a*, Looking north; *b*, Looking southeast)

L A P A T A N A C A V E S	255
<p>back of the irregular shallow cave, which was only about thirty-five feet deep.</p> <p><i>A Taino Burial.</i>—At the point indicated on the plan (pl. LV), the nearly perfect skeleton of an old man was found, heading northeast and facing southwest, the skull only eight inches from the surface, the hips twelve inches. Lying partly on the left side, its legs were flexed and the hands crossed on the abdomen, as shown in the photograph (pl. LV). The skull was artificially flattened to a very marked degree, and about it still remained traces of hair, while pieces of coarse fiber cord appeared near the head, and particularly near the hips, where it may have formed part of some kind of breechcloth. The bones were clearly those of a prehistoric Indian, but were much better preserved than the skeletons with natural skulls found in the caves frequented by the Ciboney tribesmen, giving rise to the conviction that these were probably the remains of one of the Taino people, a theory afterward borne out by the finding of a number of flat-head skeletons in a Taino village-site. It may be remarked here that,</p>	
A N D M O N O G R A P H S	

while flattened skulls are frequently found on the surface in the inner rooms of caves, it is very rare to find a skeleton of this sort interred in the floor of a cave, although skeletons with natural skulls are commonly so found. This specimen was given to Dr de la Torre of Habana for the Cuban government, to be deposited in the Museo Montané of the National University.

Other Burials.—Two burials of loose, disjointed bones were then found, each at a depth of about fourteen inches, one about four feet northwest of the first skull, the other six feet farther in the same direction, the two deposits containing, between them, the remains of three individuals. Some of these had been disturbed when Mosquera tested the cave. Nine feet north-northwest of the skull of skeleton No. 1 were found, eighteen inches deep, parts of the skeleton of a child between two and three years of age, but so disturbed that its original position could not be determined, except that the skull headed northwest. Loose human bones, a few flint chips, some bits of charcoal, and the claw of a great

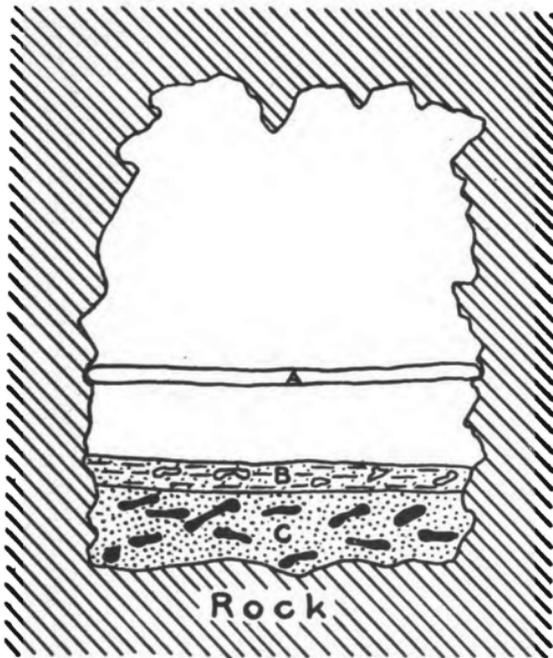
<p style="text-align: center;">LA PATANA CAVES</p>	<p style="text-align: center;">257</p>
<p>ground sloth (<i>Megalocnus</i> sp.), were found in the general digging.</p> <p style="text-align: center;">BURIAL CAVE 3</p> <p><i>Cremated Remains.</i>—A short distance southwest of this cave, in the same bluff, we found an open rock-shelter, some 30 ft. long and 15 ft. deep, containing only about six inches of soil underlaid by solid rock, a soil which, on examination, proved to be composed largely of disintegrated bone ashes, and filled with thousands of pieces of burned and broken human bones lying among slabs and pieces of rock—a condition very similar to that observed at Boca Caleta in the Cueva de Huesos. No artifacts were discovered in this shelter, which was probably either a crematory or a repository for cremated remains. We recorded it in our notes as Burial Cave 3.</p> <p style="text-align: center;">BURIAL CAVE 2</p> <p>This cave (they were named in order of discovery), about 130 yards northeast of Burial Cave 1, was a small chamber very near the top of the cliff, its difficulty of</p>	
<p style="text-align: center;">AND MONOGRAPHS</p>	

access being increased by a perpendicular climb of about seven feet just before reaching its entrance. The mouth is a narrow, high, open rock-shelter commanding a magnificent view of the nearby wild and rocky shores, and, on clear days, far in the distance across the Windward Passage the misty blue mountains of Haiti, mountains at whose feet nestle tiny white specks—the houses along the coast.

Back of this entrance a very narrow passage of three or four feet leads to an irregular but roughly rectangular chamber, about 8 ft. wide by 10 ft. deep, whose height, before excavation, averaged 8 or 9 ft.

Wooden Platform.—The first thing we noticed on entering was the fact that in the back part of the cave six ancient looking poles, perhaps 2½ in. to 3 in. in diameter, had been wedged in so as to form a rude rack, or platform, as shown in the accompanying sketch (fig. 71), about two feet above the floor, upon which lay fragments of two more poles which had rotted to such an extent that they had broken of their own weight. Removing some of the poles, we

found from inspection of their ends that they had been laboriously cut down and hacked into proper lengths with a stone



Scale of Feet

FIG. 71.—Section of Burial Cave No. 2, La Patana, Maisi. (A, Rack of poles cut with stone axes; B, Layer of guano containing decayed human bones; c, Ashes containing charred human bones.)

hatchet, and, except in one case, without the aid of fire. Most of them, although of hardwood, were in such a stage of decomposition that they could not be preserved, but we succeeded in finding a few that seemed likely to hold together, and from these we sawed the worked ends for shipment to the Museum.

Result of Excavations.—Digging revealed the fact that the floor consisted of two layers, the upper six inches deep and composed almost entirely of bat guano, in which, particularly under the rude platform, were a number of badly decayed human bones arranged as if the poles had supported a body, which, decaying, had fallen between them in pieces which were gradually covered by the ever-accumulating bat deposit, the chemical constituents of which caused a decay not commonly noticed when bones are buried in ordinary soil. Beneath this top layer was another, averaging two feet deep and consisting of soil and ashes, plentifully mixed with burnt fragments of human bone, but without artifacts of any kind.



VIEW INSIDE MOUTH, BIG WATER CAVE, LA PATANA, MAISI

<p style="text-align: center;">BIG WATER CAVE</p>	<p style="text-align: center;">261</p>
<p style="text-align: center;">CAVERNS</p> <p>Perhaps a mile southwestward from Burial Cave 2, and in the same cliff, lay the most remarkable series of caverns encountered during the whole expedition (No. 19 on map). To reach the first of them we followed the path worn by the feet of the Mosqueras in their daily quest of water southward from their village; this finally turned to the right and ascended the rocky slope, perhaps thirty feet to the foot of the cliff, where we found a very small, low cave, almost hidden behind a huge <i>jagüey</i> tree. Entering this, still following the trail, we suddenly emerged into a large cave, with a mouth fully 20 ft. high and 112 ft. long; but this opening was so blocked with fallen stones that it was easier to enter through the small grotto.</p> <p style="text-align: center;">BIG WATER CAVE</p> <p>The high, vaulted roof of this stately cavern is hung with a myriad of white stalactites, while scattered here and there about the floor are many massive stalagmites (pl.</p>	
<p style="text-align: center;">AND MONOGRAPHS</p>	

LVI), looking from a distance like groups of statuary in an exhibition hall. The middle of the chamber is occupied by a knoll of fallen rocks and earth, behind which may be found a number of natural basins in the rock, affording good drinking water most of the year; in fact they became dry only during seasons of extreme drought.

The writer naturally thought that such a spacious, clean, airy, and comparatively well-lighted cavern would surely show traces of long occupancy by the Indians, but such was not the case, careful tests failing to show any trace of them except a little camp-refuse just inside the entrance.

A large pit in the floor of the southern side of the entrance then attracted our attention, but painstaking search failed to find in it any traces of occupancy. We did, however, find a passage extending from the bottom of this pit back into the mountain, and this we followed around several turns, ever slanting downward. Suddenly we were halted—the floor of our subterranean corridor dropped into nothingness, for a great chasm yawned before us. Awed by

this discovery, we were standing in silence when we noted a peculiar, distant, roaring sound emanating from the abyss—sometimes a little softer, sometimes a little louder, but never ending—and try as we would, we could not at first place it. Cautiously dropping a stone over the edge, we fully expected to hear it splash into water after a lapse of time, but instead, we heard it ring against rock almost immediately; but there was still an interval sufficient between the time of dropping and striking, to convince us that we were high above the floor of the gulf before us. About this time we noticed bats flitting by, and as Dr Rodriguez wished to catch some for the collection in Habana, we turned down our lights and waited while he tried for them with his butterfly net. After our eyes became accustomed to the dim light, we noticed, to our surprise, a faint ray of daylight far below our level, on the opposite side of the black void, which showed us that it must have another connection with the outside. Then the writer questioned the guide, who was one of the Mosqueras, whether he knew of

any opening from outside directly into the cavern before us, to which he replied that once when a boy he had been hunting *juitas*, when one escaped from him into a pit, from which it entered a hole in the rock. Following, he found himself in a great, dark chamber, and was so frightened that he made his escape as fast as he could, and had not returned since, but could still take us to the place, which he thought might prove to be the right one.

So he led us out of the cave and around the face of the cliff to the southwest, where, on emerging from the bushes, we came upon a great hole, directly at the foot of the precipice, along which it extended for about 220 ft., with a depth of 12 to 15 ft. and a width of 20 ft., and was spanned in the middle by a natural bridge. The inevitable *jagüey* tree, apparently like the other two mentioned before, stood planted by a kindly fate directly on the brink, but we did not have to use its pendent roots, for there was a tree growing in the pit, by means of whose branches, together with a notched



PETROGLYPHS IN CUEVA ZEMI, LA PATANA, MAISI

BIG WATER CAVE

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pole, we made our way more easily to the bottom.

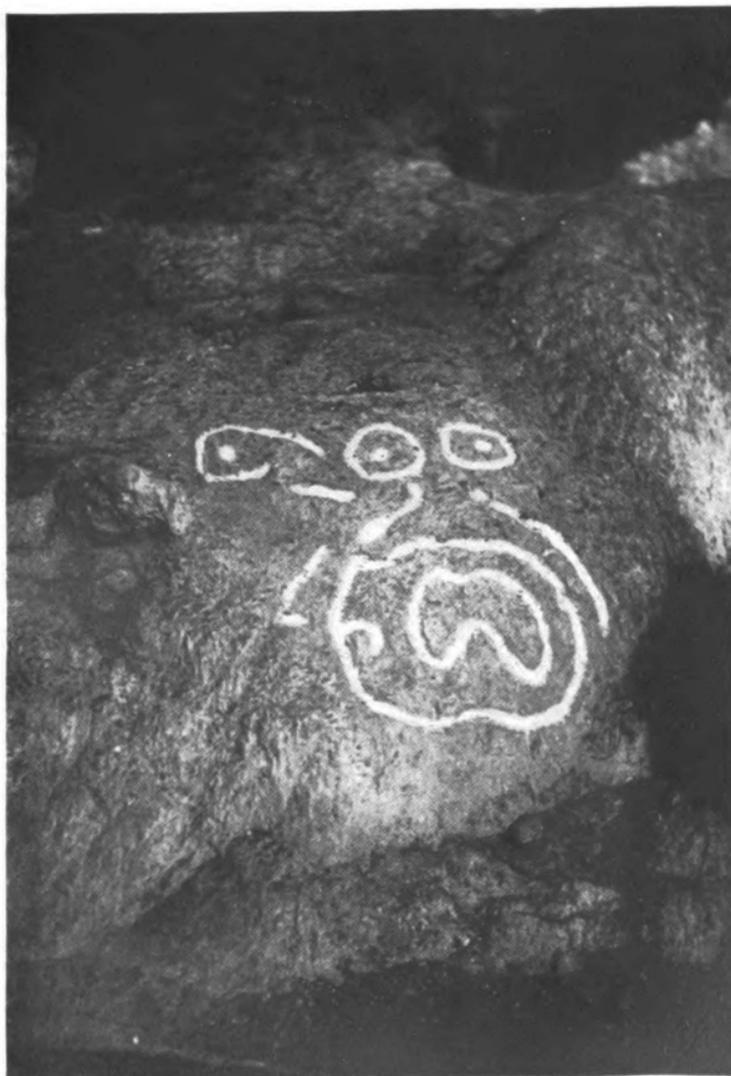
Several cave openings were noticed running into the cliff, into one of which, selected at random, we made our way and found ourselves in a great natural rotunda, which, judging from the roaring sound plainly audible, seemed to be the one we had approached from above. To make sure, two of the party were dispatched back around to the other cave with a lantern, and surely enough, after a time the flickering light appeared in a little opening high above the floor of the rotunda.

A search about this chamber, and several test-holes made in the floor, revealed nothing in the way of relics, but we were finally able to locate the roaring sound as coming from a passage opening westward, the mouth of which was nearly blocked by large, fallen rocks. Finding these difficult to overcome, and remembering the other openings near, we returned to the pit and tried a large, roughly funnel-shaped cave-mouth about 100 feet to the west. This led us to a tunnel that extended into the passage

AND MONOGRAPHS

blocked from the rotunda by the pile of rocks, a spot where the roaring sound was louder than we had heard it before. It came from an opening about 25 ft. wide and 15 ft. high, leading westward.

The Cockroach Corridor.—Turning into this, we found ourselves in a tunnel on a soft floor of bat guano, with a rocky ridge down the middle, all of which was literally crawling with thousands of great cockroaches—one could not step without crushing them. Pressing on, we soon noticed centipedes, some of them very large, moving among the roaches, while the walls of the passage were decorated with huge spider-like creatures, which later proved to be a species of tailless scorpion. Bats wheeled overhead in large numbers, and filled the air with their twittering squeaks of protest. As we went on toward the ever-increasing roar, the air grew hotter and hotter, and more and more oppressive, until our clothing became soaked with sweat. Finally, two of the oil lanterns went out and could not be relighted, and even the acetylene bulls-eye began to flicker in the heavy air, so



PETROGLYPHS IN CUEVA ZEMI, LA PATANA, MAISI

we were reluctantly compelled to turn back without solving the mystery. On our way out, the author noticed a little mound of struggling cockroaches, which he scattered with his foot to see what had caused the excitement, and found the body of a baby bat already half-picked to a skeleton, which aroused reflections not only as to how the roaches of the cave found a living, but also on what might happen to a man should he faint and fall from lack of oxygen in that dismal dungeon.

Rotunda of the Bats.—Some days later we tried again to unravel the secret of the cockroach corridor, and this time succeeded, reaching the point where it debouched into another great rotunda before the bad air drove us back, and found that the roaring sound proceeded from the wings of thousands of bats flying round and round the rotunda, looking for a place to light not already occupied by one of their myriad comrades. We found out later that it requires nearly two hours for them to come out of the cave every night, flying in a steady stream. Thinking that the heat

might come from their bodies, in the close and unventilated cave, the writer reasoned that the place must cool off somewhat during the absence of the bats at night, and that they must bring in with them a lot of fresh air when they flocked back at dawn. So we made a third attempt early one morning and found the temperature much lower and the air distinctly better, so much so that we were able to penetrate the cave to the middle of the bat's rotunda, from which point we could see the opening of still another corridor leading westward. But we were obliged to leave without exploring this, as we could endure the fetid atmosphere no longer.

CUEVA ZEMI

Petroglyphs.—On the way out, the writer was searching the walls for rock-carvings when he espied in a crevice a large boa, or *majá*, which Dr Rodriguez succeeded in capturing for the Parque Colón in Habana. On arriving at the entrance we sat down to rest, tired and discouraged at finding such slight traces of man in so wonderful a



EAST SIDE OF IMAGE IN CUEVA ZEMI, LA PATANA, MAISI

cavern; and the author watched idly while one of the Indian aids removed his scant clothing to bathe in a little natural pool on the northern side of the entrance, and was admiring the bronze beauty of the man's figure when his eye rested on the cave wall back of the pool, and noticed thereon in plain daylight, but partially hidden by a mossy growth, some genuine ancient petroglyphs, the series shown in pl. LVII, and a little farther back another carving (pl. LVIII). Looking about for more, the writer was astonished to find that a large stalagmite we had passed many times on our way into the cave had not only a plainly marked face, but indications of a body carved upon it (pl. LIX).

The Zemi.—The stalagmite stood some fifty feet back from the shelter-line of the cave-mouth, but in plain if subdued daylight. About 4 feet high, it measured at the base about 25 inches from north to south, and nearly 7 feet from east to west, an elongate form with two points projecting upward, the westernmost short, with three little hollows pecked into it and forming a

rude face consisting of eyes and mouth only, looking westward. The highest and largest point of the formation rose from its eastern end, and here we found the most carving, the face first discovered, made by pecked-in grooves, with mouth, nose, and eyes plainly marked, while other grooves suggested limbs and male genitals, and another groove encircled the forehead like a head-band. This image faced east, and was so placed by nature that at a certain time in the morning, at least during our stay in June and July, a shaft of sunlight striking through a crevice fell full upon the face of the figure for a few minutes. The south side of the head bore a third rude face indicated by three shallow depressions; the north side, in addition to the groovings which may have represented an ear of the large face, a fourth, this time outlined with a groove, as may be seen in the photograph (pl. LX), to take which in a satisfactory manner we had to whiten the grooves with cassava starch.

Removal of the Image.—The removal of the image, or *zemi*, seemed impossible at first, for it weighed 800 or 900 pounds;



NORTH SIDE OF IMAGE IN CUEVA ZEMI, LA PATANA, MAISI

but the problem was finally solved by sawing it into five pieces with the aid of a two-man lumber saw (which had to be sharpened very frequently), carrying these pieces by hand out of the cave and up out of the pit, loading them on mules and thus transporting them to Maisi, where they were packed in boxes made of wide cedar boards sawed out by hand from the trees of the forest, and loaded on a little schooner which touched occasionally to bring provisions to the lighthouse when the weather was good. This in turn took them to Baracoa, where they were shipped on board a Norwegian fruiter to New York.

Specimens in Cueva Zemi.—Careful search of the cave-mouth, the bottom of which was very rocky, and which measured 60 ft. wide and 120 ft. deep to the opening of the tunnel, revealed little, but a spot about 8 ft. in diameter had been cleared in front of the image, floored with blackened earth mixed with ashes to the depth of about 8 in., which yielded *julia*, turtle, ground sloth, and fish bones, and a few bits of chipped flint and plain potsherds. Elsewhere in the cave,

among the rocks, were found two sticks, apparently worked by the Indians, and a number of potsherds, hammerstones, and the like, but nothing to indicate plainly the culture of the old inhabitants except the handle of a vessel, a rubbing stone, and part of an unfinished celt which looks very much as if it belonged to the Tainan culture. Probably both peoples had been there. We called the cavern "Cueva Zemi," in honor of the image, such things being called *ce mi*, or *zemi*, by the Taino Indians at the time of the discovery, according to the old writers; but the future traveler in La Patana will do well to ask for the *Cueva Cucaracha*, or "Cockroach Cave," which more prosaic appellation gained considerable vogue among the natives; or, better still, the *Cueva de los Bichos*, or "Cave of the Bugs."

Explanation.—It seems probable that the mysteries of the hot, dark, subterranean chambers, the roaring sound, the millions of cockroaches, and thousands of bats, existed in Indian days, as well as now—if so, these awe-inspiring phenomena may well have caused the selection of this particular cave

MYLONDON CAVE

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as a special spot for "cavern worship," known to have existed also among the related Indians of Haiti.

MYLONDON CAVE

Passing northeastward through the large rotunda where the roaring sound was first heard, and several low-roofed chambers in none of which did we find any trace of habitation, we came at last to another cave mouth, this opening but very little below the level of the mesa. This we followed backward and downward to about three hundred feet through a wide and open passage into a roomy chamber, perhaps seventy-five feet in diameter, partly surrounded by a kind of gallery at a considerable height above the floor. The passage entered at the level of this gallery, and was connected with the floor by a natural inclined plane, down which we passed, and found the bottom of the chamber covered with a mixture of bat guano, disintegrated limestone, and what appeared to be ashes, averaging about fourteen inches deep, but sometimes as much as twenty-two inches before solid rock bottom

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was reached. This contained many marine shells of the varieties known locally as *sigua* and *cobo*, some broken to extract the animal, a flint chip, and a number of claws and bones of a ground sloth that we took to be a *Mylodon*, but which turned out to be a *Megalocnus*. We, however, cheerful in our ignorance, named the place "Mylodon Cave," which now is written into the records and cannot well be changed. It was plain that while the ancient people had often been in this part of the cave, they had not lived here regularly, for careful search failed to reveal anything more except, lying among the rocks, part of a pottery vessel bearing a kind of cross-hatch decoration like the pottery of Jamaica, sometimes in eastern Cuba found on Ciboney sites.

Burials and Specimens.—The entrance chamber, 21 ft. wide and 28 ft. deep, with a mouth 8 ft. high, was then examined, a trench being dug along the eastern side, which revealed a dark earth layer ranging from 12 to 19 in. deep, containing many potsherds, turtle-bones, fish-bones, and other traces of Indian occupancy, and



BURIAL IN MYLONDON CAVE, LA PATANA, MAISI

next to the eastern wall, covered by a pile of stones mixed with very little earth, the skeleton of an old man, lying on its left side with knees drawn up, heading southeastward. Most of the skull and many of the other bones, including all those of the feet, were missing; the lower jaw was dislocated and placed near the knees, as shown in the photograph (pl. LXI). As the trench was continued, many bones of food animals came to light, together with some worked stones, including a large block of hematite; while far underneath the shelving rock, at the side, were the ribs, spine, and arm-bones of a child about three years of age, seven inches from the surface, the skull, hips, and legs being missing. Tests elsewhere near the entrance showed a shallow refuse layer, but no further work was done.

Cultures Represented.—On the whole, the objects found here seemed to belong to the Ciboney culture, with a few potsherds which might have come from the Taino.

After visiting a very beautiful cave, particularly rich in stalactites, just southwest of the Cueva Zemi, and finding nothing

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	<p>there, we reluctantly left La Patana for the equally sparse, if not quite so primitive, settlement called San Lucas, across the cañon of the Rio Maya, and considerably nearer to Cape Maisi.</p>
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CHAPTER XI

THE BIG WALL SITE



WHILE working at La Patana, as before related, word was brought to us of a site where many celts and other objects had been picked up at a place called San Lucas, on the opposite or northern side of the Rio Maya cañon, and somewhat nearer to Cape Maisi, as indicated by No. 20 on the map (pl. xxvii).

GENERAL FEATURES.—When we visited the site, we found it occupying a low knoll, perhaps an eighth of a mile from the cañon's brink, and about the same distance from the foot of the second *paredón*, or cliff, counting from Cape Maisi, from which cliff it was separated by a shallow and rocky little valley, growing deeper northward. The entire top of the knoll was covered with abundant signs of ancient habitation, an area somewhat oval in form, about 460 feet

AND MONOGRAPHS

long and 300 feet wide, including the refuse-heaps on the slopes, the longer axis running north-northwest to south-southeast, as may be seen on the plan of the site (pl. LXII).

The slope of the wooded hillside was slight southward toward the Rio Maya; toward the east the land dipped gently away, forested with dwarfish trees in the direction of Cape Maisi; to the north, at the end of a long, gradual, timbered incline, lay the open fields of a little farm; but to the west the declivity was steep, down into the little valley; this was partly cleared, revealing the fact that the soil, when not blackened by village refuse, was a kind of red clay.

Where the ancient inhabitants could have obtained their water seemed at first a mystery, as the "Rio" Maya is merely a dry cañon except in times of especially heavy rain, and there are no springs or brooks about; but we soon found that the present natives get their supply from a water-hole in a nearby cave, and that there is a *casimba*, or natural cistern, in the rocky valley not far distant. Near it still lay the



VIEW OF EMBANKMENT, "BIG WALL SITE," SAN LUCAS, MAÍSI

fragments of a large pottery vessel, probably brought to carry water back to the village—brought once too often.

