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UNITED STATES NATIONAL MUSEUM.

NARRATIVE OF A VISIT TO INDIAN TRIBES OF
THE PURUS RIVER, BRAZIL.

BY

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Ann Arbor, Michigan.

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ITINERARY.

During a recent trip to Brazil I was commissioned by the United States National Museum to make collections in natural history and anthropology, with a view to completing certain series of exhibits for the Pan-American Exposition at Buffalo. The present paper relates to brief visits made to certain native tribes of the river Purús, western Brazil, and the collections and data obtained.

The Mundurucús (Tupian family) of the river Tápajos had seemed the most interesting tribe within reach, but a conference with Dr. Goeldi, the director of the Pará Museum, led to a change of plans. He had made an extended study of the native tribes still existing in the Lower Amazon region, and informed me that the Mundurucús were spoiled for ethnological study by contact with the missionaries and civilization, having lost to a great extent their ancient arts, customs, and language.

It seems probable that no wild tribe now lives on the Lower Amazon or its navigable branches. The ancient inhabitants have in most cases entirely disappeared, leaving nothing but their graves, kitchen middens, and old village sites buried in the forest, and the names of their tribes and ancient territories preserved in the histories of the country and in local names. Most of these tribes have without doubt become extinct, though a few individuals may have merged with the hardier Tapuios (Tapuyan family), the civilized and Christian Indians of the Amazon. Great tracts of the country are entirely without human inhabitants, as the latter generally live in small villages and scattered cabins along the navigable streams only.

Wild tribes still exist on the headwaters of the rivers, where impassable forests and dangerous rapids separate them from the traders and rubber gatherers below. A great war canoe in the museum grounds at Pará and arms, clothing, and ornaments in the museum cases had been recently procured from the Timbýras, a tribe living on the upper

Guamá, a little river running into the bay on the west side of Pará. These Indians are probably now living within 150 miles of the city, but a visit to them would require a strong party and several weeks' time in ascending rapids and dragging canoes.

In 1873 I had visited the wild tribes of the upper Purús River and had found them within reach of steam navigation, so I decided that this place, though so distant, was the most favorable for my work.

After getting as much information as possible from Pará merchants and residents who had visited the Purús, I took passage up the Amazon on an English steamer, and after four days' voyage reached Manáos, at the mouth of the Rio Negro and 1,000 miles from the sea. Since my former visit Manáos had grown from an Indian village to a city of 30,000 people, the capital of the Brazilian State of Amazonas, with street cars and electric lights. Five ocean steamers were at anchor in the Rio Negro in front of the city, and a fleet of river steamers engaged in trade with the Madeira, Purús, Rio Negro, Jurúa, etc.

I was fortunate in getting passage on one of these, the *Antonio Olyntho*, which was about to sail for Acre, on the Bolivian frontier, and intermediate ports on the Purús.

Two days' steam up the Amazon brought us to the mouth of the Purús, now, the 1st of March, rapidly rising with the daily rains. The great sand bars had disappeared and the water was already setting back into the low timber behind. The Purús is noted for its crooked course, there being a decided bend at every 2 or 3 miles distance, and at every bend a great sand bar. These occur with such regularity that the inhabitants are accustomed to reckon distance by so many prayas (sand bars). The banks are generally low, at this season just above water, but now and then the river would strike the high land on one side or the other, this showing generally in bluffs of red clay, some of them 100 feet above the river.

For several hundred miles of the Purús' lower course the forests produce but little rubber and nuts, the staples of the country, and settlements are seen only at long intervals. These settlements consist usually of palm-thatched barracks occupied by fishermen, turtle hunters, and wood choppers from Pará and Manáos. At one of these the steamer drew near the bank, the landing plank was run out to the shore, and two or three cords of dried fish (pirarucú), in great bundles, were brought on board and added to our means of subsistence. At another 50 great river turtles were purchased and the crew sent on shore to bring them from the turtle corral, a shallow pond surrounded by paling. The turtles were thrown on their backs along the sides of the deck, where they lay kicking and sprawling until they also were added to our limited bill of fare.

As we approached the mouth of the Tapaúá, though to the unprac-

ticed eye there was no change in the character of the never-ending forest, the settlements of the rubber gatherers became frequent. The rubber station usually consists of a large building (the barracón) generally built of wood or mud and roofed with tile. The lower story serves for a salesroom and for storage, and the upper story for a home for the proprietor (patrón) and his family. Around the station are scattered rude palm-thatched cabins, the homes of the rubber gatherers. Though most of the settlements are of this kind, at Canutáma and Lábria towns of several hundred inhabitants have sprung up.