BIG WALL.—The most notable feature of the place was a great elongate mound or wall of earth bounding it to the east (pl. LXIII), a structure 260 ft. in length, 30 to 40 ft. wide, and about 6 ft. high at the crest, near the middle, but tapering off toward the ends. This it was that led us to name the place "Big Wall Site." Near each end of the wall, but west of it, was a small circular mound, while another, still smaller, lay to the northward of the center, on the brink of the slope leading down to the little valley. The respective positions of these features are seen in the plan (pl. LXII).

The appearance of things in general, especially the part under cultivation, convinced the writer that the site should be explored. The owner, Sr Rumualdo Matos, being willing, we moved our camp thither early in August, and set up our tents beneath the spreading branches of a huge *jagüey* tree, not far from the owner's palm-thatched cottage. Digging a few test-

holes about the place, we soon found that indications of habitations were so abundant all over the top of the knoll that a little work almost anywhere would uncover fragments of pottery, a grinding-stone, or something of the kind; and that wherever the soil was worn or washed, as in the paths, careful search would reveal beads of stone or of shell.

REFUSE-HEAPS.—It was soon also discovered that the slopes, almost all the way around, were covered with refuse deposits, particularly on the western hillside toward the little valley, where the deepest of all lay within the limits of the cultivated field, reaching a depth of 4 feet 7 inches in places. The photographs taken of this spot at the time were not successful, so another was made when the writer revisited the place in 1919 (pl. LXIV), at which time the field, once cultivated, was found grown up in weeds and undergrowth.

Our first trench was commenced in this hillside midden at the bottom of the slope, at the western end of the section marked Trench 1 on the plan (pl. LXII). On the



HILLSIDE REFUSE HEAPS, "BIG WALL SITE," SAN LUCAS, MAISI

surface was found a layer of red clay, which grew thinner as we proceeded up the hill, until it disappeared entirely; this had undoubtedly been washed down from above since Indian days; then came a layer of dark soil from 14 to 27 inches deep, containing

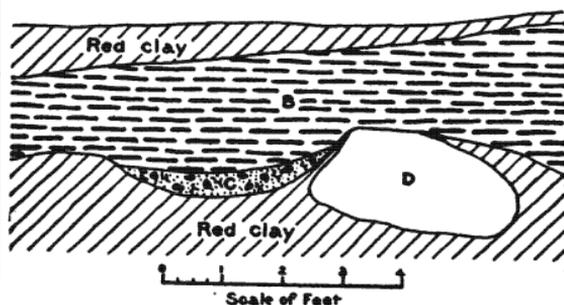


FIG. 72.—Section of the western edge, hillside refuse deposit, Big Wall Site, San Lucas, Maisi. (A, Red clay; B, Dark refuse layer with artifacts; C, Layer of crab-claws, shells, and ashes, with artifacts; D, Rock.)

village refuse such as ashes, pieces of pottery bowls and plates, including many effigy handles; shell ornaments, whole and broken; marine and terrestrial shells; animal bones, and the like. Then at the bottom, as shown in fig. 72, came a deposit or pocket, in the rocky red clay subsoil, of almost pure crab-claws, small snail-shells; and ashes. Occa-

sional irregular ash-layers covering limited areas were encountered throughout the deposit, and similar layers of snail-shells, mostly terrestrial, together with fish and *julia* bones, the whole mixed with red clay, and often 8 inches thick.

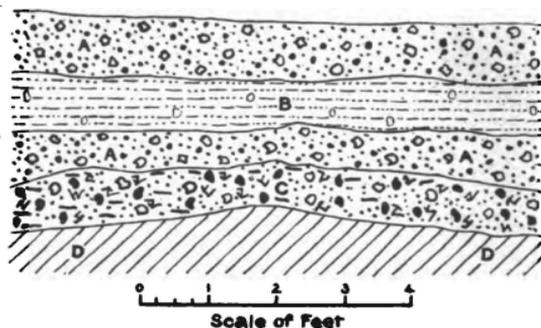


FIG. 73.—Typical section of hillside refuse deposit, Big Wall Site, San Lucas, Maisi. (A, Dark refuse, artifacts; B, Hard, yellow, gravelly soil, few artifacts; C, Snail-shells, crab-claws, ashes, artifacts; D, Rocky red clay, no artifacts.)

The depth of this hillside deposit averaged 30 to 36 inches, with some deeper and some shallower places. In some places the layers could hardly be distinguished, in others they were quite well marked, as shown in the typical section of Trench 3 given in fig. 73, in which the top and third layers,

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both marked A, are of typical, dark, village soil, full of débris; B is a hard, gravelly, yellow layer, with very few objects; C largely ashes, crab-claws and snail-shells; and D the rocky, red, undisturbed clay forming the subsoil.

The deposit reached its maximum depth just below the brow of the hill, where it extended from 4 feet to 4 feet 7 inches; above the brink the layers of hard, gravelly soil increased in number and depth, the potsherds averaged smaller and complete objects rarer, while the layers of dark village refuse grew rapidly thinner, and finally became exhausted, leaving only the rocky red subsoil of the hill, topped with but a thin and stony village layer, which tests showed us in no place reached a depth of more than 18 inches.

Toward the south, as the slope of the hillside grew gentler, the hillside refuse-heap grew thinner, but still remained quite productive, as native workers found; it could be traced around the southern edge of the site nearly to the "big wall" itself.

To the north, the refuse-heap thinned out

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considerably, being only about 2 feet 3 inches deep in Trench 11, which was dug in the thickest spot that could be found, but it, too, could be traced around the end of the site, coming to a close near the path, where Trench 10 revealed a depth of only 17 inches. Near the northern end of the wall another refuse-bed, exposed by Trench 13, showed a maximum depth of only 20 inches.

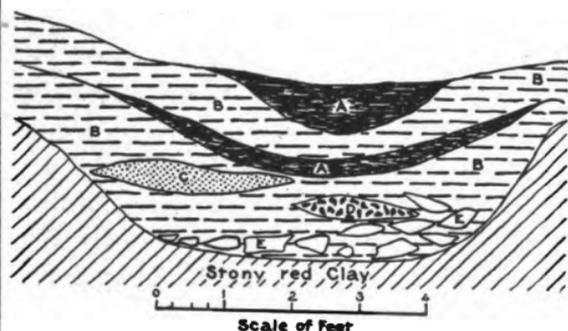


FIG. 74—Section of pit, Big Wall Site, San Lucas, Mai. (A, Black earth; B, Dark earth; C, White ashes; D, Shells; E, Stones, black earth; F, Stony red clay.)

PITS.—Just above the brow of the hill, Trench 1 extended into a pit (No. 1), visible from the surface as a slight depression, and filled with soil and refuse, as seen in the section (fig. 74), among which was found the

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<p>greater part of the rim of a very unusual vessel, and a number of articles of bone and shell, although the refuse deposit about it, nearing its end, was practically barren. Most of the artifacts were found above the lower black layer, but there were some potsherds in the very bottom. The layer marked c consisted of white ashes, d of snail-shells and bits of crab-claws broken into small pieces.</p> <p>Pit 2, about half-way down the slope, reached a depth of 4 feet 1 inch, although the average depth of the village layer about it was only 27 inches. It was not visible from the surface, and the regular layers of the refuse-heap extended unbroken over it, dipping but slightly as shown in the section (fig. 75), so that in all probability it dates from an early period. This seems more probable in view of the fact that a thin layer of red clay (d), evidently laid down by the wash from the hill before the refuse-heap was deposited, also extends unbroken over it. It had been dug down into the red clay (d) between the rocks (F); the lower layer (B) consisted of typical refuse, in-</p>	
AND MONOGRAPHS	

cluding a few shells, the next one above (E) of snail-shells and crab-claws, with very little admixture.

Something like this, but containing a larger admixture of earth and ashes, was the layer (B) of the regular refuse deposit above;

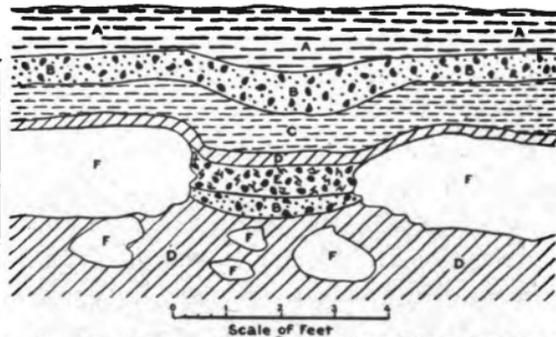


FIG. 75.—Section of small pit, Big Wall Site, San Lucas, Maisi. (A, Dark earth; B, Shells and refuse; C, Gray earth; D, Red clay; E, Snail-shells and crab-claws; F, Rocks.)

C was grayish earth with a few artifacts, while A was the typical, dark, village layer containing the ordinary refuse.

Pit 3, a depression visible from the surface just north of the expedition camp, was not explored.

CONSTRUCTION OF THE WALL.—Excavation of the wall had been left to the last,

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TAINO BURIAL, "BIG WALL SITE," SAN LUCAS, MAISI

because our test-holes had shown that we might look for better results in the hillside refuse-heap; but this proved to be unfortunate, for we had barely commenced our digging in this tumulus when the rainy season set in with such downpours every day that the work had to be brought to a close.

We dug enough, however, to find that the wall was composed entirely of village refuse, with some stones, much mixed, and in the part we excavated, without definite layers, and rested on the red-clay subsoil. Sherds, marine and terrestrial shells, *julia* bones, and all the familiar midden objects were abundant.

MOUNDS.—Just to the north and a little to the west of Pit 1, as shown on the map (pl. LXII), was one of the low mounds before mentioned, about 22 feet in diameter and 2 feet high. The section (fig. 76) shows the composition of the structure, which seems to have been little more than a midden, although it is possible that it may have been constructed as the foundation of some small building. The layers certainly

looked midden-like, however, and the probabilities are that they represent refuse dumped at different times in a pile that, on account of its position in a clearing, or its proximity to a dwelling, was more conven-

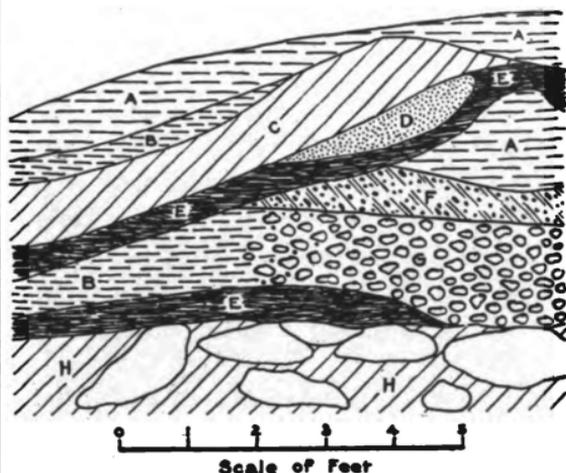


FIG. 76.—Section of mound, Big Wall Site, San Lucas, Maisi. (A, Dark earth; B, Darker earth; C, Yellowish clay; D, White ashes; E, Black earth; F, Gray ashes, flint implement; G, Loose, coarse gravel; H, Rocks and red clay.)

ient than the hillside. The usual midden objects occurred, among them an unusually good flint knife of the rude pattern prevalent here.

The two other small mounds near the ends of the wall were not excavated at the commencement of our work, because of unfavorable tests, but we had planned to explore them before we left; this was not done, however, the advent of the seasonal rains cutting short the work.

BURIALS.—The first skeleton found here lay in the hillside refuse deposit at the western edge of the site, not far from the beginning of Trench 1. Apparently an adult, it was buried in a flexed position on the left side, heading east, with the left arm bent and the right lying loosely across the abdomen, as may be seen in the photograph (pl. LXV). The body had apparently been forced in between rocks which had effectually prevented the digging of a larger grave. The bones were in fair condition, except the skull, which had been badly eaten by ants, but enough was left to show plainly that this had been artificially flattened—the first evidence linking the artificially deformed skulls of the Maisi region, of which so much has been said and written, with the Tainan Arawak culture. Many

authorities have hitherto thought these crania to be Carib, as that people were known to practise flattening of the skull.

The second skeleton was discovered near the beginning of Trench 3, at a depth of 22 inches, lying partly on the right side, with knees drawn up and heading northeast; the right hand lay upon the abdomen, the left under the chin. Although evidently a man of mature years, the bones were apparently not strong enough to withstand decay and the attacks of the ants, whose holes penetrated the soil in every direction at this point. The skull, although in very poor condition, had apparently also been flattened like that of the first.

Burial 3, of an aged man, found by native diggers but uncovered by us, lay on the gentle slope in the southwest portion of the site, flexed on the right side, heading south and facing east, with the left hand on the right elbow, right hand on the pelvis (as seen in pl. LXVI), at a depth of only 8 inches. This skull also showed the typical flattening.

On the same slope, but higher up and far-



TAINO BURIAL, "BIG WALL SITE," SAN LUCAS, MAISI

ther north, as may be seen in the map, Burial 4 was similarly found by native diggers—the remains of a young man, with skull flattened like the rest, lying on the left side, heading north and facing east, with knees drawn up at right angles, the arms bent. The bones, including the skull, were much decayed; the latter lay only 11 inches beneath the surface.

Burial 5, of a flat-head, aged adult, introduced a variation in position, the skeleton being placed on the back, heading east-northeast, with the legs bent up tightly to the body and crossed, and the skull turned slightly toward the south. The left arm was flexed, the right lower arm and right foot were missing, probably struck, broken, and thrown away by the native searcher before he realized what he had found. The skull lay at a depth of 16 inches.

As for Burials 6 and 7, they were found during the writer's absence, and full notes were not taken. Of No. 6 we know only that it lay at a depth of 4 feet 7 inches, and was flexed on the right side, heading east; of No. 7 we know only that it headed

east, but lay on the left side. No regular burials of children were found. No mortuary offerings were found with any of the burials here, but the skeletons were buried on a Taino site, both graves and surrounding soil containing casual Taino artifacts, hence there is little doubt that the skeletons themselves are Taino.

ARTIFACTS. Pottery.—The commonest artifacts found on this site were fragments of pottery, of which a wagonload could have been gathered. We discarded most of them, however, retaining only such as showed decoration or could be fitted together. By examining the potsherds carefully we were enabled to pick out all or most of the fragments of a number of vessels, so that they could be restored, and in some cases, found bowls and plates entire, or but slightly damaged, imbedded in the refuse (pl. LXVII). Many vessel handles in the form of grotesque heads (figs. 77-79) came to light.

The character of the pottery was about the same in the different layers of the deposit, and the decorations similar until the



DISHES OF POTTERY (TAINO), FROM "BIG WALL SITE," SAN LUCAS, NEAR MAISI
(Diameter of the larger, 11.2 in.)

lowest levels of the deepest portion were reached, just below the brow of the hill, refuse which must have been the first laid

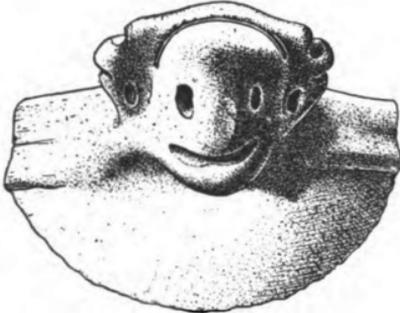


FIG. 77.—Potsherd with grotesque head (Taino), from Big Wall Site, San Lucas, Maisi. (Width of head, 1.2 in.)



FIG. 78.—Potsherd with grotesque figure (Taino), from Big Wall Site, San Lucas, Maisi. (Length, 5.2 in.)

down on the site. Here were found sherds which, although similar to the rest, were decidedly crude and archaic in decoration.

AND MONOGRAPHS

Quite general in distribution throughout the refuse deposit were occasional fragments of hard white ware which were at first mistaken for pieces of European crockery, but closer examination of the workmanship and of the forms and decorations showed their aboriginal character. It was later found that such ware is not uncommon in Haiti.

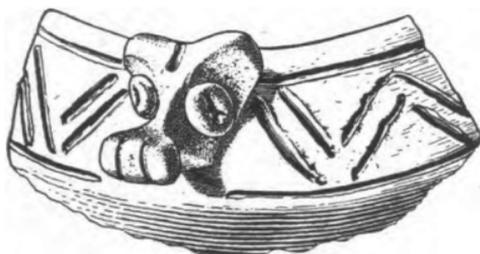


FIG. 79.—Potsherd with animal head (Taino), from Big Wall Site, San Lucas, Maisi. (Length, 2.6 in.)

Stone Articles.—Next among the artifacts in point of quantity were the hammerstones and grinding-stones used in working stone and shell; next to these, fragments of celts, mostly of petaloid form, in all stages of manufacture, and miscellaneous stone objects, such as flakes and rude implements of flint, beads of various sizes and types, and

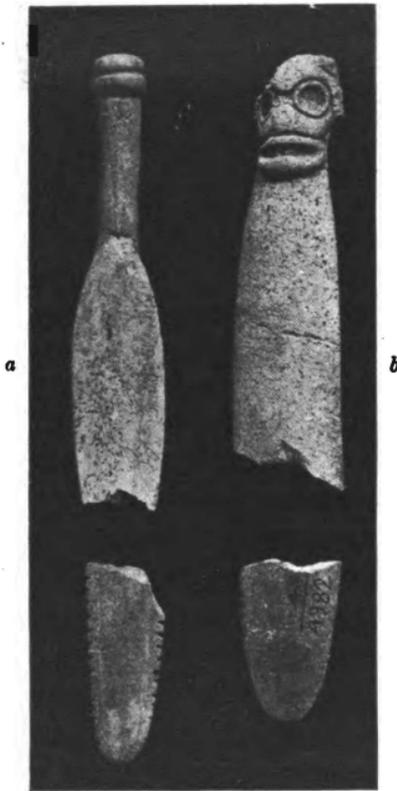


FIG. 80.—“Swallow-sticks” of bone (Taino): *a* from El Lindero site; *b* from Big Wall Site, Maisi. (Length of upper part of *a*, 4.1 in.)

roughly made little fetishes representing men and animals.

Shell and Bone Work.—After these came articles made of shell, including pendants, jinglers, beads, pieces carved to represent eyes and teeth as inlays for wooden effigies (like fig. 45), a few bone arrow- or spear-points, all unfortunately broken, together with some fragments of bone spoons and spoon-like “swallow-sticks” (to be explained later), one of the latter carved with a conventional head (fig. 80, b).

CACHES.—A little pile of nine perforated jinglers (like fig. 68), made from *Oliva* shells, was found at the bottom of Trench 5, near its western end; this may have been a true cache—a deposit purposely hidden—or may merely have marked the spot where a garter decorated with these shells, so hung as to rattle with every step, had been lost or thrown away. Knee-rattles made of these shells, perforated in the same way, are still in use among Indians, being found among some tribes as distant as the Pueblo peoples of southwestern United States.



VESSELS OF POTTERY (TAINO), FROM EL LINDERO SITE, NEAR MAISI
(Diameter of the larger, 8.5 in.)

A phenomenon more like a veritable cache, however, was encountered also on the bottom of the deposit, at a depth of 2 feet, where appeared a deposit of unfinished celts and celt-making tools, such as hammerstones and rubbing stones, to the number of thirteen, all of which throw light on the making of the excellent petaloid celts so characteristic of the Tainan tribes.

ANIMAL REMAINS.—Among the more interesting of the animal remains found scattered throughout the refuse deposits, and which included the shells of edible molluscs from the great conch *Strombus gigas* down, the bones of various fishes, and of turtles and *juttas*, were those of the now rare almi-qui, or *Solenodon*; of cetaceans, small and large, including probably one species of whale, and the remains of veritable dogs encountered at such depths, and so covered with unbroken layers that there can now be no doubt that the *perro mudo*, or “dumb dog,” which never barked, found in possession of the Indians by early explorers, was not, as some writers have thought, a species of raccoon, but a true dog.



FIG. 81.—Spearhead of iron found near surface, Big Wall Site, San Lucas, Maisi. (Length, 8.3 in.)

DATE OF OCCUPANCY.—The unusual depth of the refuse deposits, and the archaic character of some of the pottery found here, seem to give the first settlement of this village an earlier date than any other site of the Tainan culture visited by the expedition; in fact, it may well have been one of the first occupied by this people on their arrival in Cuba. That it was in use up to the coming of the whites is suggested by the finding of an iron spearhead (fig. 81) near the surface, but, because this was the only article of European origin found, it seems likely that the village was abandoned soon after that fatal date. It should be remembered in this connection that most of the Indians were exterminated or enslaved within a few years after the discovery.

CHAPTER XII

EL LINDERO, LAGUNA LIMONES, MAISI, AND
LESSER SITES

WHILE we were working at the Big Wall site, the natives were scouring the country round about for specimens to sell us. Among the many sites they located were two of especial interest—El Lindero and Laguna Limones. These they excavated, and also partially dug a village-site near the lighthouse at Cape Maisi; others at the Finca Caridad and Finca Sitges, near Casimba, in the Gran Tierra de Maya; still another at Cuesta de Palos, and finally the well-known Pueblo Viejo, all representing the Tainan culture, together with a cave at El Baga, representing in the main the Ciboney people. The grotesque head shown in fig. 82 came from the Finca Sitges site, as did the typical rubbing stone for celt-making (fig. 83).

AND MONOGRAPHS

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CUBA

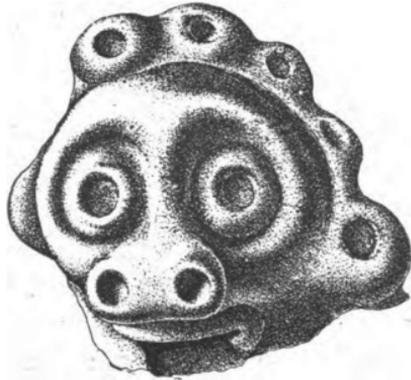


FIG. 82.—Grotesque head of pottery (Taino), from site at Finca Sitges, near Maisi. (Height, 2 in.)

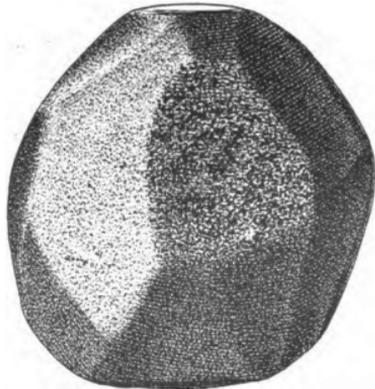


FIG. 83.—Rubbing-stone for making celts, etc. (Taino), from Finca Sitges, near Maisi. (Diam., 2.1 in.)

INDIAN NOTES



FRESH-WATER POND (LAGUNA LIMONES), NEAR MAISI

The bead seen in fig. 84 came from Pueblo Viejo.

El Baga (No. 21 on the map of the district) we had no opportunity of visiting, nor was I even able to locate on my map the one called Cuesta de Palos. We sometimes found ourselves passing the earth walls of Pueblo Viejo (No. 22) without ever having time to make an examination or a survey; while the sites at Casimba in Gran Tierra—one at Finca Sitges (No. 16), the other at Finca Caridad (No. 17)—were discovered and partly explored by Mr de Booy during his reconnoissance, as related in Chapter VIII, the work at the latter place being continued by the natives during our stay.

During our visit in 1919 natives brought us typical Tainan specimens from two hitherto unreported village-sites, one on La Papaya mesa above La Patana, the other on the Mesa Limonal near Los Llanos; but the writer was unable to visit them, and



FIG. 84.—Bead of stone, ornate type (Taino), from Pueblo Viejo, near Maisi. (Length, 0.4 in.)

so cannot locate them on our map of the district.

EL LINDERO SITE

The site called by the natives El Lindero, "The Boundary," because of its location on the boundary-line between the Hacienda Maisi and the Gran Tierra de Maya, is situated about an eighth of a mile south of the Rio Maya cañon, on the first mesa below the great tableland of Gran Tierra (the mesa of La Papaya), and about the same distance east of the foot of the cliff (No. 23 on the map). It consists of two oval hillocks, or ridges, standing on rocky but nearly level ground, each of which measures roughly 250 ft. east and west by 100 ft. north and south, and 5 to 6 ft. high—one being about 150 ft. west of the other. They can hardly be called middens, because they are for the greater part natural formations of rock and clay, but there was a deposit of village-refuse, 4 to 5 ft. deep, on the western end of the easternmost hillock, and another, 3 to 4 ft. deep, along the northerly edge of the westernmost, but so



EMBANKMENT, SHOWING LARGE MAHOGANY TREE GROWING UPON IT, PART OF AN ANCIENT EARTHWORK AT LAGUNA LIMONES, MAISI

torn to pieces by the native relic-diggers that their structure could not be ascertained. Apparently the *bohios*, or *caney*s, of the Indians had stood upon these hillocks, the refuse from which was thrown out as stated. The site was particularly rich in pottery, a number of whole or restorable vessels being recovered by the natives (pl. LXVIII). The collection as a whole was typical of the Taino culture, but it did not show the archaic forms, a few of which were encountered at considerable depth at Big Wall. Like the latter site, its last occupancy was brought up to colonial days, this time by the finding of a



FIG. 85.—Fetish of stone (Taino), from site at El Lindero, Maisi. (Length, 1.9 in.)

small piece of sheet-copper, probably of Spanish origin, in the top of the Indian deposit, about eight inches from the surface. Among the more interesting articles found here were the little stone fetish shown in

fig. 85; fragments of a shell pendant, shown restored in fig. 86, and the "swallow-stick" seen in fig. 80, *a*.

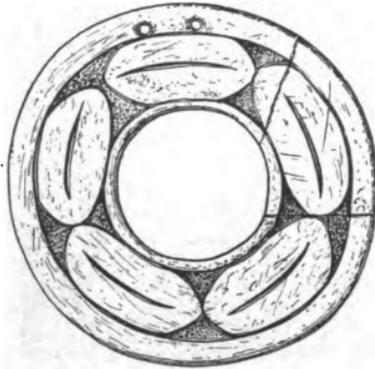


FIG. 86.—Pendant of shell (Taino), restored from fragments, from site at El Lindero, Maisi. (Diam. about 3 in.)

LAGUNA LIMONES SITE

The Laguna Limones site is situated on the first mesa above the Maisi coastal plain, on the trail which traverses the bank of Rio Maya from Gran Tierra to Maisi, about a mile and a quarter south of the cañon at point No. 24 on the map. It takes its name from a small pond or water-hole (pl. LXIX) which, although about 75 ft. in diameter, is never dry at any season; and

LAGUNA LIMONES

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this water doubtless attracted the Indians, who no doubt were also favorably impressed by the level land with very few stones. The timber grows quite tall here, but is not luxuriant as on the higher mesas where rainfall is more abundant.

Earthwork—This site is particularly notable for its roughly rectangular earthwork, an enclosure whose embankment, although rarely more than 2 or 3 ft. high and 14 ft. wide, can still be traced plainly in all its parts, and whose age is suggested by large trees growing upon its crest, such as the mahogany (*cayoban*) shown in pl. LXX. This structure measures 502 ft. long and approximately 260 ft. wide, the longest axis N.N.W. and S.S.E., and the entrance at the southeastern corner, as may be seen by the plan (pl LXXI). The wall is usually higher on the outside than on the inside, showing that the earth for its erection came largely from without. It was probably a ceremonial dance-ground and ball-court, like those of Haiti and Porto Rico.

Village-site.—Test-holes within the enclosure revealed a small quantity of village

AND MONOGRAPHS

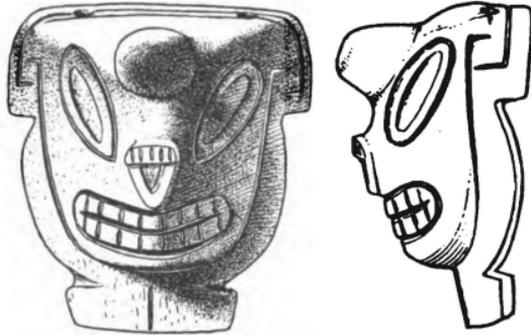


FIG. 87.—Amulet of shell (Taino) in form of a mask, from Laguna Limones site, Maisi. (Height, 1.3 in.)

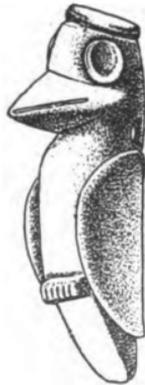
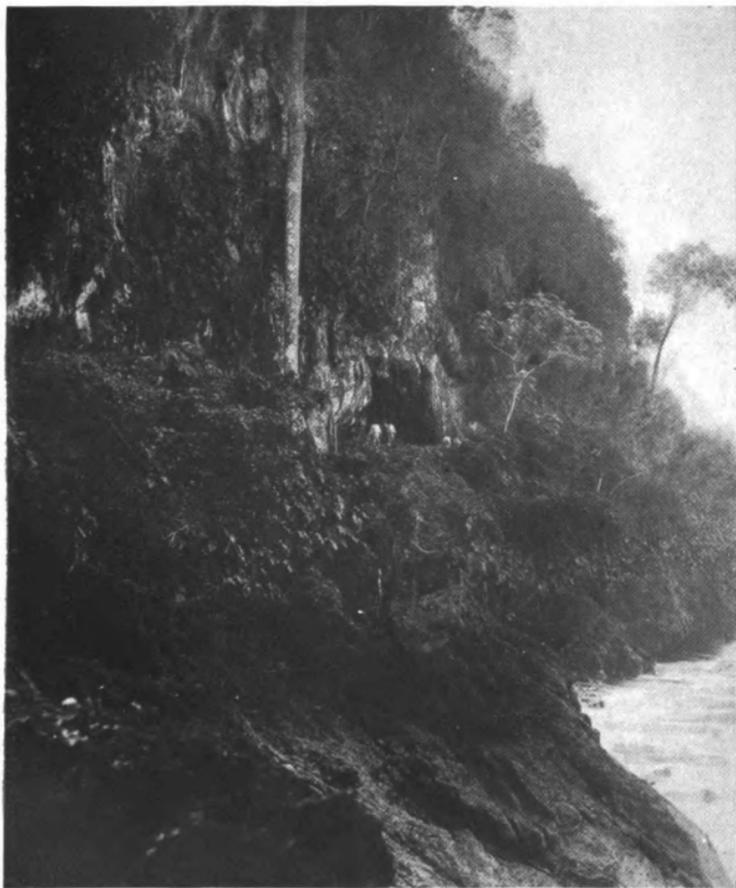


FIG. 88.—Amulet of shell (Taino) in form of a bird, from Laguna Limones site Maisi. (Height 1.2 in.)



FIG. 89.—Bead of stone (Taino), plain type, from Laguna Limones site, Maisi. (Diam., 0.6 in.)



SMALL CAVE, NEAR MOUTH OF YUMURI RIVER, BARACOA

refuse, such as potsherds, shells, etc., but the artifacts found here came from a series of six middens south of and outside the wall, arranged as shown in the map. These middens varied in size from 25 ft. (the smallest) to 80 by 45 ft. in diameter. In height they were from 2 to 4 ft., but it was evident that the highest ones had a core of natural materials and had not been built entirely of refuse.

Specimens.—The pottery found (pl. xli, b), in fact all the specimens, were characteristic of the Tainan culture, without any of the archaic types; but the best and finest things were of shell, the working of which seemed to have reached its

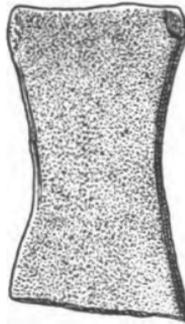


FIG. 90.—Rasp of sandstone (Taino), from the Laguna Limones site, Maisi. (Length, 1.7 in.)

height at this site. Among these objects were a small shell mask, a shell bird, both beautifully carved, and probably used as pendants (figs. 87, 88), and a number of other fine specimens of this class of work. Among the beads found here was the typi-

cal example in stone shown in fig. 89. Sandstone rasps like that shown in fig. 90, probably used in shellworking, were abundant.

MAISI SITE

This leaves only the site at Maisi (No. 25) to be described. Situated on the coastal area, it extends from a point about an eighth of a mile from the lighthouse north-eastward to the Rio Maya, over a barren area, scattered with cactus and desert bushes, the portion showing occupancy covering perhaps two acres. By this is meant the part where a little search will bring to light potsherds or other Indian traces. No middens were found, but in addition to what was picked up on the surface, the natives found some spots where a foot or two of refuse yielded relics of interest.

Cultures Represented.—The culture was mainly Taino in style, but enough of Ciboney culture material was found to indicate that the site had been used by both peoples.



CLIFF SHOWING CAVES AT SIBONEY, NEAR SANTIAGO
The Cueva del Muerto is the first cave mouth to the left of the house

<p style="text-align: center;">M A I S I</p>	<p style="text-align: center;">309</p>
<p style="text-align: center;">YUMURI CAVE</p> <p>Before leaving the Baracoa district, two days were spent in a small cave (No. 26 on the map) about a mile south of the mouth of the Yumuri cañon, alongside the trail from Sabana to Mata, as shown in pl. LXXII. Here we found in a layer, never exceeding 18 in. deep, generally less, the usual flint chips and shells, bones of <i>julia</i>, fish, and turtle, together with a few plain sherds, hammerstones, and a shell gouge or two—a typical series (excepting the sherds) of the Ciboney culture. No skeletons were found, but a few loose human bones covered with red pigment were unearthed.</p> <p>The cave mouth was about 18 ft. high and 25 ft. wide. The chamber extended back about 40 ft.</p> <p style="text-align: center;">SITE NEAR IMIAS</p> <p>While this work was in progress, Dr Rodriguez and Juan Guach made a reconnaissance of the Imias district back of Cajobabo, some 12 miles west of Jauco, and reported a promising village-site, with an</p>	
<p style="text-align: center;">A N D M O N O G R A P H S</p>	

310	C U B A
	<p>earth wall, at Veguita, on the river Jojo, six miles above its mouth. After very little digging here they were able to obtain a lot of decorated pottery (fig. 31), including one almost perfect vessel, and some other objects, all indicative of the Tainan culture; but we were unable, for lack of time, to undertake the excavation of the site.</p>
	I N D I A N N O T E S



SOUTH ENTRANCE. CUEVA DEL MUERTO, SIBONEY, NEAR
SANTIAGO

CHAPTER XIII

EXPLORATIONS NEAR SANTIAGO

 **R**ETURNING to Santiago from Baracoa, the writer interviewed officials of the Juraguá Iron Company, owners of the Cueva del Muerto at Siboney, the first cave he ever visited in Cuba, and was kindly granted full permission to conduct excavations on its property.

Siboney, a village noted historically as one of the landing places of the American troops active in the capture of Santiago in 1898, lies at the mouth of a little river about 15 miles southeast of the city, on the coast, and may be reached conveniently only by the private railroad belonging to the Iron Company.

CUEVA DEL MUERTO

How Named.—The cave in question is the largest of several in the low limestone cliff

AND MONOGRAPHS

immediately back of the machine-shops and village (pl. LXXIII), and within two or three hundred yards of the sea; it received its name, Cueva del Muerto, "Cave of the Dead Man," from the finding, during the Spanish War, of the corpse of a Cuban within its shelter. When removed for burial, the remains were in such condition that several finger-bones were left behind, easily distinguishable from the bones dating back to Indian days by their fresh and greasy appearance.

General Features.—The cave itself is an irregular chamber about 20 ft. high at the highest point, 72 ft. long from east to west, and about 50 ft. from north to south. The main entrance, 5 ft. high and $17\frac{1}{2}$ ft. wide, is at the south (pl. LXXIV); inside of this was a stretch of open floor, extending toward the north, to the west of which lay a mass of stalagmites and fallen rock; while to the east a veritable talus of rocks led up to the eastern entrance which, 16 ft. wide and 12 ft. high, opened on a level ten feet higher than the southern one. Northwest of the center of the cave there is an opening in the



EXCAVATION IN CUEVA DEL MUERTO, SIBONEY, NEAR SANTIAGO

roof which would serve very satisfactorily as a smoke-hole. Perhaps the unfortunate Cuban, the finding of whose body gave the cave its name, walked into this hole at night and so fell to his death; at least, the finger-bones were found in the crevices of the rocks beneath it.

Excavation.—We commenced our digging just outside the southern entrance, where tests had shown the first evidences of habitation, and worked inward down to the compact stony red hardpan, sifting the dirt as we went (pl. LXXV). We found the bottom very irregular, but the layer averaged 12 to 14 in. deep, and was rarely more than 18 in.; but in one place, among loose rocks, Indian traces extended down to 36½ in. A plan of the cave is shown in pl. LXXVI.

On the east side of the southern entrance was a mass of red-burned earth, 13 in. deep, evidently a fireplace.

Specimens.—Flint chips were very numerous, many of them showing plainly the bulb of percussion, and quite a number the marks of use as knives. Some have been rudely chipped for use as scrapers, and one

characteristic shaft scraper with a concave edge came to light. Hammerstones of varying size, some pitted, were abundant. Several characteristic mortars were found, also two long, rough stones, much worn at one end from use as pestles, and a carefully pecked cylindrical pestle of white quartz. Several hematite paint-stones, showing

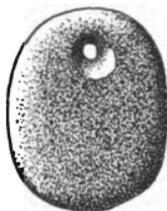
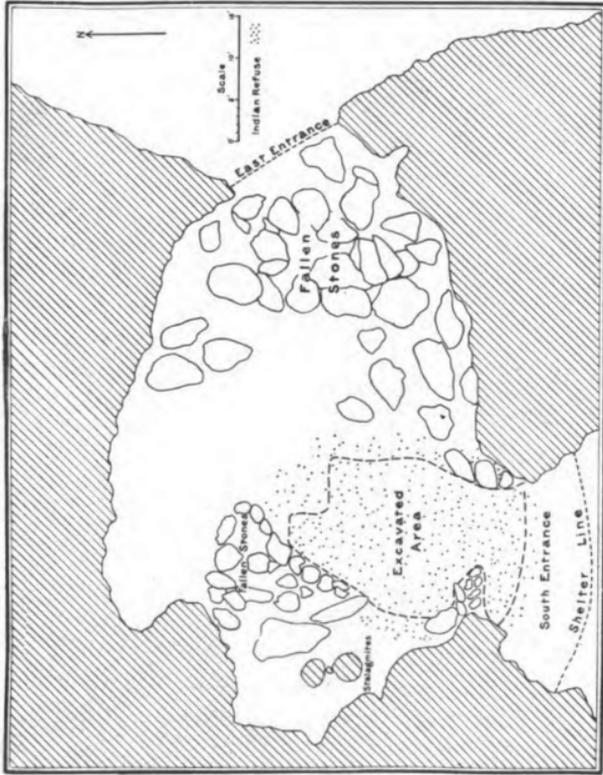


FIG. 91.—Pendant of stone (Ciboney), from cave at Siboney, near Santiago. (Length, 1.2 in.)

grinding, a small oval stone pendant, perforated near one end (fig. 91) and resembling the hematite pendant found at the time of the writer's first visit, together with a nicely made disc of stone, 1.1 in. in diameter, complete the list of stone specimens.

Pottery was very scarce, only a few small, crude sherds being found, with the exception of a rim fragment resembling the sub-Tainan ware of Jamaica more than that found in the Tainan culture sites of eastern Cuba. None were decorated.

Shell was represented by the remains of several species whose flesh was used as food, together with a few shell gouges and



PLAN OF CUEVA DEL MUERTO, SIBONEY, NEAR SANTIAGO DE CUBA

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<p>the remains of a shell celt, all much decomposed.</p> <p>Among the bones found were, first of all, the top and part of the face of an artificially flattened skull, separated from any other bones; it lay beneath a large, round, flat stone, weighing more than a hundred pounds, itself five inches from the surface—the first and only flattened skull found by us directly associated with products of the Ciboney culture. Very few human bones of ancient origin, these small and fragmentary, were found elsewhere about the cave, but the usual <i>julia</i> and fish bones, together with remains of the extinct ground sloth (<i>Megalocnus</i>), were found. The only artifacts in bone were part of an awl and a bead made from a small hollow bone, the first of its style found in Cuba by our expedition. All the bone specimens from the cave, with the exception of the smaller human bones and the awl fragment, have, unfortunately, been lost.</p> <p><i>Cultures Represented.</i>—Although a flattened skull and some potsherds, both</p>	
AND MONOGRAPHS	

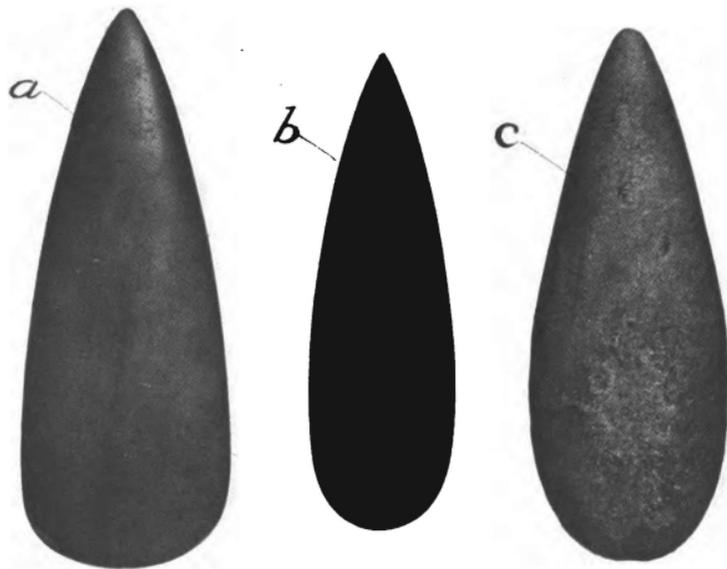
probably Taino, were found, most of the material was clearly Ciboney.

OTHER CAVES

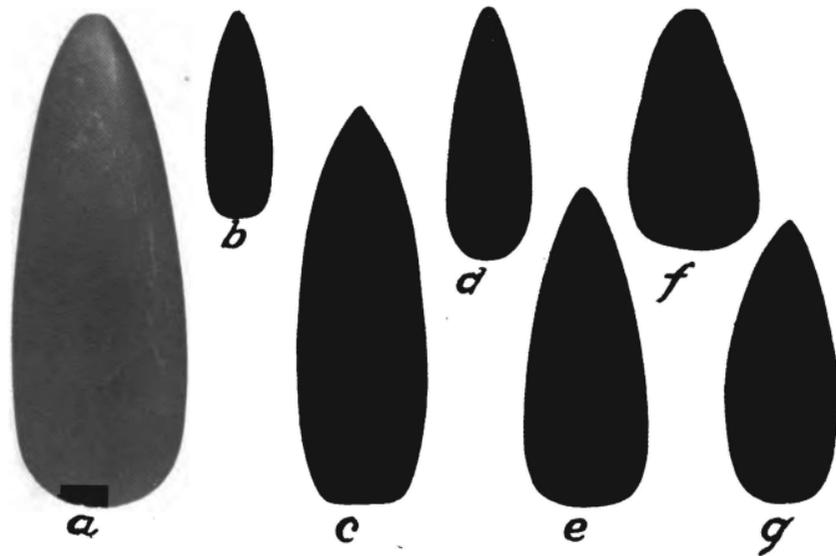
An examination of the other caves and rock-shelters in the vicinity revealed the merest traces of occupancy, save one, several miles westward, called the Cueva de la Virgen, the "Virgin" being a rude face carved by the Indians on a stalagmite. Some one had evidently tried to remove it in recent times, but had succeeded only in ruining the carving beyond repair, so that traces only were left. It is interesting to note here that back of the "Virgin" a tortuous passage leads to a large chamber with innumerable bats clinging to its roof or swirling about, and with many cockroaches below, a condition similar to that found in the Cueva Zemi at La Patana, previously noted.

EL COBRE

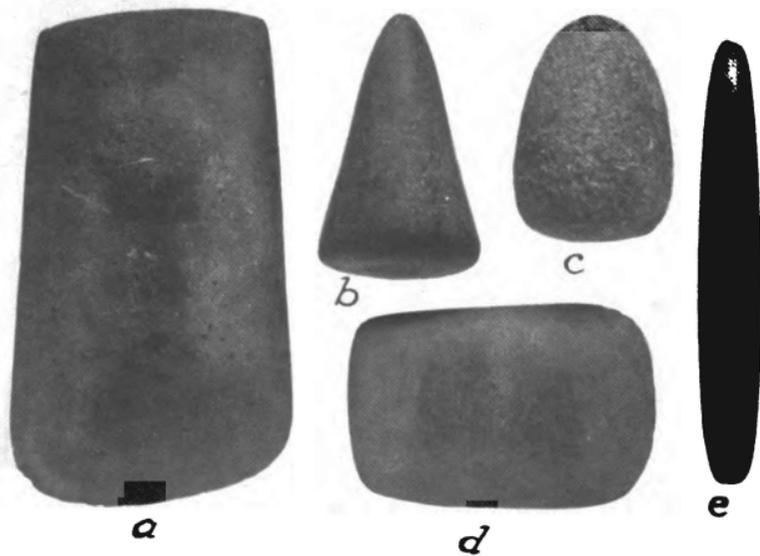
The other specimens in the collections from the vicinity of Santiago, consisting mainly of celts and pestles (pl. LXXVII-



PETALOID CELTS (TAINO), FOUND NEAR SANTIAGO
(Length of *a*, 8.7 in.)



PETALOID CELTS (TAINO), FOUND NEAR SANTIAGO
(Length of *a*, 6 in.)



CELTS AND PESTLES OF STONE (TAINO), FOUND NEAR SANTIAGO
(Length of *a*, 5 in. The celts *d* and *e* have double bits.)

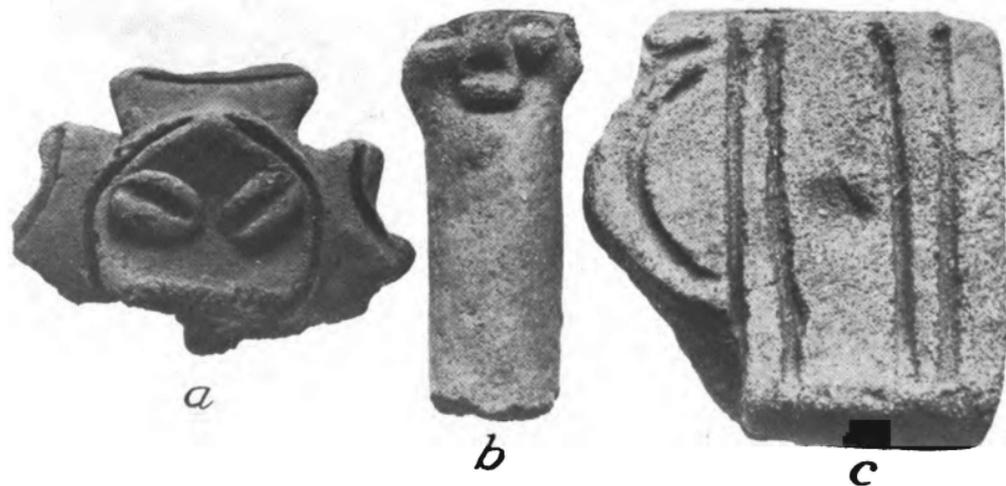
NEAR SANTIAGO	317
<p>LXXIX), with one clay stamp and part of the handle of a pottery vessel (pl. LXXX, <i>b</i>, <i>c</i>), were collected for us mainly in the region of El Cobre by Sr Manuel Tamayo, at that time a resident of the city.</p> <p style="text-align: center;">ASSEREDEROS SITE</p> <p>Another spot near Santiago which has yielded a number of specimens, is Asserederos, a small village on the coast, about 28 miles west of Santiago, where considerable pottery and other objects have been found by the natives in caves while excavating for guano, and here Mr de Booy found a boat-shaped vessel (pl. LXXXI. <i>b</i>), two broken bowls (pl. LXXXI, <i>a</i>; LXXXII, <i>b</i>), together with some potsherds and a pottery-polishing stone, all now in this Museum.</p> <p style="text-align: center;">REGION OF MAYARI</p> <p>Sr Tamayo, who had collected the miscellaneous material for us about Santiago, afterward moved to Mayari, situated on the north coast of the island near the southeast shore of Nipe bay and some 90 miles west</p>	
AND MONOGRAPHS	

of Baracoa, and from there reported many indications of ancient habitation, sending



FIG. 92.—Celt (Taino) from Mayari, collected by Manuel Tamayo. (Length, 7.2 in.)

us a large earthen vessel (pl. LXXXII, *a*) and a celt (fig. 92), itself one of the largest petaloids we have from Cuba, in support



OBJECTS OF POTTERY (TAINO), FOUND NEAR SANTIAGO

a, Part of vessel handle showing grotesque head, from cave at Aguadores. *b*, Pottery cylinder with rudely modeled face. *c*, Part of a stamp made of earthenware. (Width of *c*, 2.6 in.)

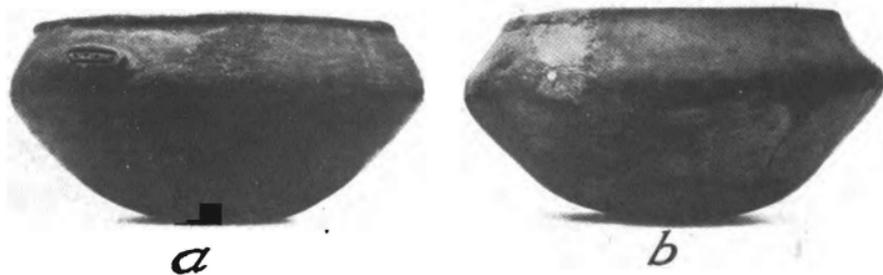


a



b

VESSELS OF POTTERY (TAINO). FROM CAVES AT ASSEREDEROS, WEST OF SANTIAGO
(Diameter of *a*, 6 in.)



VESELS OF POTTERY (TAINO)
a. From Mayari; *b.* From Asserederos. (Diameter of *b*, 9.2 in.)

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<p>of his statement. Dr Carlos de la Torre also advised us to work in this district, but the time allotted for our exploration was nearly past and the writer reluctantly gave up the hope of examining Mayari.</p>	
AND MONOGRAPHS	

CHAPTER XIV

FIRST WORK IN PINAR DEL RIO



OUR first excursion into the western end of Cuba, which has usually been supposed to be barren of remains of prehistoric man, took place in December, 1915, just before the first expedition was brought to a close. Provided with letters of introduction furnished by our very kindly and helpful friend, Dr Carlos de la Torre, and accompanied by Mr Andrew de Graux, of Habana, who knew the country, we proceeded by train as far as the city of Pinar del Rio, where we engaged an automobile to take us across the hills into the Luis Lazo valley, where Dr de la Torre had reported caves, and where we expected to make our headquarters at a little settlement known as San Carlos.

INDIAN NOTES



TYPICAL MOUNTAINS OF PINAR DEL RIO

<p style="text-align: center;">PINAR DEL RIO</p>	<p style="text-align: center;">321</p>
<p style="text-align: center;">LUIS LAZO VALLEY</p> <p>Here we found a country of rather low but very abrupt and rugged mountains of limestone (pl. LXXXIII), sometimes rising as solitary peaks, called <i>mogotes</i> (pl. LXXXIV), full of caves, but apparently of an older formation than the limestones of eastern Cuba. Among these mountains are the exceedingly fertile and highly cultivated valleys where the world-famous Habana tobacco is raised, and here were found, instead of the perilous mule-trails so characteristic of the wilds of Cape Maisi, good automobile roads on which one is rarely out of sight of a house, each with its picturesque thatched tobacco-barn near by.</p> <p>These pleasant open valleys along the streams are not the only ones, however, for back in the rugged plateaus of the mountains the traveler sometimes comes upon a great pit, often a number of acres in extent, in whose almost perpendicular sides no outlet can be found, but whose level bottoms consist of the same rich soil that produces ideal tobacco. When sufficiently near to</p>	
<p style="text-align: center;">AND MONOGRAPHS</p>	

civilization, so that the tobacco may be carried out on the backs of its producers, the land in these pits, or *hoyos*, as they are called, is worked; when too far away, they are left to the luxuriant tropical forest.

ROCK-SHELTER IN THE HOYO VALTESO

The first archeological site examined in Pinar del Rio lay in just such a place—the Hoyo Valteso, which is the third *hoyo* encountered going eastward over the mountains from San Carlos. Its floor is quite flat, and contains some eight or ten acres, which, although fallow now, has evidently been cultivated in the past, for there is little timber to be seen.

On the northeast side is a great mass of rocks fallen from the wall, above which, in a place quite difficult of access, and after a climb of at least fifty feet, we discovered a small rock-shelter some 10 ft. high and 15 ft. across, with a depth of perhaps 25 ft., tapering back to a point.

Specimens.—On the floor lay many bones of the *julia* and of domestic animals, such as the pig and the goat, together with de-



A "MOGOTE," OR SOLITARY PEAK, IN PINAR DEL RIO

cayed bits of wood and palm-leaves. Amid this litter were found numerous fragments of two pottery vessels differing somewhat from the *cazuela* type, crudely made and poorly fired, crumbling to pieces even in that protected spot.

One of these, a sherd of which is seen in pl. LXXXV, *c*, seems to have been of flattened

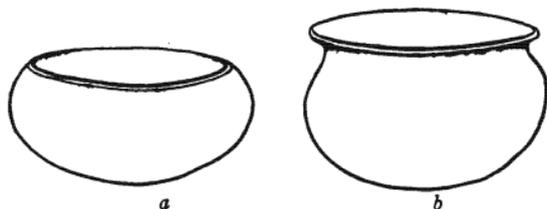


FIG. 93.—Restoration of pottery vessels found in a rock-shelter in the Hoyo Valteso, near San Carlos, Pinar del Rio. Diameter of *a*, about 9 in.

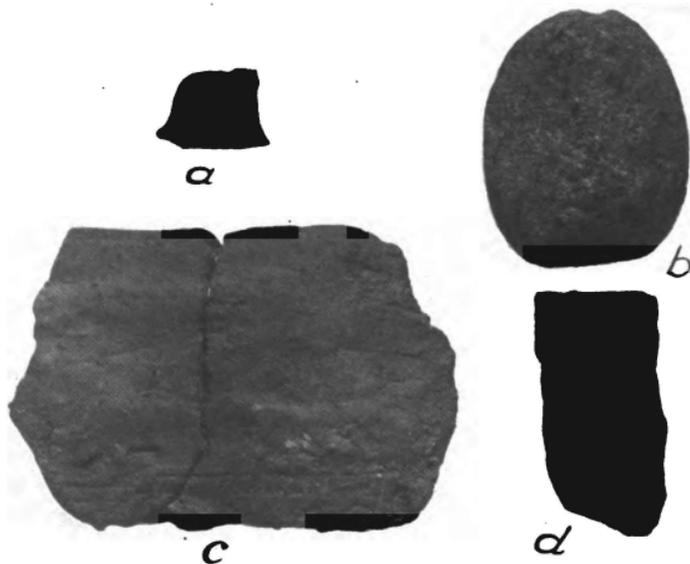
semiglobular form, like the restoration in fig. 93, *a*; the other, a fragment of which is illustrated in pl. LXXXV, *d*, had a sharply out-turned rim, and must have looked somewhat like the vessel shown in fig. 93, *b*. In color the first is ruddy yellow, the second originally even redder, but now is much blackened by smoke. In both cases the tempering material is fine gravel, the ware

rather coarse and thick, ranging from less than a quarter of an inch in thickness near the rim to more than half an inch at the bottom. Judging from the curvature of the fragments, both vessels must have been eight or nine inches in diameter, the height between four and six inches. Plain marks of the polishing stone are visible on the second vessel, both inside and outside. Some sherds of the rim appear as if this had been provided with broad, band-like handles.

Interpretation.—A study of the conditions leads to the conclusion that the place was one of the temporary refuges occupied in historic times, say within the last hundred years, by the persecuted remnant of the primitive Indians of this region, the last survivors of whom were ruthlessly slaughtered by the whites about the middle of the 19th century.

OTHER CAVES

Returning then to San Carlos we examined a number of caves in that vicinity whose outer appearance seemed promising,



FIRST ARTIFACTS FROM PINAR DEL RIO
a, Flint chip; *b*, grinding stone; *c*, *d*, potsherds. (Length of *c*, 3.2 in.)

but found to our disgust that the deposits had been dug out of all of them down to bedrock to make fertilizer for the tobacco fields. Sometimes when a few square inches of the original soil of the cave bottom had been accidentally left adhering to the rock, it contained a few bits of human bone, or perhaps a flint chip or two, one of which, the first stone specimen of undeniable aboriginal workmanship found by us in Pinar del Rio, is illustrated in pl. LXXXV, *a*, and these showed that the caverns must have at one time contained specimens of interest.

CAVE AT EL PESCUERO

Leaving San Carlos, we proceeded to a place called El Pescuero, on the west side of Cuyaguaje river, finding here, on a spur of the mountain, about 40 ft. above the valley, a cavern known as "Cueva de los Indios." The cave mouth, which opens south, is about 18 ft. across, with a height of some 12 ft., and the opening runs back perhaps 45 ft. clear, being partly blocked at that point by some great stalactites. Passing around these we discovered that the

floor began to dip downward, and continues down and back to an unknown distance. We penetrated 300 or 400 ft. only, as no signs of occupancy were visible.

Wooden Specimens.—Most of the floor of the part near the mouth is a breccia, too hard to dig with the tools at our disposal at that time, but in some patches of soft soil, especially along the western side, masses of decayed human bones and teeth were encountered, mainly near the surface, many of which seem to have been painted red. Among these, at a depth of perhaps 8 in., lay the first aboriginal wooden objects found by us in this province—three worked sticks, of which one shows plainly the use of a grit-stone in rasping off the end and edges of a wooden splinter, and the filing of a groove about one end with some kind of a stone having a fairly thin but dull edge, evidently not a flint; another is apparently the tip of an arrow, but is now much decayed; while the third, judging by its straightness, was probably part of a similar arrow, but disintegration has left us little by which to identify it.



MASS OF ROCKS CONTAINING CAVES, NEAR PORTALES DE GUANE, PINAR DEL RIO, SIERRA CUEVA OSCURA IN THE BACKGROUND

CAVES AT PORTALES

The "Santico."—Proceeding thence southward by stage toward Guane, we were informed of an image resembling a human head in a cave near Portales, a phenomenon known as the *Santico de la Cueva* ("Little Saint of the Cave") to the natives, and worshipped by them as a miraculous figure of the infant Jesus. Stopping off to view the image, we found the cave one of dozens honeycombing a very picturesque mass of rocks, to be described later, lying between the public road and Portales river, and the famous "Santico" a natural stalagmite formation, but none the less interesting for that. The faith of the people in it was testified by the hundreds of offerings that filled one chamber of the grotto, among which were bridal veils hung in the shrine by girls who had married the men of their choice, for whose favor they had prayed before this image. A man having a lame leg might pray here for recovery, and if he recovered would hang a little silver effigy of a leg in the cave; if a farmer prayed for a good

crop and received it, his offering was a tiny tobacco plant of silver. Such instances are representative, but the different kinds of offerings were too numerous to mention.

Rock-shelter.—In another part of the rock mass we then located a rock-shelter that contained not only a mortar hole pecked into the bedrock, but also a considerable deposit of ashes, shells, *julia* bones, and crab-claws, among which a small test-hole yielded a slightly-used hammerstone and the oval sandstone pebble, its end worn by grinding, illustrated in pl. LXXXV, *b*, all indicating that the place had been long inhabited. At this juncture the writer was obliged to leave to embark for New York, but not before making a resolve to return some day to make further investigation.

CHAPTER XV

CAVES NEAR PORTALES DE GUANE



THE opportunity to resume the work did not come until April, 1919, when the writer returned to Cuba in search of further data relating to Pinar del Rio province and concerning the surviving Indians of Cuba. After some preliminary researches he returned to Guane, in company with Dr Victor Rodriguez of Habana University, whose pleasant companionship had meant so much during the work in Baracoa. On our arrival we went at once to Portales and commenced work on the rock-shelter mentioned above, discovered in 1915.

THE PORTALES DISTRICT

As before stated, it is one of many caves and shelters situated in a weird and picturesque mass of rocks between the public

AND MONOGRAPHS

road and Portales river, a miniature mountain range, interspersed with fields and meadows, beginning perhaps a mile south of Portales postoffice and extending southward some three-quarters of a mile, forming a veritable natural park (pl. LXXXVI).

The ledges are perhaps only 75 ft. at the highest, and the width of the main range averages from 100 to 300 ft. from east to west. The rocks are limestone, the strata of which have been somewhat contorted and now through erosion present a picturesque and remarkable spectacle (pl. LXXXVII), for they are filled with holes, caves, natural bridges, crags, and pinnacles of every description, in which stand or hang *jagüey* trees, "century" plants, air-plants of many kinds, cacti, short stout palms and tall thin ones, vines, and many curious plants, too numerous to mention. About a quarter of a mile to the east and parallel with this range runs the Portales river, a narrow but deep stream, with several picturesque waterfalls and rapids (pl. LXXXVIII), southward to join the Cuyaguaje. Just beyond it is a rough mountain along whose base the river



PALMS, CRAGS, AND CAVE MOUTHS, NEAR PORTALES DE
GUANE, PINAR DEL RIO

<p style="text-align: center;">P O R T A L E S D I S T R I C T</p>	<p style="text-align: center;">331</p>
<p>flows—the Sierra de la Cueva Oscura, seen in the background of pl. LXXXVI. Between the river and the natural park of rocks and caves are open meadows, and a few cultivated fields, interspersed with smaller masses of limestone; while to the south lies a stretch of veritable “bad lands,” a devilish maze of rocky crags, <i>dientes de perro</i>, or “dog-tooth” rocks, sharp and jagged, thorny bushes and the poison tree <i>guao</i>. Near the north end of the rock park, where a lane crosses it, lies the <i>Cueva del Santico</i>, “Cave of the Little Saint,” before mentioned, and about a quarter of a mile south-southeastward from this, the rock-shelter, both facing eastward.</p> <p style="text-align: center;">P O R T A L E S R O C K - S H E L T E R</p> <p>The rock-shelter opens on a little meadow sloping away toward the river, and is one of the most open and airy natural camps the writer ever saw, still affording protection from the elements (pl. LXXXIX). It measures 48 ft. long from north to south, and the rock overhangs 19 ft. maximum, from west to east.</p>	
<p style="text-align: center;">A N D M O N O G R A P H S</p>	

The Deposit.—The Indian deposit is deepest to the north and northeast near the shelter line, reaching a depth of 2 ft. 7 in. to 2 ft. 10 in., but becomes shallower toward the south, averaging less than 2 ft., ending just south of the mortar shown in the plan

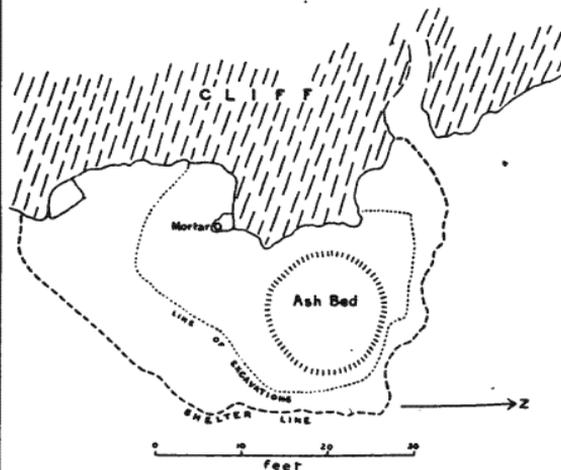


FIG. 94.—Plan of the Portales rock-shelter.

(fig. 94), pecked into the living rock, and the alcove contained nothing. This deposit consisted of blackened earth; charcoal; ashes; shells mainly of a large land-snail but with some river clams and one sea-shell; hundreds of claws of at least two kinds of

crabs, many of them burnt; bones of the *jutta*, mostly broken for the marrow, in large quantities, and in lesser quantities the bones of snakes, fish, turtles, the extinct ground sloth (*Megalocnus* sp.), and an extinct rodent (*Baromys* sp.), a few human bones mostly from the hand, and some large bones so badly decayed as to be past identification.

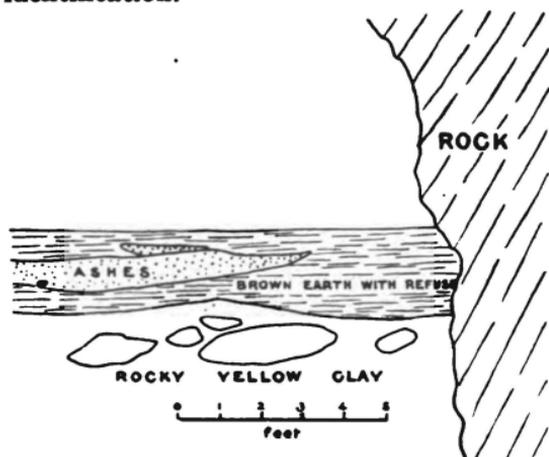


FIG. 95.—Section of the deposit in the Portales rock-shelter.

Artifacts.—Artifacts were very scarce, and consisted of rude hammerstones showing use, a shallow mortar, flint chips, rudely

pointed bits of limestone, some very rude notched sinkers, a pebble partially perforated for use as an ornament, two pieces of a nicely made flat gorget-like stone ornament, several river stones evidently brought in for some purpose, and a worn red-paint stone. The bottom consisted of a tough reddish yellow clay mixed with rocks. A large bed of ashes, in places 8 or 9 in. thick, lay in the northeastern part of the shelter, a section of which may be seen in fig. 95.

BAT CAVE

The Cueva de los Murciélagos ("Cave of the Bats") is one of the numerous caves belonging to the same rocky mass, and is situated in the northeastern end of a little *hoyo*, or valley without outlet, containing somewhat less than an acre, cutting into the limestone about a third of its length from the southern end, the cave mouth facing almost westwardly. The cavern once occupied is the middle one of three, all opening into the same great rock-shelter shown in the photograph (pl. xc) and the plan (fig. 96), and extends up and back

into a very high narrow grotto in whose gothic depths fluttered numerous bats. The chamber to the south, too low for occupancy, leads back also into a good-sized cavern, while the northern chamber opens into a natural tunnel that passes

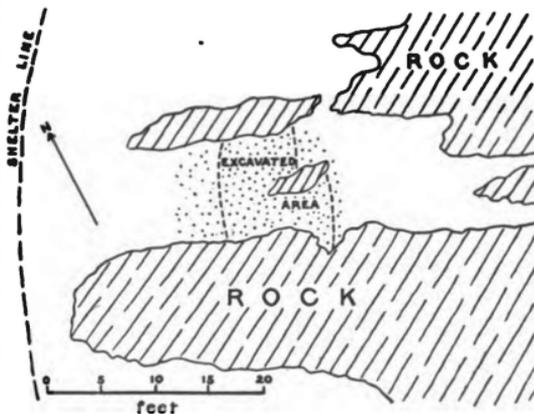


FIG. 96.—Plan of the Bat Cave.

entirely through the little mountain. Digging at the base of the rock standing in the middle of the chamber (pl. xci) we found earth showing former occupancy of the cave, nearly 5 ft. deep, the upper 18 in. only being barren of charcoal, *julia* bones, snail-shells, and the like. No real

artifacts were found, however, but a river pebble that apparently had been used lay at the depth of 4½ ft. As we proceeded inward, the layer north of the central rock rapidly shallowed, but that south of it maintained its depth and yielded many bones of small animals and part of a sea-shell undoubtedly brought there by the Indians, but still no artifacts. Finally we ceased digging owing to lack of results. The top of the central rock had several small pits pecked into it as receptacles in which to break the palm-nuts called *corojo*.

CUEVA DE CENIZAS

Discouraged by our results in the Bat Cave, we began a systematic examination of all the caves and rock-shelters in the vicinity, and were surprised to find the very best of them all, barely 100 ft. northwest of the first shelter explored, very large and high, yet so masked by trees and choked with undergrowth that we had not suspected its existence (pl. XCII). Our attention was first called to it by one of the local tobacco



PORTALES RIVER, NEAR GUANE, PINAR DEL RIO

farmers, who told us that, in searching the caves for bat guano to use as fertilizer, he



FIG. 97.—Plan of the Cueva de Cenizas.

had here encountered a bed of dry ashes, which he considered almost as good for his purpose. Starting to dig he soon came upon

human bones, which caused him to beat a hasty retreat.

We lost no time in following this clue, and forcing our way through the undergrowth found ourselves in the *Cueva de Cenizas*, "Cave of Ashes," roughly triangular in form, as may be seen from the plan (fig. 97), 76 ft. across the mouth, some 56 ft. deep, and, at the highest point, near the mouth, about 35 ft. high. It is really more of a rock-shelter than a cave proper.

Ash Deposits.—The floor was quite rocky in spots, with little traces of habitation until the southeastern side was reached, where we found a heavy deposit of ashes (pl. xciii), for the greater part loose, dry, and powdery, becoming thicker toward the wall, full of stones of all sizes, and in two places extending back into pockets in the rock, one of which, as shown on the map (fig. 97), the section (fig. 98), and the photograph (pl. xciv, of which *a* shows the deposit before excavation, *b* after), penetrated 10 or 12 ft. back under the wall of the cave.

Animal Remains.—The ash deposit, which was 3 or 4 ft. deep in places, contained quan-

tities of small animal bones, mostly of the *julia*, those of turtles and various birds, snails of several species, shells of freshwater clams, and some marine shells, including fragments of conchs, together with thousands of crab-claws.

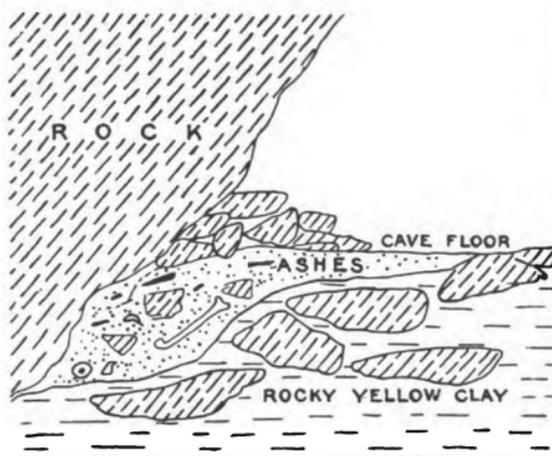


FIG. 98.—Section of the deposit in the Cueva de Cenizas.

Stone Objects.—Many river pebbles were unearthed from the deposit, a number of which showed marks of use as hammers and grinders, of which an example may be seen in fig. 99; a pitted hammerstone used also

as a grinder; another is a much battered hammerstone with the broad surfaces roughened by pecking instead of pitted to facilitate grasping; there were also a roughly-chipped piece of limestone, probably intended as a chopping tool, and thin slender grinding or whetstones, of which a number were procured.



FIG. 99.—Hammerstone (Ciboney), from Cueva de Cenizas, near Guane, Pinar del Rio. (Length, 3.9 in.)

tended as a chopping tool, and thin slender grinding or whetstones, of which a number were procured.

Gouges and Vessels of Shell.—

Quite unexpected was the finding of two typical shell gouges identical with those of the Ciboney culture of eastern Cuba (like fig. 106), and an equally characteristic perfect shell vessel (fig. 100) made of a *Strombus gigas* conch with the interior spire and whorls pecked out to form a receptacle. A broken specimen of this type was also obtained.

Culture Identical with Ciboney.—The finding of these gouges and vessels impressed the writer for the first time with the practi-

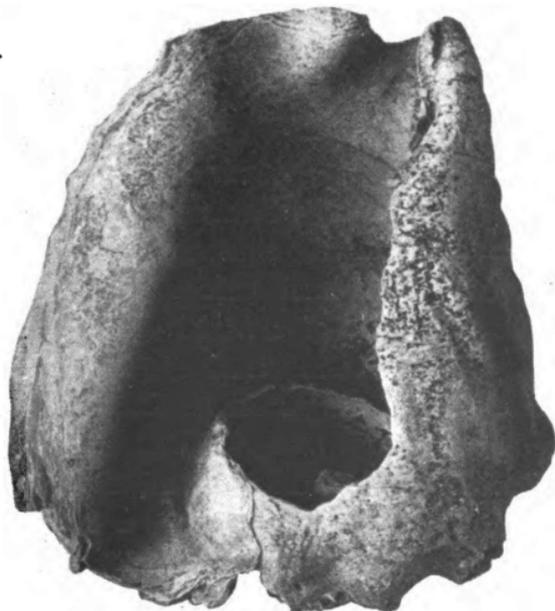


FIG. 100.—Vessel of shell (Ciboney), from Cueva de Cenizas, near Guane, Pinar del Rio. (Length, 8.7 in.)

cal identity of this culture with that of the "coast" or Ciboney people of the Baracoa district, which, as will be remembered, lies at the opposite extremity of the island.

Flints.—Flint chips were fairly numerous also, but these were evidently used as knives and scrapers without further elaboration, instead of being improved by secondary chipping, as was often done in the eastern district.

Human Remains.—Human bones representing several individuals were scattered throughout, but lay mostly in the back of the crevice under the overhanging wall, and included the frontal portion of a skull without a trace of artificial deformation. Many of the bones, although fairly well preserved by the dry ashes, had been broken, and some showed traces of burning.

Breccia.—Where moisture had trickled in through crevices in the rock, a kind of breccia had been formed in which bones, shells, and crab-claws were imbedded; but this existed only in certain spots, the bulk of the deposit being in such a condition that the fine ashes rose in a dusty cloud when disturbed.



PORTALES ROCK-SHELTER, NEAR GUANE, PINAR DEL RIO,
SIERRA CUEVA OSCURA IN BACKGROUND

<p>PORTALES DISTRICT</p>	<p>343</p>
<p style="text-align: center;">OTHER CAVES</p> <p>After finishing the Cueva de Cenizas, we located one small cave containing indications, on the opposite side of Portales river, but did not excavate this; and at another time Sr José Díez Camejo, a teacher, showed us still another, called the Cueva Obispo, across the river from Guane, in the southern end of the Sierra de la Cueva Oscura, but this, while showing some traces of aboriginal occupancy, yielded nothing of interest.</p>	
<p>AND MONOGRAPHS</p>	

CHAPTER XVI

SITES ABOUT REMATES

LA GÜIRA



THE greatest service to Cuban archeology by Sr José Díez Camejo was performed when he called the writer's attention to the fact that some articles of a superior grade of workmanship, different in character from what we had found, are occasionally picked up on this end of the island, and he proved his statement by presenting to the expedition three fine petaloid celts, which, so far as appearance and finish are concerned, might have come from a Taino site in Baracoa, also two conical pestles, much like those found about Santiago de Cuba, and a curious squarish grinding stone, all found in the vicinity of La Güira; near Remates de Guane, which is the westernmost settlement of any importance in Cuba, the name *Re-*

INDIAN NOTES

mates, translated freely, meaning "Land's End," or "Ultima Thule."

Taino Celts.—Two of the Taino celts are shown in pl. xcv, of which *b*, nearly 4 in. long, is fairly well made of hard green stone; while *a*, 2.9 in. long, is of fine-grained black material, and very well made, in symmetry and finish fully equaling the average of those from eastern Cuba. It was learned afterward that this was by no means an isolated find, a number of such celts being reported from the Mantua district near the coast northwest of Guane; moreover, the writer has seen examples found near San



FIG. 101.—Pestle of stone from La Güira, near Remates, Pinar del Rio. (Length, 4.5 in.)

Vicente, north of Viñales, as will appear later.

Pestles.—One of the pestles presented by Sr Díez Camejo is the fine conical specimen

shown in fig. 101, which is 4.5 in. long, and is made from a coarse impure hematite.

LAKE AT MALPOTON

Before the writer left Habana, Dr de la Torre had informed him that an account had been published in some Cuban newspaper of the finding of wooden objects, thought to be of aboriginal origin, in the muck of a lake-bed near Remates.

Early Find of Wooden Objects.—Later, while working in the caves at Portales, one of the helpers, an intelligent old man named Nemesio Valdés, informed the writer that he had formerly lived near Remates, at a place called Malpoton, and that about the year 1900 a neighbor of his, Domingo Corrales by name, was digging a well for his stock, during a drouth, in the edge of a swampy old lake-bed, when he found a rude wooden bowl, an arrow, and (Valdés thinks) also a bow imbedded in the mud. These things, together with the discovery of the celts above mentioned, led to the belief that the vicinity of Remates might repay investigation.



MOUTH OF BAT CAVE, NEAR PORTALES DE GUANE, PINAR DEL RIO

In the meantime, Dr Rodriguez, who had been obliged to return to Habana, had secured a letter of introduction to the owner of the lake where the discoveries reported in the newspaper were made—a letter which proved subsequently to be of great service.

Trip to Malpoton.—Leaving Guane, May 24, the writer, in company with Sr Valdés, proceeded to Mendoza by rail and thence by automobile to Remates. On this trip the mountain country was left behind us, and we soon found ourselves crossing a great rolling prairie, dotted here and there with dwarfish thorny palms called *guano prieto* (pl. xcvi), then regions reminiscent of the pine barrens of Florida (pl. xcviI)—scattered scraggly pines interspersed with occasional low-growing palms like “scrub palmetto.” Finally, after perhaps 16 miles of this kind of terrain, we reached a fertile cultivated district again, and soon rolled into the good-sized village of Remates, then pressed on to Malpoton, a small settlement 3 or 4 miles farther, toward the wilds of Cabo San Antonio.

The Malpoton Plantation.—Here we found the plantation on which the lake is situated, owned by Sr Manuel García Pulido, of Habana, to whose son, Don Nicolas, as resident manager of the place, we presented our credentials. This gentleman and his younger brother not only entertained us most hospitably, and found horses, guides, and information for us, but very kindly presented the remarkable wooden specimens shortly to be described—for all of which the author wishes to express here his sincere appreciation.

A little questioning soon brought out the fact that it was here at Malpoton where the original Corrales find of wooden objects was made, also the later discoveries the newspaper accounts of which had attracted the attention of Dr de la Torre; but that La Güira, where the celts were picked up, lay miles away to the southward, and must constitute a problem by itself.

How the Wooden Objects were Found.—The lake-bed had been filled with muck and vegetation, as is still a similar one in the neighborhood (pl. xcviII), when Corrales

made his discovery, and remained in the same condition when the present owner took possession. About June, 1915, this gentleman, needing fertilizer for his crops, had the swampy lake-bed cleared of trees and undergrowth, and, taking advantage of a drouth, dragged out all the mud down to solid bottom with teams and scrapers and spread it on his fields, leaving the pretty little lake shown in pl. XCV, which is now of good water, and measures approximately 240 ft. long, from north to south, with a width of about 180 ft.

It was during the progress of this work that the remarkable wooden objects were unearthed, all imbedded in the mud near the bottom of the lake, and, it is said, not far from its center. With them were two objects of stone, now lost, which, from the descriptions furnished, seem to have been hammerstones.

Carved Staff.—The best of the wooden objects is the unique carved staff shown in fig. 102, which represents a class of work not hitherto found, to the writer's knowledge, in the West Indies, but in fact is



FIG. 102.—Baton of wood (Ciboney?), found in mud of a lake bottom at Malpoton, near Remates, Pinar del Rio. (Length, 22.6 in.)

slightly reminiscent of northeastern South America, and even of Polynesia. Made of a hard, black, coarse-grained wood, perhaps a species of palm, it measures 22.6 in. long. Generally cylindrical, the shaft is a little less than an inch in diameter, expanding at one end into a disc 2.5 in. across, but the remainder of it is plain until within 5.25 in. of the opposite end, where a very effective pattern begins and continues to within eight-tenths of an inch from the tip, covering half of

the decorative protuberance found at this point.

The design consists of alternating series of vertical and horizontal grooves and rows of dots, very neatly made, as the drawing (fig. 102) shows. The vertical grooves are wider than the horizontal, and contain transverse scorings which add greatly to the effect, and the whole shows the very careful and painstaking use of aboriginal tools. The finders thought the object must have been a *macana*, or warclub, but to the writer's mind it was more probably a ceremonial baton or staff, or even a ceremonial pestle, and as the design is so different from anything identified with the more advanced or Tainan Arawak Indians of Cuba, it may perhaps be regarded as a good example, in fact perhaps the only recorded example, of the decorative art of the more primitive people. And so far as the writer knows, it is more than the only recorded example—it is the only one that survives.

Arrow.—The only aboriginal arrow the writer has seen from Cuba is illustrated in fig. 103, also one of the lake finds. With



FIG. 103.—Arrow of wood (Ciboney?), found in mud of a lake bottom at Malpoton, Pinar del Rio. (Length, 41.2 in.)

a length of 3 ft. 5.2 in., it had a maximum diameter of about half an inch, and the distal end terminates in a conical point which shows a smoothness, almost a polish, not evident elsewhere, perhaps caused by being frequently imbedded in the ground. The rest of the shaft, which is of hard, black wood like the carved staff, shows also the work of primitive tools, probably flint chips, to scrape it into form; the notch for the bowstring is very shallow, and the shaft below it but slightly indented to afford a grip for the fingers.

There is little mention of arrows in the accounts of early Cuba, except the statement that the Indians at the eastern end of the island learned archery from their

enemies, the Caribs, who paid them occasional hostile visits, but according to popular tradition the last Indians of the Cabo San Antonio district, a few of whom survived well into the nineteenth century, were expert bowmen—in fact the extermination of the last individuals is said to have been due to their habit of killing the settlers' cattle with this weapon, which roused the whites to offer a reward for their destruction.

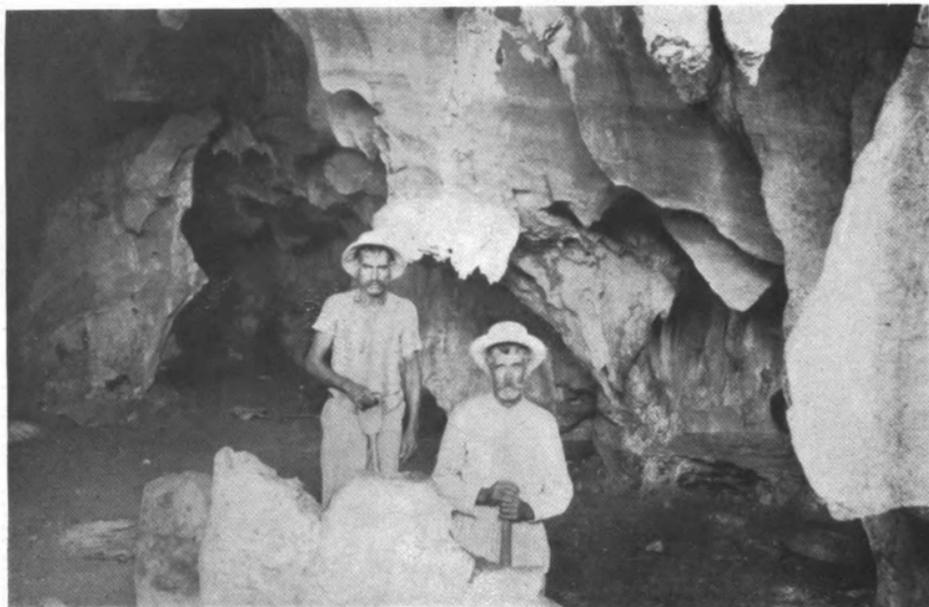
Fire-stick.—Made of the same kind of material as the last two specimens is an upper fire-stick which was found with them. Its length is 9.8 in., its greatest thickness about 0.7 in. Although slightly more decayed than the other objects, enough of the surface still remains to show not only traces of the aboriginal implements with which it was made, but decided marks of the bowstring or thong by which it was rotated, evidently by either the bow-drill or the strap-drill method. The top, although somewhat wasted by decay, has been plainly rounded to fit the socket necessary to either method, while the lower end,

which fitted into the piece of softer wood forming the lower part of the fire-making combination, shows heavy charring. This, as well as the following, will be illustrated in another part of this work.

Other Carved Sticks.—Two other carved sticks similar to the preceding in material and workmanship also formed part of the collection from the Mapoton lake, but were presented by us, with an assortment of other specimens, to the Museo Montané at Habana University in partial recognition of the many kindnesses, the facilities, and active assistance rendered the writer by Drs de la Torre, Montané, and Rodriguez.

One of these, of unknown use and showing plainly the marks of stone implements, measures 19.5 in. in length, while its companion, which looks like a drumstick, measures only 7.75 in.

Wooden Bowls.—Also imbedded in the muck of the lake-bed were two wooden bowls, of which the more complete, although the cruder, is seen in pl. c. It measures 10.2 in. in length. The material, although rather heavy, differs from that of



INTERIOR OF BAT CAVE, NEAR PORTALES DE GUANE, PINAR DEL RIO

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<p>the foregoing in being of finer grain and of light-brown color, instead of almost black.</p> <p>The most noticeable feature is the charred condition of the interior, showing that it had been hollowed out, in part at least, by burning, shell gouges probably serving to scrape out the charcoal between the applications of fire. The outside not only shows burning, but, where not too badly decayed, strokes of a dull implement, supposedly of shell or stone, and marks of a gritty rock used to rasp the surface smooth. Thinner and better made, but warped and wasted by decay, is the second bowl, of which part of one side is missing, which we presented to the Museo Montané. The wood is hard and brown, the grain curling, the form oval, measuring 13 in. by 9 in., with a height of 3.5 in.</p> <p>Still another similar bowl, flat, circular, and low-sided, found in another lake east of Remates, called the Laguna de los Indios, may be seen in the collection of Col. Federico Rasco in Habana. The last two will be illustrated later.</p>	
AND MONOGRAPHS	

Surface Finds.—Careful search of the vicinity of the Malpoton lake where the muck had been spread failed to reveal more than a few fragments of crumbling worked wood, so small that their original

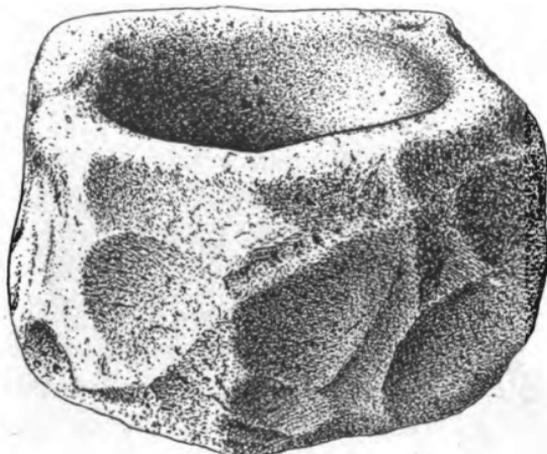


FIG. 104.—Mortar of stone (Ciboney), found on the surface at Malpoton, Remates, Pinar del Rio. (Height, 3.6 in.)

character could not even be conjectured. On the surface of the fields in the vicinity, however, were found a number of stone pestles, some of them well made and conical in form, for the greater part of impure hematite.

Some stone mortars of an unusually deep type were also picked up here, one of which is illustrated in fig. 104, which, with a diameter of only 5.2 in. and a height of only 3.7 in., has a depression 2.4 in. deep. Both the pestles and the mortars probably represent the primitive culture of the region.

CAYO REDONDO SHELLMOUND

About six or seven miles to the north of Malpoton, on the shores of the bay of La Fé,

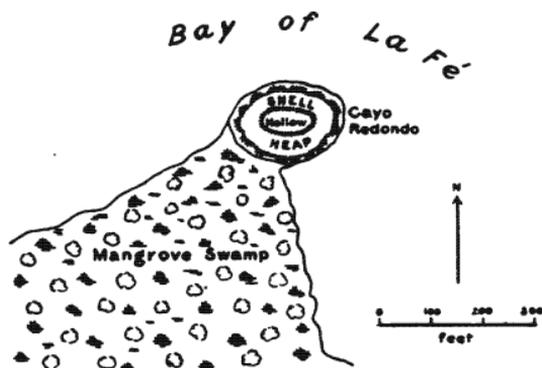


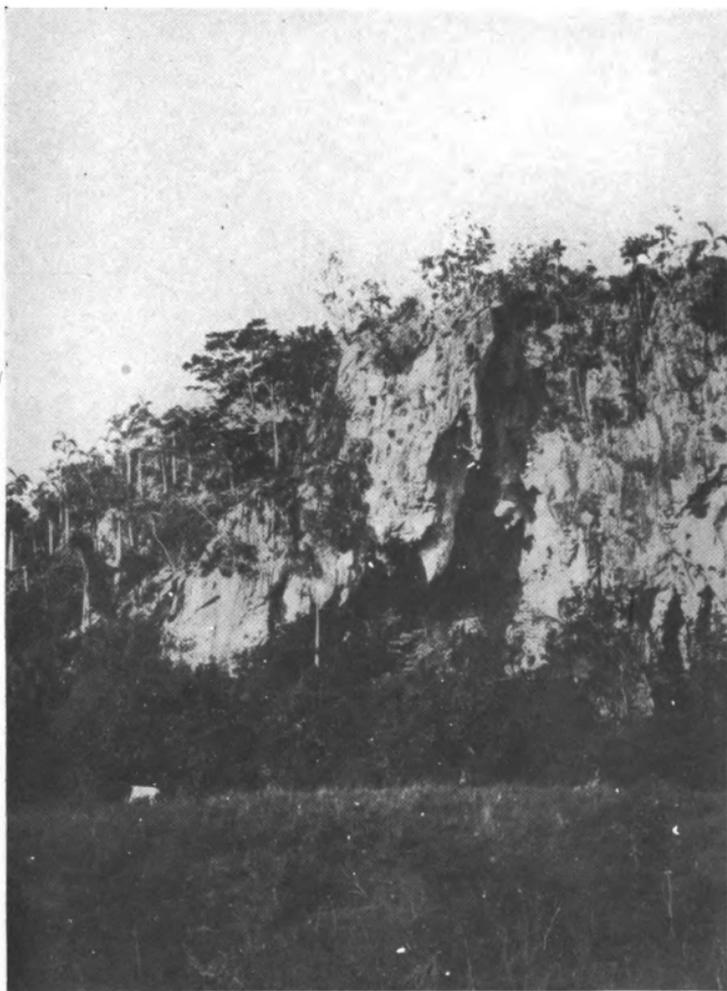
FIG. 105.—Sketch map of the Cayo Redondo shellheap.

may be seen an oval island known as *Cayo Redondo*, "Round Key," just at the edge of the mangrove swamps and truly an island

only at high-tide. Its most interesting feature is an oval mound of shells (pl. CI) covering most of the surface and reaching a height of about 4 ft. in some places near the periphery, but showing a decided depression in the center. Its length is about 220 ft. from northwest to southeast, its width about 135 ft. The sketch map (fig. 105) will give an idea of its form and surroundings.

Construction.—The mound was constructed almost entirely of the shells of conchs, of which *Strombus pugillus* seems to predominate, almost every one of which had a hole pecked in one side to facilitate removing the flesh for use as food. There were also many clam-shells, a few oysters, and some turtle-bones in the heap, all of which came to light when we dug a small test-hole, together with some ashes and charcoal, relics of ancient fires.

Artifacts.—The only artifacts found during our brief visit were a typical hammer-stone with a slight pit in the center of each side and showing considerable battering about the periphery from long use, and a



MOUTH OF CUEVA CENIZAS, NEAR PORTALES DE GUANE,
PINAR DEL RIO

CAYO REDONDO	359
<p>grinder made of coral, bearing marks of long service.</p> <p><i>Ciboney Culture.</i>—An exploration trench driven through this shellheap would probably yield interesting if crude specimens illustrative of the life of its builders, whom the writer, from the scant evidence at hand, would identify with the cave-dwelling people of Portales, whose culture resembles in its turn that of the Ciboney people of the Baracoa district.</p> <p>As in the case of so many sites attributable to this cruder Cuban culture, careful search of the surface failed to reveal a trace of aboriginal pottery—only some broken modern crockery, relics of recent fishermen. The island was probably not a regular place of abode in Indian days, but merely a fishing station where the conch-meat was removed from the shells and dried for future use, each discarded shell adding to the pile, but in the way of camp refuse very little was deposited. The formation of such heaps was a common Antillean custom, according to the data secured by de Booy and recorded in Chapter IX of this volume.</p>	
AND MONOGRAPHS	

CHAPTER XVII

CABO SAN ANTONIO

WHILE examining some caves in the immediate vicinity of Malpoton, which proved to contain nothing of interest, we met a man named Pio Lazo who had frequently guided timber scouts through the wilds of Cabo San Antonio, with which he was reported to be quite familiar. Conversation with him soon revealed the fact that in the course of his wanderings he had noticed caves containing ashes, and had observed mounds of ashes and shells in the interior of that heavily-timbered and sparsely-settled territory.

The work at Malpoton finished, we engaged our informant as guide, hired horses, and set forth early one morning to examine the sites he had reported. After about half an hour we passed the last house of the

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cultivated district and plunged into the jungle—the thickest extended tangle of vegetation ever seen by the writer (pl. CII).

The Jungle Trail.—At first the ground was swampy and the trail muddy—even dangerously boggy in spots; then we came to a ditch cut through the morass by some lumbering concern for floating out logs of mahogany and other valuable woods; this was spanned by a rickety bridge which the horses were induced to cross only after much persuasion. Finally solid ground was reached, and rough stony stretches began to take the place of mud in the trail, swamps grew fewer and farther between, and occasional large trees were seen towering above the lower jungle growth.

Soon scattered, low-growing palms with enormous leaves, known in this district as *cana hata*, began to appear, and quaint orchids could be seen clinging to trees and bushes at varying heights. The morning was well advanced when we noted that the land had become distinctly higher, then we skirted a little *sabana*, or prairie, and passed a deserted palm-thatched cabin.

Valle San Juan.—Finally we came upon a beautiful little lake, rock-rimmed, almost circular, and perhaps 150 yds. in diameter (pl. ciii), in whose crystal depths many fish could be seen swimming, a lake which we were told lay about halfway between the Caribbean to the south and the Gulf of Mexico to the north. About it were grouped several thatched cottages and adjacent clearings—the settlement known as Valle San Juan.

Two Village-sites.—Situated respectively north and south of the lake were traces of two ancient villages, of which the latter, on the little farm of Sr Lino Borrego Chirino, had been by far the larger.

The Great Midden.—The owner's house stands on a distinct knoll (pl. civ), perhaps 200 ft. from the water's edge, which on investigation turned out to be nothing less than a great midden, or mound of camp refuse, measuring about 130 ft. from east to west and 180 ft. from north to south, with a height of some 4 ft. This, except for the part where the cottage and outbuildings stood, was under cultivation at the time of



ASH DEPOSIT IN CUEVA CENIZAS, NEAR PORTALES DE GUANE,
PINAR DEL RIO

our visit, as was the level ground between the mound and the lake, and all showed abundant evidences of ancient habitation.

Surface Specimens.—Walking about here we picked up thirty perfect and many

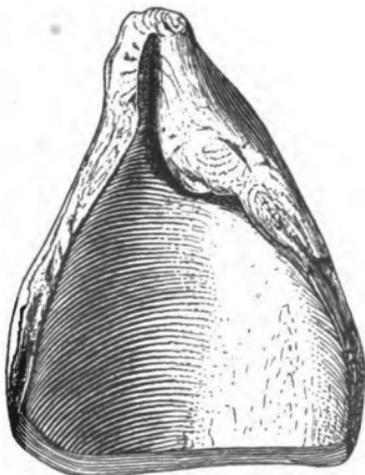


FIG. 106.—Gouge of shell (Ciboney), from midden at Valle San Juan, Cabo San Antonio, Pinar del Rio. (Length, 3.7 in.)



FIG. 107.—Bead of shell (Ciboney), from midden at Valle San Juan, Cabo San Antonio, Pinar del Rio. (Max. diam., 0.7 in.)

broken shell gouges (one of which is seen in fig. 106), eighteen shell beads, most of them exceedingly rude (fig. 107), a fragment of a deep mortar which when perfect must have been like fig. 104, some flint

chips, a few broken shell vessels of the same type as those shown in fig. 100, and one small fragment of aboriginal pottery.

Excavations.—Sr Borrego kindly allowed us to dig test-holes in his garden, which revealed the fact that the refuse deposit was 3 ft. to 4 ft. deep along its crest, and was composed of irregular layers of ashes and earth, mixed with an enormous quantity of crab-claws and many marine shells, together with the bones of *juttas*, fish, and turtles.

Artifacts.—Among these, which in places were consolidated into a soft breccia, were scattered occasional artifacts, such as flint chips, shell gouges, shell beads, broken shell vessels, battered pebble hammerstones, some of them pitted, a square-sided hammer or grinding stone with a slight pit in five of its six sides, and a small cylindrical natural pebble showing on both ends long use as pestle and hammer.

Of the various types of beads found here, some are made of fish vertebræ, of which one kind is merely the natural bone, its central perforation enlarged by drilling, as

C A B O S A N A N T O N I O	365
<p>was found on Ciboney sites in Baracoa; in another specimen we have the same perforation, but in addition the periphery has been carefully ground round, and an encircling groove cut; while in a third the bone has been so ground down on all sides that its resemblance to the original vertebra from which it was made has been lost. An <i>Oliva</i> shell was also secured, with the spire ground away to make a perforation, rendering it available as a bead, identical with hundreds found in Baracoa; while the numerous flat shell beads, most of them rough, were evidently made from fragments of bivalve shells and the walls of conchs, more or less chipped and ground into form, and perforated, apparently with the aid of a pointed splinter of flint. It will be remembered that shell beads, both like the rougher and the better-made ones in this series, were found on the Ciboney sites in Baracoa.</p> <p>On the smaller site on the other side of the lake only one broken shell gouge was picked up, but an unusual curved pestle, made of what seems to be a fine grayish conglomer-</p>	
A N D M O N O G R A P H S	

ate, was found on the surface, also a piece of flint showing chipping.

Cuban Hospitality.—Sr Borrego very kindly permitted us to swing our hammocks in his house and invited us to take our meals with him, for all of which he would not accept a centavo; moreover, he informed us that he would be pleased to have us return whenever we might find it convenient to investigate his mound, so the writer takes this opportunity to express his cordial appreciation. We found this kindly, hospitable and helpful spirit of frequent occurrence in all ranks of society in Cuba, among educated people and among the illiterate alike, in all parts of the island we visited.

CAVES

The next morning we started out shortly after daybreak with our guide, Pio Lazo, to look at the caves he had mentioned, but on foot, because the trail through the jungle was impassable for horses on account of the rough rocks full of holes in which an animal's leg could be broken, the sharp lime-



REFUSE DEPOSIT BENEATH ROCK, CUEVA CENIZAS
(*a*, Before excavation; *b*, After excavation)

stone formations known as *dientes de perro* or "dog teeth," the fallen trees lying across the path, and the tangle of vegetation overhead. It was still cool and shady when we set forth, taking a course toward the east-southeast, and hundreds of land-crabs frantically scuttled away to shelter in every direction as we walked along, or stopped in their flight to defy us with blindly clutching claws. Anyone who has walked with native Cubans in the country districts will appreciate the speed with which we traveled, and will realize that by the time we had arrived at the first cave, called *Cueva Contrera*, the writer was delighted to rest for a while, and astonished to learn that we had traveled only about three miles.

Cueva Contrera.—The country was quite level, the jungle dense, and there was no suggestion of a cave until suddenly the dim trail led us to the edge of a pit 8 or 10 ft. deep and perhaps 30 or 40 ft. in diameter, in one edge of which the cave mouth could be seen. The sun had grown hot, and the low jungle growth, in spite of the occa-

sional big trees, offered no protection from its rays, while effectually cutting off the breeze, so we lost no time in scrambling down over some fallen rocks to the cool shade within the opening, and found that the floor of the cavern was covered with about a foot of clear, fresh water, and that there were no Indian vestiges in sight.

After a brief rest we left the cave, and proceeding about 150 ft. eastward came upon an elevation that turned out to be a midden like that at Valle San Juan, only smaller, being roughly 100 ft. long by half as wide, and 2 ft. in height. The usual crab-claws, shells, bones, and roughly worked stones appeared here on testing.

Cueva Funche.—Leaving this, and still holding our course, we pushed ahead and finally reached our destination, the cave called *Funche*, meaning "mush," we were told, which lies between five and six miles east-southeast of Valle San Juan. This proved to be a large cave hung with many beautiful stalactites, opening, like the one we had just left, from a great pit in the floor of the jungle (pl. cv), and also

like it, with a bottom covered with clear, cool water about a foot deep. In a few places small sections of the roof have fallen in, forming sky-lights which illuminate the interior, light up its weird stalactites, and make a fairy picture for the spectator standing in the cavern's mouth.

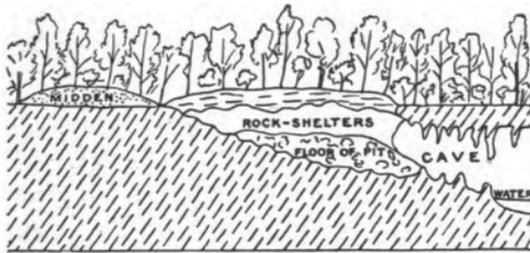


FIG. 108.—Diagrammatic section of the Cueva Funche.

Except on one side, where a talus slope leads up nearly to the level of the ground outside, the sides of the pit are overhanging, forming rock-shelters, as shown in the section (fig. 108), whose floors are considerably higher than the floor of the cave, and therefore dry and habitable. Test-digging here revealed, near the top, relics of the Cuban war for independence against Spain; a little deeper, gun-flints and other relics of

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	<p>the Spanish colonial period; and below all the rest, signs of Indian occupancy. About the cave mouth and in the shelters were found an unfinished shell gouge, fragments of shell vessels, and two large pieces of undecorated aboriginal pottery, made considerably better than those found in the Hoyo Valteso, before described—the only other sherds of any size the writer has seen from Pinar del Rio province.</p> <p>The most impressive indications of the ancient dwellers, however, were seen outside of the pit and just south of it, where stands a large midden of irregularly oval form, some 120 ft. by 80 ft., and about 4 ft. high, composed of ashes, crab-claws, some shells of conchs, clams, and oysters, and bones of <i>juttas</i>, turtles, and other creatures used by the aborigines as food.</p> <p>It seemed evident here, as at the Cueva Contrera and the village-sites near the lake at Valle San Juan, that the great attraction for the Indians, who seem to have belonged to the Ciboney culture, must have been the abundant supply of fresh water, none too abundant in this almost streamless district,</p>
	INDIAN NOTES

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<p>where most of the drainage finds its way to the sea through underground channels in the cavernous limestone. All these sites were noted for exploration later, as were also similar ones farther out on Cabo San Antonio, for which we had collected data.</p>	
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CHAPTER XVIII

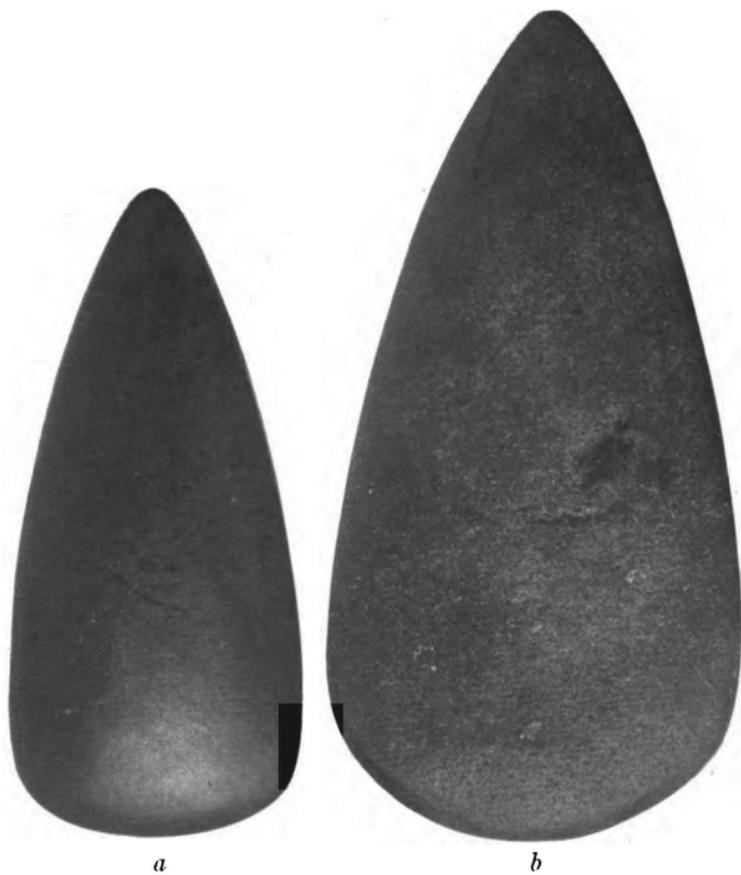
THE VIÑALES DISTRICT

INTRODUCTION



AS EARLY as 1915 the writer was furnished information by Dr de la Torre concerning the existence of caves near Viñales, some 17 miles north of the city of Pinar del Rio, which seemed very favorable. Then a visit to Dr Pedro García Valdés, Director of the Normal School at Pinar del Rio, who kindly showed the writer two fine petaloid celts from the Viñales district and gave him valuable information and letters of introduction, convinced him that at least a preliminary trip should be made at once. Another member of the faculty, Srta Dr Ana América Cuervo, also contributed valuable information, as did Sr Pablo Llaguno of the Jefatura de Montes y Minas.

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TAINO CELTS FROM PINAR DEL RIO, FOUND AT LA GÜIRA,
NEAR REMATES
Gift of Sr José Díez Camejo. (Length of *a*, 3.9 in.)

Finally, on June 1, the writer arrived at Viñales, where Sr Encarnación Labrador, proprietor of the hotel, on reading the letter of introduction from Dr. García, received him with great courtesy and introduced him to several other gentlemen to whom he related his plans. They listened with interest, with the outcome that a trip was arranged for the next day to visit the caves, for which these gentlemen furnished the horses and other requisites, and volunteered their services. On account of the assistance they rendered to this pioneer archeological work in western Cuba, the writer takes pleasure in recording their names, with those mentioned before, with his thanks. They were Señores Ernesto Labrador Pérez, principal of the local public school and brother of the hotel proprietor, Alfredo Organes Duró, the district school inspector, and Álvaro Martínez Blanco, the municipal judge.

TOPOGRAPHICAL FEATURES

The country about Viñales, as may be seen by the photograph (pl. CVI), is unusu-

AND MONOGRAPHS

ally picturesque—flat fertile valleys nestling among the rather low but very abrupt and rugged Sierra de los Órganos. A few miles to the north of the town, but cut off from it by a spur of the range, is the valley of La Guasasa, and here our party, which included the gentlemen named above, commenced exploration by a visit to a cavern known as *Cueva de los Santos*, "Cave of the Saints," probably on account of its weird stalagmitic formations suggesting statues in a church.

CUEVA DE LOS SANTOS

This was by no means easy of access, for the entrance was at least 300 ft. above the valley, and the trail exceedingly rough and in places precipitous. When at last we reached it, winded and reeking with sweat, we found a large, airy, and gratefully cool cave, opening almost southward and commanding a beautiful view. The mouth is fully 80 ft. wide and 20 ft. high, and the floor slopes downward steeply to a depth of about 15 ft., beyond which it is reasonably level. Here the cavern spreads out into a



PALM-DOTTED SABANA NEAR REMATES, PINAR DEL RIO

large chamber, from which three others open. One of these, to the east, has a floor slightly higher than the rest, and this contains a number of natural tanks of clear, cool, fresh water, which must have been a great attraction to the Indians, for while the valleys here are well watered, potable water is rarely found so high in the mountains. The central chamber leads downward and backward, and we were not prepared to follow it to the end; while the westernmost, also large and containing some water, and decked with picturesque stalactites and stalagmites, receives light from a natural air-shaft reaching to the top of the mountain from one side of it. In this chamber a rude but much-worn pestle of impure hematite was picked up, and in the back of the main chamber a broken vessel of conch-shell, which when perfect must have been like fig. 100. In the very mouth of the cave lies a deposit of aboriginal refuse, mainly ashes, in which test-holes showed the usual bits of shell, etc.—a deposit which might repay excavation.

The descent of the mountain proved

almost as difficult as the ascent, but we finally reached the level ground with reasonably whole skins, and made our way out to the main road from Viñales, which we followed northward toward a place called "Baño de San Vicente," examining on the way a number of caves which proved to be unsuitable, either by structure or by location, for aboriginal occupancy, and consequently contained no relics. Finally, however, in the last cove of the mountain on the north side of the valley before reaching the San Vicente school-house, we located another inhabited cave, at the level of the valley floor, opening nearly eastward.

CAVE AT SAN VICENTE

The habitable part of the mouth was not more than 20 ft. in diameter, for the back of the cave was full of large rocks; behind these tortuous passages opened back into the mountain, but were not followed out for lack of time. A Cuban family had lived here within recent years and had left some traces, but there were also abundant evidences of prehistoric Ciboneyes in the un-

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derlying ash-beds, including flint chips, a pitted stone, fragments of conch-shell vessels, and the like, besides the inevitable crab-claws, *juita* bones, shells, and charcoal. We dug only a few small test-holes, but here again thorough excavation would probably reveal something worth while.

Riding on to San Vicente, the writer met Sr Antonio Acosta Hernandez, a school-master, who seemed much interested in our investigations, and the next day very kindly secured horses at his own expense, and led the way to an ancient camp-site on a creek called Arroyo de las Vueltas, near the Constanacia Mine, where the two fine petaloid Taino celts in Dr García's collection were found.

SITE YIELDING TAINO CELTS

The little field (pl. CVII), situated on a low knoll adjoining the creek bank, was looked over with great care, with full realization of its probable importance as an outpost of a higher culture, but nothing was found except numerous flint chips, a few fragments of conch-shells, and a hematite hammer-

stone, but no pottery, and nothing else that would serve to identify the culture. At this point Sr Acosta volunteered the information that another handsome petaloid celt had been found here by children, but had been afterward lost, as was also a small pottery vessel, once in his collection, washed out nearby by the waters of the little creek, some distance below the camp-site.

OTHER SITES

We next visited a deep cave called *El Fogón de los Negros*, "The Negroes' Fireplace," but found nothing; then a heavy tropical downpour of rain came up which prevented our reaching a site where some of Sr Acosta's pupils told him they had found fragments of pottery—a place that should prove of considerable interest if the information is correct.

"*Indians' Oven.*"—In this neighborhood also, between the Constanca Mine and San Vicente, we visited a curious ruined stone structure known as the *Horno de los Indios*, or "Indians' Oven." What is left of the little building is circular and only about 8



SCRUB PALMS AND SCRAGGLING PINES NEAR REMATES, PINAR DEL RIO

ft. in inside diameter; the walls still standing are 3 or 4 ft. high, of stones and clay, the narrow entrance to the east. In the middle

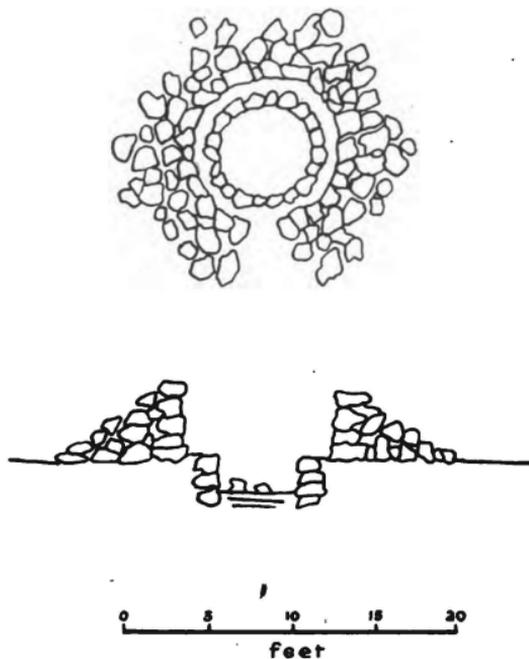


FIG. 109.—Plan and section of the "Indians' oven."

of the floor is a shaft or well, perhaps 5 ft. in diameter, also walled-up with stones set in clay, but full of fallen rocks from the

wall up to within a foot or so of the top. A plan and section are shown in fig. 109.

Rough field stones were used in the building, averaging a little more than the size of a man's head, and neatly and regularly placed, but not in tiers; clay was used as mortar, and smaller stones to chink the spaces between the large ones. No signs of fire were seen, nor were there any traces of village refuse or other signs of habitation in the vicinity.

According to local tradition this structure was found here by the first settlers when they cleared the land, but no one can guess the purpose for which it was built, nor who the builders may have been, if they were not Indians. Certain it is that others have been reported within a few miles, also somewhat similar structures of burnt clay. Only the excavation of a number would tell the story. It may be possible of course that they are kilns constructed by the early voyagers to extract from the pine trees, abundant in the region, the tar they needed for their ships.

This closes the work in Pinar del Rio



**LAKE-BED FILLED WITH DILUVIUM AND VEGETATION, AT MALPOTON, NEAR
REMATES, PINAR DEL RIO**

The adjoining lake, where the wooden objects were found, was formerly similarly filled

province, for the heavy rain mentioned above proved to be the beginning of the rainy season, which here is marked by a terrific downpour every afternoon, streams swollen beyond fording most of the time, and, in general, unfavorable conditions for archeological exploration. The work had barely been begun, however, and many months more could be well spent in this virgin field.

SUMMARY

Summing up the results of our work in Pinar del Rio, we note first that the majority of the Indians of this province had not advanced beyond a very rude and primitive stage of development, and second that this rude culture, so far as it can be judged by the remains that have survived, was practically identical with the more primitive of the two cultures found by us in Baracoa, and the crude culture found by Cosculluela and Montané in the Ciénaga de Zapata—the culture which we have already identified as Ciboney.

Now, the first Spanish colonists found in Pinar del Rio a rude savage people, called the Guanahatabibes, whose mode of living, they observed, was much more primitive than that of the Taino Indians occupying the major part of the rest of the island, and whose language was different. The conclusion seems evident that these Guanahatabibes were the survivors of the Ciboney people who at an earlier period had occupied the whole of Cuba, but had been crowded into a few restricted sections by the invading Taino from Haiti.

The finding in isolated localities in Pinar del Rio of occasional fine examples of the petaloid celts characteristic of Taino culture seems to indicate either the presence of Taino fugitives at the time of the conquest, small colonies of this people who constituted the remotest outwash of the Haitian migration wave, or perhaps merely trade between the Guanahatabibe Ciboney and the Taino to the east. Further work should settle this question.

CHAPTER XIX

CULTURES FOUND IN CUBA



ONE of the most important results of the whole Cuban exploration was the discovery, beyond doubt, of the existence of at least two distinct aboriginal cultures on the island. That probably more than one might be found had already first been suspected by Fewkes,⁵³ but our expedition was fortunate enough to secure the evidence establishing the fact.

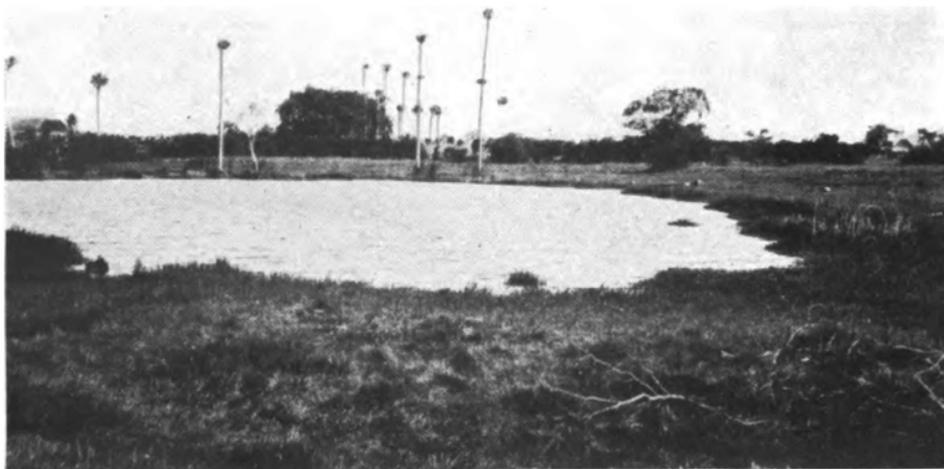
It will be remembered that, at the very beginning of our work in eastern Cuba, we soon found that we were dealing with two cultures, one of which, the earlier and more primitive, we called the Coast Culture on account of the location of most of its stations in that district; later, as its wide distribution westward on the island was discovered, it was decided to name it the Primitive Culture, for lack of a plausible tribal

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or stock name; but after reading the accounts of the early writers, it was seen that *Siboney*, or better *Ciboney*, was most applicable as a general term for the original natives of the island, in spite of its general acceptance in Cuba today as a name for all the Indians living there at the time of the discovery. This question will be discussed in the next chapter.

The second culture, much more advanced, and evidently of later advent in the island, was first denominated the Upland Culture, from its habitat in Baracoa, but it was afterward decided to call it the Taino or Tainan Culture, as this name has already been applied to it by other writers who have studied the vestiges of this important division of the Arawak Indians in the Bahamas, Haiti, Jamaica, and Porto Rico.

As the work progressed, it was seen that there were certain typical phenomena connected with each culture; these the writer has assembled in the form of a list in the hope of furnishing criteria by which the future student may determine to which culture a given site may be attributed.



LAKE WHERE THE WOODEN OBJECTS WERE FOUND IMBEDDED IN THE MUCK,
MALPOTON, REMATES, PINAR DEL RIO

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<p style="text-align: center;">THE CIBONEY CULTURE</p> <p><i>Artifacts.</i>—We soon found that the typical implements of the Primitive or Ciboney Culture are the shell gouge (figs. 38, 106), which is abundant, the shell celt (fig. 53), which is rarer; the pitted hammerstone (figs. 56, 57), common, and the stone mortar with a rather deep, cup-shaped grinding hole (fig. 42). The characteristic receptacle is the shell bowl, made by pecking out the interior spire and whorls of a conch-shell, usually <i>Strombus gigas</i>, <i>Triton nodiferus</i> Lam., or <i>Cassis tuberosus</i> Linn. (pl. xxxiv). The typical ornaments are a rude, oval pendant made of a rounded, beach-worn bit of shell or stone, perforated near one edge for suspension (figs. 40, 91), and rude disc beads of shell (figs. 41, 107).</p> <p><i>Habitat.</i>—In eastern Cuba, particularly in Baracoa, the characteristic habitat of this culture is the rock-shelters and cave mouths along the coast, and in the stream gorges near it; but sometimes open-air village-sites of these people may be found in these places. On the western end of the</p>	
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island open-air village-sites are frequent and large in places where good fresh water could be obtained convenient to the coast, and caves showing occupancy are abundant, not only near the coast, but near streams far inland.

Burial Customs.—The Ciboney of Baracoa buried their dead in the soil of the cave floors (pl. XLVI) without regularity as to depth, position, or orientation; but near the Ciénaga de Zapata they seem to have used their midden-like mounds for interment, and to have buried with the head toward the east.

Skull-form.—The Indians of the Ciboney culture did not flatten the head, hence the skulls retain their rounded, natural form.

THE TAINAN CULTURE

Artifacts.—The typical implements of the Tainan culture are the petaloid celt, usually very symmetrical and often highly polished (pls. LXXVII, LXXVIII); a short squat form of pestle, usually well made, and sometimes bearing a carved animal or human effigy (fig. 10); rubbing stones,

often of globular form (fig. 83), showing facets from use in grinding celts and in shaping other stones, and sometimes battering from use as hammers, always made of hard stone such as diorite, and frequently of flint; and small, thin slabs of gritty stone (not exceeding three or four inches long), obviously used both as rasps for smoothing surfaces and as files and grooving tools in shell, bone, and wood work (fig. 90).

The characteristic vessels are of earthenware, comprising *cazuelas* (fig. 44; pls. XLIII, LXVIII), bowls, plates (pls. XLI, XLII, LXVII), and sometimes kettle, bottle, and erratic forms, all frequently decorated with incised lines (usually but not always in curved patterns), with raised ridges and nodes forming designs, or with decorative handles modeled in the round, often highly grotesque effigies of men or animals—sometimes with a combination of two, or of all three forms of decoration. To these must be added the flat, circular, cassava griddles of earthenware, known in Cuba as *burén*, which average about 20 in. in diameter,

with a thickness of about three-quarters of an inch.

The typical ornaments are numerous, and include ear-plugs of conch-shell, suggesting in size and form the modern collar-button, but with a thicker shank (fig. 69); pendants of conch and mother-of-pearl shell, usually in disc or claw-like shapes (figs. 62, 86); jinglers made of *Oliva* shells with the spire end ground away (fig. 68) and sometimes bearing grinning carved faces (fig. 49); amulets in the form of little figurines of shell (figs. 87, 88) and stone (fig. 35); and beads, well made and often of ornate form, of both these materials (figs. 84, 89).

Typical also are flat, oval objects of shell, carved on one side to represent teeth (fig. 45), which were used as inlays for the mouths of effigies carved in wood, supplying the toothy grin without which, to the Tainan mind, no carved face or head could be complete.

Besides these, there are long and spoon-like, but slender, objects of bone, characteristic of the Tainan culture, sometimes nicely carved (fig. 80), to which the name

“swallow-sticks” has been given, on account of their probable use in a Taino purification rite, mentioned by the chroniclers, when they were thrust down the throat to produce vomiting.

Equally characteristic of these people is their woodwork, which usually bears their favorite incised patterns, and grotesque heads carved in the round, suggesting those seen in their pottery, and their shell- and bone-work. Unfortunately but few examples are left, but among the forms preserved are the *dujo*, or wooden seat (pl. v), the idol (pl. viii), the platter (frontispiece), and the paddle (fig. 50).

Habitat.—The regular Tainan villages in the Baracoa district were invariably situated on the uplands back from the coast, where the inhabitants could be sure of enough rain for their corn and cassava, and near some cave or stream where fresh water could be obtained. The sites are still frequently marked by mound-like middens, and by earthen embankments and enclosures. Traces of this people are occasionally seen on the coast, however, under

circumstances to be explained in detail later.

Burial Customs.—The Tainan Indians of eastern Cuba seem to have had two regular systems of burial, one, interment in the outskirts of the village, sometimes in the middens, in a flexed position, on the side, and often heading or facing eastward (pl. LXV, LXVI); the other method was simply to take the body into a cave and leave it lying on the floor, sometimes, when practicable, sealing the entrance with stones. Most of the historic finds of flattened skulls in the Maisi district, beginning with that of Rodriguez-Ferrer, have been apparently from burials of this class.

Skull-form.—All the skulls found by the expedition, associated with artifacts of the Tainan culture, had been artificially flattened.

COMPARISON OF CULTURES

Drawings of typical implements, vessels, and ornaments of the Ciboney culture, compared class by class in parallel columns with characteristic implements, vessels, and or-

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WOODEN BOWL, FOUND IN MUCK OF LAKE-BED, MALPOTON, NEAR REMATES, PINAR DEL RIO
(Length, 10.2 in.)

naments, of the Tainan culture, form the graphic table shown in pl. CVIII, which is intended to emphasize the contrast between the two cultures, and perhaps to be of assistance to future students in the field. Some typical Tainan objects have been left out of the table for the sake of brevity, especially when there is no corresponding class on the Ciboney side, but the artificial flattening of the Taino skulls, as contrasted with the natural form of the Ciboney crania, is indicated. To avoid confusing the reader and befogging the main issue, certain objects, known to have been used by both cultures alike, have been purposely omitted from the above list, also artifacts whose origin is doubtful, or at least not fully established, and the discussion of mixed sites. These will now be taken up in order.

Objects in Both Cultures.—Chief in interest among objects representing both cultures alike are the rude implements of flint, which, although more numerous on Ciboney sites, are by no means rare throughout the Tainan deposits examined by the writer. These consist of sharp-edged and often

pointed flakes showing use, but with little or no secondary chipping, evidently employed as knives, and some, perhaps, as points for arrows, darts, or spears (fig. 48); sharp-pointed splinters showing marks of use as drills; elongate, more or less rectangular, flakes fitted by secondary chipping for use as knives or scrapers (fig. 46); in which case the chipping was from one side only to give a sharply beveled edge; more or less circular forms chipped to an edge for use as scrapers or groovers (fig. 47), and larger boulders or pieces of flint with an edge roughly chipped on one side, probably choppers or improvised hand-axes made to meet temporary need. All these things were found on the sites of both peoples; but there is one form, not enumerated above, which, perhaps by chance, appeared only at Ciboney stations. This is a form of scraper, chipped from one side only, in which the scraping edge is concave, as if for dressing down arrow- or spear-shafts (fig. 52).

From the fact that rude flint implements are found all through the Ciboney deposits

in Baracoa, which we presume, from the evidence at hand, to have preceded the Tainan, it would appear that this elementary knowledge of flint chipping belonged to the Ciboneys and was probably adopted from them by the Tainan invaders. In western Cuba, however, so far as our work has shown, the flint implements rarely advanced beyond the used-flake stage and seldom shows secondary chipping. Further explorations are needed, however, to establish the exact status of flint-working in this part of the island.

Among other things common to both cultures may be enumerated the stone weights unusually classed as net-sinkers—merely flat, oval pebbles notched at the sides to facilitate attachment of the cord, which, while very numerous about the stations of the Ciboneys near the fishing grounds on the coast, are not rare in the Tainan middens inland; stone pestles of bulging cylindrical form; awls simply made by sharpening splinters of bone; beads made by rubbing off the spiral tip of *Oliva* shells to make a perforation by which they might be strung, and beads

made of fish vertebræ by enlarging the central perforation. Common also to both cultures are flat, circular beads of shell, but those of the Ciboney culture are generally larger, averaging about 0.3 in. in diameter, while the disc beads of the Tainan are usually better made and very small, perhaps half that size. The flat, oval pebbles and waterworn bits of shell perforated near the edge for pendants are the only ornaments commonly found on Ciboney sites, and are typical of that culture, and for that reason are included in the above list and in the graphic table; but these were sometimes made and used by the Taino also, although in small numbers in proportion to their favorite circular gorgets and claw-shaped pendants of shell, and their great variety of amulets.

Objects of Doubtful Origin.—Pottery of any kind is very rare on Ciboney sites, except in certain cases where it is found on or near the surface and is obviously Tainan and intrusive, but once in a while, as at the early village-site at Mesa Buena Vista, near Jauco, may be found sherds, usually plain but



PART OF SHELLMOUND AT CAYO REDONDO, REMATES, PINAR DEL RIO

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<p>sometimes decorated with simple angular patterns, of rather rude vessels which seem to have been of flattened globular form, like the, more recent Pinar del Rio vessels shown in fig. 93, or of the type known as "boat-shape," oval in outline and pointed at both ends. Now, semiglobular and boat-shape forms and angular patterns are by no means unknown to Tainan ware, although they are not common; yet it seems significant that such forms and such patterns, and these only, should be found apparently associated with the Ciboney culture.</p> <p>A glance at the collection from Jamaica in the Museum of the American Indian, Heye Foundation, reveals the suggestive fact that the forms and decorations of the ancient pottery from this island are for the greater part the identical ones just mentioned as sometimes associated with Ciboney remains in Cuba. Hence it seems possible that there may have been settlements of Jamaican Indians in Cuba before the coming of the true Taino, or at least settlements of Indians with similar sub-Tainan culture,</p>	
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perhaps left here during the wave of migration which peopled Jamaica, for which Cuba would be a natural stepping-stone—people whose pottery in some cases and by some means, perhaps through trade, became mingled with the refuse of Ciboney camps. Or perhaps Ciboney bands that survived the coming of the Taino learned pottery-making from them, but manufactured little, and took up as decoration only the simple angular patterns they themselves had been in the habit of using in other lines of work. This would explain the fact that many long-occupied Ciboney sites in both eastern and western Cuba show not a trace of pottery.

These theories remain to be substantiated, however. The few fragments found in Baracoa may be intrusive, after all, and in Pinar del Rio, the few pieces found near the surface in the Cueva.Funche, and the single sherd from the Valle San Juan midden, may have been left by the same Tainan colonists or fugitives who left the petaloid celts at La Guira near Remates and at San Vicente near Viñales. So the connec-

tion of pottery with the primitive culture must still remain doubtful.

Although a few crude and fragmentary stone celts were found on some Ciboney sites of the Baracoa region, none were found except where there was reason to suspect the later presence of Taino. No celts whatever, nor fragments of them, nor unfinished specimens, nor the necessary and characteristic rubbing stones for making them, were found in any of the long-occupied purely Ciboney sites like Flint Cave near Ovando in Baracoa, nor in any of the primitive Pinar del Rio sites.

Yet the rude celt shown in fig. 5, found by the Montané expedition in the clearly Ciboney mound at Loma de Rizo near the Ciénaga de Zapata, seems to show that this people sometimes had such implements, although apparently not of the petaloid form.

Among the objects of doubtful origin are the rude carvings on stalagmites and on cave walls, of which the best found by our expedition are shown in pls. LVII-LX. There is no positive evidence connecting

these with either culture, although it seems probable that the ruder ones at least are Ciboney.

Another doubtful class of objects is the conical pestle. We found none in Baracoa, but about Santiago they are quite abundant as surface finds. Here they can be connected with the Tainan culture, because they sometimes bear grinning, carved faces (fig. 9), typical of that people's handiwork; but in Pinar del Rio, while the writer has never found them *in situ* in Ciboney stations, they have frequently been picked up on the surface near such places, and may here belong to this culture. Perhaps, like the net-sinkers and other artifacts mentioned above, they were used by both.

The wooden objects found in the mud of the Pinar del Rio lakes must be included in this list, for it is not certainly known to which culture they may be attributed, as they were not associated with the known products of either. None of them shows a trace of the characteristic flowing curved designs, the conventional eyes, and the grotesque grinning heads and faces typical



JUNGLE ON CABO SAN ANTONIO, PINAR DEL RIO

of Tainan art; in fact, only one of them is decorated at all, the handsome baton shown in fig. 102, and this exhibits a design and technique entirely foreign to Tainan patterns and methods. It is easy to say, "We have found two cultures in Cuba—Tainan and Ciboney; these things are not Tainan, therefore they must be Ciboney;" but it is better not to be too positive until we have found such things associated with objects whose origin is known. Meanwhile the specimens, for exhibition purposes, have been classed as pertaining to the Ciboney culture.

To which culture belonged the custom of cremation as illustrated by caves whose floors are covered several inches deep with the charred, calcined, and broken bones of many individuals, is even more doubtful—the pieces of skulls found are too fragmentary to be of use for identification, and the single Ciboney pitted hammerstone picked up in one of the caves is not sufficient to give more than a hint.

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	<p data-bbox="515 289 679 312" style="text-align: center;">MIXED SITES</p> <p data-bbox="314 343 881 925">As might be expected, there are certain places along the coast which were occupied by both peoples: these were the regular homes of the Ciboney during their time, but fishing places and embarkation points only for the Tainan people in later years. So it happens that there are numerous caves near good landing places and fresh water that show a thick layer of Ciboney refuse at the bottom, and a thin Tainan layer, or scattered artifacts from this people, on the surface. In other places, such as the village-site near the lighthouse at Cape Maisi, the vestiges of both peoples were scattered so thinly over so large an area that they have become thoroughly mixed.</p> <p data-bbox="495 967 700 990" style="text-align: center;">SPORADIC FINDS</p> <p data-bbox="314 1021 881 1233">Once in a great while a Ciboney shell gouge or a pitted hammerstone may be found on a Tainan site, but they are so infrequent that the exception proves the rule. They may have been brought home as trophies or curiosities, or may have been</p>
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the property of Ciboney servants among the Taino. A unique burial was that of a solitary, typical, flat-headed Taino *in the earth* of the floor of Burial Cave No. 1, La Patana, identical with Ciboney burials; but that does not affect our conclusions concerning the typical method of burial of either people. In this and in the other phases of culture discussed in this chapter, we must base conclusions on the majority of cases.

DISTRIBUTION OF TAINAN CULTURE

In Cuba.—Our explorations found evidences of the Tainan culture throughout the Baracoa district adjoining Cape Maisi; we find it about Santiago, and westward to Asserederos; Rodriguez-Ferrer's work takes it still farther west to Bayamo, which is the westernmost recorded outpost of the Tainan culture, on the south coast, so far as archeological evidence goes. On the north coast Sr Tamayo found it at Mayari, east of Nipe bay; Fewkes reports typical Tainan specimens near this bay, and Sr Eduardo García Feria's work about Holguin shows that this culture flourished here in full degree. The

Jiménez find near Moron, in the northwest corner of Camagüey province, judging by the published description quoted in another chapter, must have represented the pure Tainan culture or something but little inferior, and this is our most westerly (archeological) outpost on record, so far as the whole complex of petaloid celts, decorated pottery, and clay figurines, is concerned. From this point westward we have on record only sporadic finds of petaloid celts, from such scattered localities as Sancti Spiritus, the Zapata district, Matanzas, San Miguel in Habana province, and from three distinct localities in Pinar del Rio; but whether the typical decorated pottery, carved shell, and the like can be traced that far is a question which further work alone can decide. Then we shall be able to determine whether the Taino actually had colonies in these regions, perhaps, in Pinar del Rio, fugitives who invaded this last stronghold of the Ciboney tribes, in the vain hope of escaping the Spanish conquerors, or whether the petaloids were lost by exploring or war parties, or represent articles traded to the Ciboney

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<p>people. In the accompanying map (pl. CIX) the localities known archeologically to have been populated by Taino are shown by solid red spots; the sporadic finds of celts by red circles.</p> <p><i>In Other Islands.</i>—A study of the collections in this Museum, as well as the works of other investigators, shows us that the Tainan culture, practically identical with that of eastern Cuba, flourished on the island of Haiti and in the Bahamas; a slightly modified form of it, more advanced in some respects, in Porto Rico; and a less highly developed modification of it in Jamaica, whose products are so much poorer in variety and often so inferior in workmanship that the culture might well be called “sub-Tainan.” Traces of Tainan culture may also be seen on some of the Lesser Antilles, but in these islands artifacts of different character appear, supposed to belong to the Carib culture, which, at this writing, has not been satisfactorily studied and worked out in detail.</p>	
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DISTRIBUTION OF CIBONEY CULTURE

As to the Ciboney culture, our expedition traced its dwelling places from a cave near the mouth of the Rio Yumuri, on the north coast of Baracoa, around Cape Maisi to Mesa Buena Vista west of Jauco on the south coast. It was evident again at the Cueva del Muerto at Siboney near Santiago; and the reason we did not find it in the coastal caves west of the mouth of the Yumuri on the north shore, and between Jauco and Siboney on the south, is simply, the writer feels, because we had no time to look. It is likely that Rodriguez-Ferrer's historic find in the "Caney de los Muertos," on the south coast of Camagüey, belonged to this culture (although the reported finds of pieces of cassava griddles in other "caneyes" suggests the Taino), and Prof. Barnum Brown, of the American Museum of Natural History, in the course of a conversation mentioned the existence of middens near the bay of Cienfuegos, which the writer thinks may, on examination, prove to be Ciboney. Dr Montané's discovery in



LAKE AT VALLE SAN JUAN, CABO SAN ANTONIO, PINAR DEL RIO, NEAR WHICH
THERE ARE TWO ANCIENT SITES

the cave at Sancti Spiritus, although many of the typical artifacts were not found, seems to represent an early form of the same crude culture, while his excavations with Dr Rodriguez in the midden-like mounds found by Sr Cosculluela, near the Ciénaga de Zapata, revealed typical Ciboney shell gouges, shell vessels, and the like (pl. iv). From this point onward to the writer's finds in Pinar del Rio we have no reports, but it is likely the Ciboney culture will be found all the way by future investigators. In Pinar del Rio the culture found in the Guane caves, the caves of Viñales, and the middens and caves of Cabo San Antonio, was certainly practically identical with the Ciboney culture of eastern Cuba. Localities known archeologically to have been inhabited by this culture are indicated in solid green on our map (pl. cix); dubious sites are shown by green circles.

The Hoyo Valteso pottery can hardly be classified with either culture, having been left by fugitive Indians within historic times, and the so-called "Indians' oven" at San Vicente and similar structures else-

where in Pinar del Rio require strict investigation to determine whether or not they are Indian at all.

PRIMITIVE CULTURE IN OTHER ISLANDS

Although the writer has not been able to find any archeological reports on the existence of a culture resembling the Ciboney of Cuba elsewhere in the Greater Antilles, there is historical evidence of a cave-dwelling people possessing a similar simple culture in the province of Guacayarima at the western end of the island of Haiti.⁵⁴

RELATIVE AGE

In eastern Cuba, where the two cultures have occupied the same territory, certain sites are found containing vestiges of both. An examination of these in places where the layers are thick enough to be studied and are undisturbed will always show the Tainan vestiges above those of the Ciboney, showing that the Tainan people were the later comers.

There is no reason for supposing that the Ciboney people were exterminated by the

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<p>Tainan invaders, although they seem to have been pushed westward; indeed there is historical evidence that they survived in the western tip of the island long after the coming of the Spaniards, various authors mentioning, as will soon appear, the rude tribes in that district who had no farms, but lived on the fruits of the forest, fish, and turtles, and had no dealings with the other Indians. And it is likely that the "wild" Indians of Pinar del Rio, exterminated during the last century, were survivors of this people.</p>	
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CHAPTER XX

CONCLUSIONS

IDENTIFICATION OF CULTURES



IN TAKING up our general conclusions we will first discuss more fully than hitherto the reasons for identifying the two principal cultures as Ciboney and Taino, respectively. However, in considering these problems we must remember that we are not dealing with a static condition of population, but, if we may believe the first-hand evidence of Las Casas and others, with peoples in active movement.

Archeology shows a long establishment of Tainan culture only in the eastern tip of Cuba, yet, by the time of the discovery, the Taino had overflowed the island at least along the southern coast, up to the eastern border of what is now Pinar del Rio province, for Columbus on his second voyage

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GREAT MIDDEN AT VALLE SAN JUAN, CABO SAN ANTONIO, PINAR DEL RIO

found Taino-speaking Indians up to this point,⁵⁵ that is, those who spoke dialects akin to those of Haiti and Jamaica, but here found a language (probably Ciboney) which his interpreter, a Taino Indian from the Bahamas, could not understand; and the first Spanish colonists found only the inhabitants of Pinar del Rio, the outlying islands, and some parts of the interior, different from the rest. The recent character of this influx, which by Las Casas' time had become so great that the greater part of Cuba's Indian population consisted of immigrants from Haiti and their immediate descendants, has not been generally understood, and has given rise to considerable confusion.⁵⁶

The Ciboney.—Considering first the primitive culture, we find that archeology can trace it from one end of the island to the other, with but little local variation, frequently in caves, associated in places with the extinct *Megalocnus*, and underlying all other human deposits. It is evident that the people possessing this culture might well be called the original natives of Cuba; but

where can we find a name for them? Las Casas supplies the deficiency by informing us that the original inhabitants of Cuba, the same who were subjugated and converted into servants by the invaders from Haiti, were called "Ciboneyes."⁵⁷ That this name was not applied to an earlier wave of Taino who had previously settled in Cuba, but refers to the original natives of the primitive culture, we may find by the statement from the Muñoz collection quoted by Fewkes,⁵⁸ which says, "There are other Guanahatabiyes who are called Ciboneyes whom the Indians of the same island have for servants." Now, we know from various accounts that the Guanahatabiyes, or Guanahatabibes, were one of the primitive tribes of the western end of Cuba, a people speaking a different language, whose "manner of living is that of savages, as they have no houses nor seats nor towns nor farms, nor do they eat anything but the game they catch in the woods, and turtles and fish."⁵⁹ This makes the chain of evidence complete, connecting the primitive culture found by archeology with the "Ciboneyes"

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<p>of the early writers, and gives us authority to use this term as a name for the primitive aborigines of Cuba.</p> <p>These were the "very simple" primitive people who had occupied the whole island of Cuba from some unknown date in the distant past, were often cave-dwellers, were contemporaries of the <i>Megalocnus</i>, and probably descendants of Montané's "Homo Cubensis." Dislodged from eastern Cuba by the Taino a century or so before the discovery, they were crowded westward; the flood of Taino increased and overran the island until they outnumbered the Ciboneyes, whom, in many cases, they reduced to servitude, until by the beginning of the sixteenth century the primitive population could be found only as servants among the Taino, on the islands off the coast, at some places in the interior, and in the western extremity of the island, in the part now known as Pinar del Rio province,⁶⁰ for the writers of the period mention only the Indians of these places as being different from the rest. As to language, so few of the Ciboney words are left that we</p>	
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have no material for comparison, but if it belonged to the Arawak stock, like the Taino, it had become so differentiated that it was unintelligible to the latter. The name Ciboney, however, was applied to them by the Taino, and seems to mean "rock-men," an appropriate term for cave-dwellers.

The Taino.—The situation is different with regard to the name Taino, as applied to the most advanced culture found in eastern Cuba—in this we are merely following the precedent of various authors who have applied this name to the advanced culture of the Greater Antilles, which attained its most characteristic development in Haiti, and left abundant traces in the Bahamas; while in Porto Rico it became somewhat differentiated and reached a higher state, particularly in stonework, but in Jamaica seems to have lagged behind the rest.

The original authority for the use of the name Taino seems to be Peter Martyr,⁶¹ who, in his account of the second voyage of Columbus, tells how the Spaniards while in Hispaniola (Haiti) were approached by a



MOUTH OF CUEVA FUNCHE, CABO SAN ANTONIO, PINAR DEL RIO

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<p>body of Indians who assured them that they were "Tainos," that is to say, good men and not cannibals. By this statement it has been assumed that the term refers to the peace-loving Arawak tribes of Haiti, as contrasted with the warlike and cannibalistic Carib; and it has been extended by writers on the subject to cover the tribes of neighboring islands who were similar in language and culture.⁶²</p> <p>Having conceded the name Taino to the predominant culture of Haiti, we find it applicable to the advanced culture found by us in eastern Cuba, for the artifacts left by both are practically identical; in fact the writer can safely say that the majority of the objects found in eastern Cuba can be duplicated from Haiti. It thus appears that the makers of the artifacts representing the advanced Cuban culture can be called Taino.</p> <p>That these were the immigrants from Haiti mentioned by Las Casas there is no room for doubt. It is only reasonable to suppose that there was an appreciable if not a numerous population of Taino in</p>	
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eastern Cuba at an early date, say at the time of the peopling of Jamaica, when the culture was not so well developed as it became later; but our work shows that the true Tainan culture did not obtain a solid foothold in eastern Cuba until a century or so before the discovery, and that the great influx of Taino, the one mentioned by Las Casas, was very late, perhaps, as he says, only fifty years before his day,⁶³ increasing as the Spaniards took possession of Haiti and began to oppress its inhabitants.

The facts that when the Spaniards began to colonize Cuba they found Indians of undoubtedly Taino culture as far west as Habana, and that Taino-Arawak place-names are found that far west, have been taken to indicate that the Ciboney, known to have been the original inhabitants, were Taino. But this is a mistake. Both the evidence of Las Casas⁶⁴ and that of archeology shows the Taino to have been late comers in this part of the island, in which they had preceded their Spanish conquerors by comparatively few years, "making servants" of the primitive native



VIEW NEAR VIÑALES, PINAR DEL RIO, SHOWING CHARACTER OF THE MOUNTAINS

Ciboneys or driving them back into the interior or into the wilderness of what is now Pinar del Rio.

Traces of Other Cultures.—For many years Cuban students of the subject have believed that the Carib had settlements in the eastern end of the island, on account of the finding there, by various investigators, of numerous artificially flattened skulls, which Poey identified as Carib from their resemblance to a deformed cranium from St Vincent, an island known to have been a Carib stronghold.⁶⁵ This identification rests on the supposition that the artificial flattening of the head was an exclusively Carib custom, which supposition we can show to be erroneous from both archeological and historical evidence; but everyone in Cuba seems to have taken it for granted, except Bachiller y Morales,⁶⁶ who says, "Not only the Caribs, but other Indians of Cuba, flattened the head," and cites historic proof. The fact that such flattened skulls are found frequently on the Taino islands⁶⁷—Haiti, Jamaica, the Bahamas—and are not at all peculiar to those

occupied by the Carib at the time of the discovery, would, without anything else, cast doubt on such a theory. From the archeological standpoint our most important evidence, showing the flattened skulls of Cuba to be Taino and not Carib, lies in the fact that whenever we found skeletons buried on typical Taino sites, such as Big Wall near Maisi, the skulls were always of the flattened type; De Booy⁶⁸ found flat-head skeletons buried with unmistakable Taino pottery vessels on the island of Haiti, and Fewkes⁶⁹ illustrates a flattened skull found ostensibly with a characteristic Taino bowl on the same island. Nor do we lack historical evidence to the effect that the Taino practised such deformation, for we find in Oviedo the following statement regarding the Indians of Haiti:⁷⁰

“They have wide foreheads . . . this kind of forehead is produced artificially, because when the children are born they squeeze their heads in such a manner in front and in back, that, as they are tender creatures, the heads are forced into that shape, flattened before and behind, and thus they remain deformed.”

Charlevoix,⁷¹ referring to the same Indians, even suggests how the flattening was accomplished, for he says:

“They obtained by artifice this conformation of the head, which, although it caused them to have almost no forehead at all, they admired greatly.

“For this the mothers took care to squeeze tightly between their hands or between two little boards the upper part of the heads of their newly born infants, so as to flatten them little by little, by which the skull is molded after a fashion. . . . It is easy to see that this operation changed the entire physiognomy, and added much to the fierce air noted in this people.”

It is unnecessary to quote Fray Iñigo,⁷² who makes a similar statement for Porto Rico.

All this would serve to indicate that some, at least, of the flattened skulls of Maisi are Taino, and that all are probably Taino may be inferred from the fact that none of the very characteristic painted pottery decorated with chubby faces and figurines, nor the fanciful stone-axe forms, typical of St Vincent and supposedly Carib, have ever been found in the district, nor

indeed in all Cuba, which would indicate that the Carib had no settlements here.

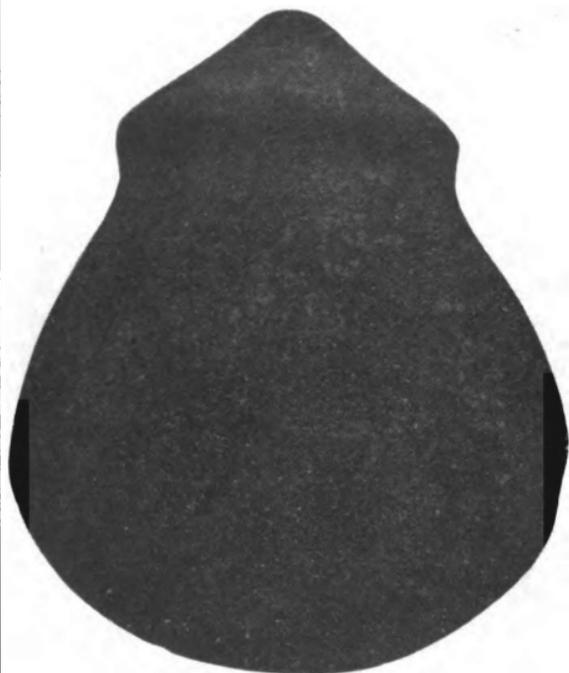


FIG. 110.—Axe of stone (Carib type), from Mesa Abajo, near Maisi. (Length, 5.7 in.)

In fact, the only specimens the writer has seen from the island that may be attributed to the Carib are three hatchets,

and these not of the ornate type, of which one was collected by our expedition from the surface at Mesa Abajo, near Sabana, in the Baracoa district (fig. 110), while another, from Banes, near Holguin, appears in the García Feria collection (fig. 111), and a third (fig. 27) in the Museo Montané was picked up near Mantanzas—enough to suggest the raiding parties for which the Carib were notorious, but not settlements.

Fewkes⁷³ thinks that, besides the Tainan and a cave-dwelling culture (corresponding to the writer's Ciboney), there was probably a third, a fishing people, mentioned by some early writers, living along the

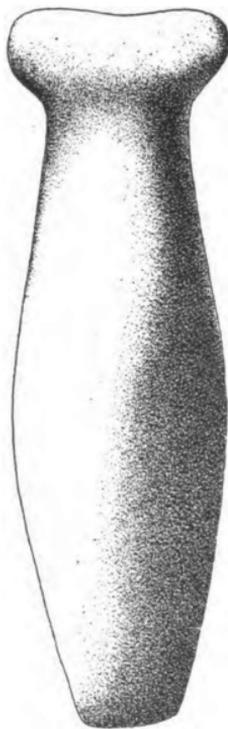


FIG. 111.—Axe of stone (Carib type), from Banes, near Holguin. García Feria Collection. (Length, 8.2 in.)

coast, particularly among the small keys or islands. Whether the artifacts left by these will show enough character to differentiate them from those of the cave-dwellers remains to be seen, for our historical data tell us that the two peoples were almost the same.⁷⁴ Fewkes himself says of them, "Contact with people of a higher culture had raised them somewhat above the dwellers in the mountains [our Ciboneyes], to whom they were related."⁷⁵

Then there is the problem of the lake-dwellers, the remains of whose pile villages were found in the Ciénaga de Zapata by Cosculluela, and concerning whom we have historical data. Only exploration of their sites can tell us to which, if either, of the two known cultures of Cuba they are related. It is quite possible, too, that further research will reveal traces of early settlements of Taino made before their culture had reached its final development, while it was still no further advanced than that of Jamaica; in fact, it is only logical to look for such a culture, for Cuba probably served as a sort of stepping-stone of



SITE WHERE TAINO CELTS HAVE BEEN FOUND, NEAR MINA CONSTANCIA, SAN VICENTE, PINAR DEL RIO

migration in the peopling of Jamaica, and it is therefore natural to suppose that some, at least, of the travelers made it their final home. This would explain the occasional finds of Jamaica-like potsherds on some Ciboney sites.

MAINLAND INFLUENCES

Taino Culture.—The writer has yet to see a single object from Cuba suggesting the Maya art of Yucatan. With regard to the southeastern part of the United States, what little influence there was among the more advanced peoples seems to have passed from the islands to the mainland, and not vice versa, for we find throughout the area covered by the "southeastern" type of culture, from the Gulf to Tennessee, and from the Atlantic to eastern Texas, the typical Tainan type of bowl—the *casuela* (fig. 44)—and scattered petaloid celts have been found as far north as Georgia. Moreover we find Holmes⁷⁶ calling attention to the fact that the resemblance between certain designs used by the later Indians of the southeastern United States and Antillean

patterns is too close to be accidental, and that the evidence indicates an infiltration of culture elements from the higher culture of the islands to the less advanced groups inhabiting the mainland. In this connection should also be noted the form of palm-thatched house still used among the Seminole Indians of Florida, resembling the Cuban *bohío*,⁷⁷ which is of aboriginal origin, and the use of *coonti* root, somewhat reminiscent of the Antillean cassava industry among this tribe.⁷⁸ On the contrary, we do not find anywhere in the Antilles flint arrowpoints, nor the gorgets, "banner-stones," and tobacco pipes typical of the southeastern part of the United States.

Ciboney or Primitive Culture.—So much for the evidences of contact between the more advanced culture of the Antilles and the mainland. When we turn to the primitive culture, we find Fewkes⁷⁹ calling attention to the fact, apparently from historical evidence (at least, on the part of Cuba), that "the connection of the coast fishermen of Cuba with the shellheap and key population of Florida was intimate,

but it is still undetermined which was derived from the other." In this connection the writer is pleased to state that we have in the Museum of the American Indian, Heye Foundation, archeological evidence to the same effect, found in Florida shell-heaps, in the shape of rough, flat, shell beads, identical with those the writer found in the midden at Valle San Juan in Cabo San Antonio; and gouges, celts, and vessels, all of shell, similar to those characterizing the Ciboney culture of Cuba, from one end of the island to the other.

If it should ever be established that the ancient coast fishermen of Cuba received their culture from Florida, we would then have good reason to look to southeastern United States, instead of to South America, for the origin of all the Ciboney bands of Cuba (as their culture was practically identical), and perhaps for the origin of the primitive people of Haiti, mentioned by the old writers as distinct from those we know as Taino.⁸⁰

Origins in South America.—All the evidence, linguistic and cultural, shows that

we must look for the point of origin and the modern relatives of the more advanced Antillean tribes, that is, the Tainan Arawak, and the Carib, not in North America nor in Yucatan, but in northeastern South America, where both Arawak and Carib may still be found. Whether relatives of the primitive Ciboney people of Cuba may also be found there is a question: so little of their language survives that there is no material for comparison. As noted above, they may even have originated in what is now southeastern United States.

THEORETICAL PEOPLING OF THE ANTILLES

Let us suppose that there has been a series of waves of migration starting out from South America, and spreading from island to island up through the Lesser to the Greater Antilles. And let us suppose that our primitive people formed the first wave, far back in the dim past, and that they finally settled in Haiti, and in Cuba, under the name of Ciboney, and lived there for many generations, undisturbed in their caves and rude shelters, subsisting

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on crabs, fish, turtles, and *julias*, and such natural fruits as they could find in season. Then suppose a wave of Arawak started forth, with their culture, already partially developed, experienced in the corn and cassava industries, and building serviceable houses; that they worked their way up through the islands to Porto Rico, Haiti, Jamaica, and Cuba, in all of which they settled and multiplied, driving the primitive peoples back into the western part of Haiti, and westward in Cuba; that their original culture developed considerably in Porto Rico and Haiti, and that this advanced form, which we call the true Tainan, then spread to eastern Cuba and the Bahamas, and just before the discovery, over most of Cuba, but not to out-of-the-way Jamaica. And, finally, let us suppose a wave of warlike Carib, gradually sweeping up through the Lesser Antilles, killing off their predecessors and settling in some islands, leaving others desolate, and in still others butchering the Arawak men and taking their women, but fortunately not making permanent settle-

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ments west of the lesser islands, although sending piratical raiding parties as far as Cuba. If we can suppose all this, we shall have a pretty good theory for explaining the archeological conditions as we find them on these islands.

Such are the outlines of Cuban archeology, so far as they can be determined at the present time; but some, at least, of our conclusions are likely to be modified by future exploration, for it must be remembered that only in the Baracoa district has anything approaching thorough work been done, and that the whole great region from Holguin and Bayamo westward is practically unknown archeologically, except for the early Jiménez find at Moron (the specimens from which are lost), the Montané discovery at Sancti Spiritus, Montané's explorations with Dr Rodriguez near the Ciénaga de Zapata in connection with the Cosculluela finds, and the writer's modest preliminary observations in Pinar del Rio.

The next part of this work to be published will contain an intensive study of the Tainan Arawak Indians of eastern Cuba, based on



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our explorations and artifacts, and on all other available sources, and a similar account of the Ciboneyes, so far as our present knowledge goes. In this second part the specimens will be illustrated and described in detail.	
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NOTES

1. Las Casas, *Fray Bartolomé de*. Historia de las Indias, tomo III, p. 464, Madrid, 1875.
2. Fewkes, Jesse Walter. The Aborigines of Porto Rico and Neighboring Islands. *Twenty-fifth Annual Report Bur. Amer. Ethnology*, p. 26, Washington, 1907.
3. Martyr, Peter. De Orbe Novo, MacNutt translation, 1st Decade, book II, p. 81, New York, 1912.
4. Rodriguez-Ferrer, Miguel. Naturaleza y Civilización de la Grandiosa Isla de Cuba. Parte Primera—Naturaleza. Madrid, 1876.
5. *Ibid.*, pp. 177 et seq.
6. *Memorias de la Sociedad Económica de la Habana*, tomo XVII, p. 457, Habana, 1843.
7. Rodriguez-Ferrer, Miguel. De los terrícolas Cubanos con anterioridad á los que allí encontró Colón, según puede inferirse de las antigüedades encontradas en esta Isla. *Congreso Internacional de Americanistas, Actas de la Cuarta Reunión*, tomo I, pp. 224 et seq., Madrid, 1881.
8. Poey, Andrés. Cuban Antiquities. A brief description of some relics found in the Island of Cuba. *Transactions of the American Ethnological Society*, vol. III, part I, p. 195, New York, 1853.
9. *Revista de Cuba*, tomo II, pp. 246 et seq., Habana, 1877.
10. Poey, op. cit.
11. Squier, E. G. Discovery of ancient tumuli in the Island of Cuba. Read before the

INDIAN NOTES

- American Ethnological Society, May 1860. Published in *The Century*, June 2, 1860.
12. Montané, Dr Luis. L'homme de Sancti Spiritus (Ile de Cuba). *Extrait du Compte Rendu du XIII^e Congrès International d'Anthropologie et d'Archéologie Préhistoriques*, Session de Monaco, 1906; tome II, pp. 141-152, Monaco, 1908.
 13. Idem. L'homme fossile Cubain. Study presented before the Second Pan-American Scientific Congress, Washington, Dec. 27, 1915 to Jan. 8, 1916.
 14. Idem. El Congreso Científico Internacional de Buenos Aires, pp. 14 et seq., Habana, 1911.
 15. La Torre y Huerta, Dr Carlos de. Conferencia Científica. *Anales de la Real Academia de Ciencias Médicas, Físicas y Naturales*, tomo XXVII, entrega 315, pp. 325 et seq., Habana, 1890.
 16. Idem (editor). Manual ó Guía para los Exámenes de los Maestros Cubanos, chap. II, Habana, 1901.
 17. Culin, Stewart. The Indians of Cuba. *Bulletin of the Free Museum of Science and Art of the University of Pennsylvania*, vol. III, no. 4, Phila., May 1902.
 18. Montané, Dr Luis. Rapport sur l'état des sciences anthropologiques à Cuba. *Extrait des Bulletins et Mémoires de la Société d'Anthropologie de Paris, Jubilé du Cinquenaire*. (n.d.)
 19. Fewkes, J. Walter. Prehistoric culture of Cuba. *Amer. Anthropologist*, n.s., vol. VI, no. 5, pp. 585 et seq., Oct.-Dec. 1904.

AND MONOGRAPHS

20. Idem., Porto Rico, p. 216.
21. Cosculluela, José Antonio. Cuatro Años en la Ciénaga de Zapata, pp. 61 et seq., Habana, 1918.
22. Fewkes, Cuba, op. cit., pl. XIX, 2.
23. Montané. (See note 12.)
24. Bacardi y Moreau, Emilio. Crónicas de Santiago de Cuba, tomo I, pp. 7-12, Barcelona, 1908
25. Fewkes, Cuba, op. cit., pl. XIX, 1.
26. La Torre, Dr José María de. Mapa de la Isla de Cuba, y tierras circunvecinas, según las divisiones de los naturales con las derrotas que siguió el Almirante Don Cristóbal Colón en sus descubrimientos por estos mares, y los primeros establecimientos de los Españoles; para servir de ilustración á su historia antigua. Habana, 1842 (?).
27. *Memorias de la Sociedad Patriótica de la Habana*, tomo XIII, pp. 18-67, Habana, 1841.
28. Bachiller y Morales, Antonio. Cuba Primitiva. Origen, Lenguas, Tradiciones y Historia de los Indios de las Antillas Mayores y las Lucayas. 2ª edición, Habana, 1883.
29. Pichardo, Esteban. Diccionario Provincial de Voces y Frases Cubanas. 4ª Edición —Correjada y mui Aumentada. Habana, 1875.
30. Fort y Roldán, Nicolas. Cuba Indígena. Madrid, 1881.

INDIAN NOTES

31. Zayas y Alfonso, Alfredo. *Lexicografía Antillana. Diccionario de voces usadas por los aborígenes de las Antillas Mayores y de algunas de las Menores, y consideraciones acerca de su significado y su formación.* Habana, 1914.
32. Brinton, D. G. *The Arawack language of Guiana in its linguistic and ethnological relations. Transactions of the American Philosophical Society, Phila., 1871.*
33. Idem. *The archæology of Cuba. From the American Archæologist, vol. 2, no. 10, Columbus, Ohio, Oct. 1910.*
34. Reynoso, Dr D. Alvaro. *Agricultura de los Indígenas de Cuba y Haiti.* Paris, 1881.
35. Vidal y Careta, Francisco. *Estudio de las Razas Humanas que han ido poblando sucesivamente la Isla de Cuba.* Madrid. 1897
36. Fewkes, Porto Rico. (See note 2.)
37. Joyce, Thomas A. *Central American and West Indian Archæology.* New York, 1916.
38. Pi y Margall, D. Francisco. *Historia de la América Antecolumbiana.* 1º, tomo I, cap. XXI, Barcelona, 1892.
39. Cowley, R., y Pego, A. (*elitores*). *Los Tres Primeros Historiadores de la Isla de Cuba. Reproducción de las Historias de D. José Martín Félix de Arrate y D. Antonio José Valdés, y Publicación de la inédita del Dr D. Ignacio Urrutia y Montoya.* Habana, 1876.
40. Wright, I. A. *The Early History of Cuba, 1492-1586. Written from original sources.* New York, 1916.

AND MONOGRAPHS

41. Morales y Morales, Dr Vidal. Nociones de Historia de Cuba. Adaptadas á la enseñanza por Carlos de la Torre y Huerta. Ilustradas por Francisco Henares. Habana, 1917.
42. Bacardi y Moreau, op. cit. (See note 24.)
43. Baralt, L. A. Apuntes Históricos del Pueblo de Indios San Luis de los Caneyes. In Bacardi y Moreau, op. cit., tomo II, Barcelona, 1909.
44. Montané. (See note 14.)
45. Poey's article in *Revista de Cuba*. (See note 9.)
46. Culin, op. cit., p. 195.
47. *Ibid.*, p. 204.
48. de Booy, Theodoor. Certain kitchen-middens in Jamaica. *Amer. Anthropologist*, n. s., vol. xv, no. 3, p. 429.
49. *Idem.* Pottery from certain caves in eastern Santo Domingo. *Amer. Anthropologist*, n. s., vol. xvii, p. 80.
50. *Idem.*, Jamaica, p. 431.
51. Miller, Gerrit S., Jr. The teeth of a monkey found in Cuba. *Smithsonian Miscellaneous Collections*, vol. 66, no. 13, Washington, 1916.
52. Mead, Charles W. The distribution of an Arawak pendant. *Holmes Anniversary Volume*, pp. 316-320, Washington, 1916.
53. Fewkes, Cuba, op. cit., pp. 585 et seq.
54. Martyr, Peter, op. cit., Third Decade, p. 380.
55. *Ibid.*, First Decade, pp. 100, 101. The point where the "coast began to recede in a southerly direction" must have been

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somewhere in the vicinity of Batabano, to the westward.

56. Las Casas, Historia, p. 464. "All the greater part of the people by whom that island [Cuba] was populated were come from and native of this island of Española, although it is true that the oldest and native people of that island [Cuba] were like those of the Lucayos an exceedingly simple people and they were called in their language Ciboneyes, and they of this island either by persuasion or by force took possession of that island [Cuba] and its people, and had them for their servants, not as slaves" The statement by Las Casas that the Ciboney were like the people of the *Lucayos*, or Bahamas, has been the only point difficult to explain in developing our hypothesis that the name "Ciboney" belongs really to the primitive race of Cuba and not to any Taino division; for most of the known specimens from these islands are clearly Taino, and the inference is that their inhabitants were Taino. The writer feels, however, from a study of our collections, that the Taino were comparatively late-comers in the Bahamas, and that future work will show the original inhabitants of these islands to have been a rude and backward people like the primitive Indians of Cuba, whose few surviving implements and utensils are so crude that they have for the greater part been overlooked

by collectors. These Indians may have still been in the majority at the time of the discovery, and it was to these that Las Casas compared the Ciboney of Cuba, characterizing them as "exceedingly simple" in contrast with the more advanced Taino tribes.

57. Ibid. The paragraph above, also p. 437.
58. Fewkes, Cuba, op. cit., p. 588.
59. Velasquez, Diego. Letter written in 1514. *In Documentos Inéditos del Archivo de Indias*, tomo XI, pp. 424-425, Madrid, 1869.
60. Fewkes, op. cit.
61. Martyr, Peter, op. cit., First Decade, p. 81.
62. Among the writers using the word Taino in this sense are: Fewkes, Porto Rico, p. 26; Joyce, op. cit., p. 158; La Torre, Manual ó Guía, p. 58.
63. Las Casas, op. cit., p. 474. "Afterward passed from this island Española some people, especially since the Spaniards began to annoy and oppress its natives, and arriving in that one [Cuba] by persuasion or by force, settled upon it, and by good luck were able to subjugate its natives, who, as we stated above, were called Cibuneyes, the penult long, and, according to what we believed at that time, it was not fifty years before that those of this island had passed thither."
64. See notes 53 and 60.
65. La Torre, Conferencia, p. 335.
66. Bachiller y Morales, op. cit., p. 154.
67. Joyce, op. cit., p. 228. Brooks, W. K., On the Lucayan Indians, *National Academy of Sciences*, Washington, vol. iv, 10th

INDIAN NOTES

- Memoir, read Nov. 1887. Haddon, A. C., Note on the craniology of the aborigines of Jamaica, in Duerden, J. E., *Aboriginal Indian Remains in Jamaica*, p. 23, Kingston, 1897. de Booy, Theodor, Santo Domingo kitchen-midden and burial mound, *Indian Notes and Monographs, Museum of the American Indian, Heye Foundation*. vol. I, no. 2, p. 114, New York, 1919.
68. de Booy, *ibid.*
69. Fewkes, Porto Rico, *op. cit.*, pl. I.
70. Oviedo y Valdés, Gonzalo Fernandez de. *Historia General y Natural de las Indias*. la parte, lib. III, cap. v, p. 68, Madrid, 1851.
71. Charlevoix, Pierre François Xavier de. *Histoire de l'Île Espagnole ou de S. Domingue*, tome I, pp. 36, 37, Paris, 1731.
72. Abbad y Lasierra, Iñigo. *Historia Geográfica, Civil y Natural de la ysla de Puerto Rico*, pp. 26, 27, Madrid, 1788.
73. Fewkes, Cuba, *op. cit.*, p. 598.
74. *Ibid.*, p. 588.
75. *Ibid.*, p. 586.
76. Holmes, W. H. *Caribbean Influence on the Prehistoric Ceramic Art of the Southern States*, *American Anthropologist*, vol. VII, pp. 71-78, Washington, 1894.
77. MacCauley, Clay. *The Seminole Indians of Florida*. *Fifth Rep. Bur. Ethnology*, p. 500, Washington, 1887.
78. *Ibid.*, p. 513 et seq.
79. Fewkes, Cuba, *op. cit.*, p. 598.
80. See note 51.

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