The rubber gatherers are a mixed population, chiefly Tapuio, gathered from all of the older settlements of the Amazon and led here by the hope of making money easily and quickly in the rubber business. Of late years large numbers of people have come up the river from the State of Ceará, on the seacoast, from which they were driven by famine caused by excessive drought.

Near the mouth of the Ituchý the steamer stopped at the little station of San Luis de Cassaná, the property of Coronel Gomez, who has made his fortune in rubber and is called the king of the Ituchý. Two steam launches for navigating the Ituchý and numbers of smaller craft anchored in front of his barracón, with \$10,000 or \$15,000 worth of rubber lying on the bank ready for shipment, were marks of his enterprise and prosperity. Several of the dugout canoes of the Paumarí Indians (Arauan family) were drawn up on the bank (Plate 9), the first signs of aborigines we had seen, and as our freight was carried on shore a half dozen Paumarí women came down and helped carry it to the storehouse. While among civilized people they were dressed like the poorer Tapuios, but were readily known by their small size and peculiar method of wearing their hair, which was cut straight across the forehead above the eyes and allowed to fall loose down the back. They were also marked by a peculiar skin disease, which leaves large white spots upon the hands and feet. The only man among them, after carrying a few loads up the slippery bank through the mud and rain, with the promise of a drink of rum as pay, gave it up in disgust, and getting into his canoe drifted down astern of the steamer, where he sat slapping mosquitoes and watching us until we were ready to start.

On my former trip I had visited these Indians in their villages. Anciently they were much more numerous and are said to have occupied the Purús down to near its mouth. They are now reduced to a few hundred, who are found during the dry season leading a wandering life along the river from the Ituchý to the Cashoeiras (rapids of the Purús). The Paumarí are the best known of the Purús tribes. They are peculiarly river Indians, expert swimmers and boatmen, living almost entirely upon fish and turtles. During the dry season they wander in their little dugout canoes from one sand bar to another, liv-

ing in little oven-shaped huts made by laying narrow palm-leaf mats over frameworks of saplings bent and stuck into the sand. When they move the mats are carried in their canoes, so that they always have their houses with them. In the rainy season, when the sand bars are covered with water, they retire to the lakes, where they live on rafts of dead logs tied together and floored with strips of palm wood.

Their clothing consists of the little apron (*tanga*) common to other Purús tribes. They paint their bodies and limbs in horizontal red stripes. In common with the neighboring tribes they cultivate a little tobacco, and make snuff, which they inhale through hollow bones placed in the nostrils. (Plate 8.) They are a humble, cowardly race, and live in deadly fear of their neighbors, the Hypurinás.

Two days more of slow steaming brought us to Hyutanihan, just below the rapids, and to the end of my journey. This place is on the northwest or right bank of the river in ascending, and at a point where the stream strikes the high land. Part of the village stands on the low ground near the river, and along the water's edge in front is a great pile of wood cut for the passing steamers. A steep climb of perhaps 150 feet leads to the plateau above, where stand a dozen rude palm-thatched cabins of the rubber gatherers, in a clearing of several acres, which is no longer cultivated and has grown to grass and bushes, in which a few immense trees of the Brazil nut are still standing; behind this clearing is the forest. The people, patron and all, were from Ceará, and now, as there was too much rain for rubber working, were busily engaged, some making canoes, others handsawing planks under a shed near the beach, and still others cutting wood for the steamers. Just as I got on shore a canoe drew up to the beach loaded with the meat of a tapir, which was so large that it had been cut in pieces to bring it out of the woods.

I had expected to find villages of the savages within a few hours' distance of this place but discovered that hours would turn into days before I could reach them. There were said to be permanent villages of both the Jamamadí and Hypurinás on the headwaters of the Marmoreá Mirí, a river entering the Purús 60 miles below, but approaching the main stream at this point within 25 miles. A broad trail had been cut across to the Marmoreá from the town, in the search for rubber and nuts.

The agent in charge at Hyutanihan found me a guide, Leocardo, an active young Indian from Ceará, who had been here for several years and had learned something of the country and savages in his hunting expeditions.

Early the next morning we climbed the bluff and began a hurried tramp through the great forest, Leocardo carrying our baggage in a rubber sack to keep it from the rain. The trail led to the west, over high land, which was nearly level, but every mile or two the path

would drop down a steep and slippery bank 100 feet to a narrow valley and small stream, and then rise as sharply to the level above. A little after noon we came out to a new clearing planted with corn and manihot on the banks of a little river, the Apahán. Here were three cabins where lived Senhor Paulo Xavier, the patrón, with three or four rubber gatherers. Senhor Paulo had made the trail we had followed and was well acquainted with the country. He told me that the trail reached the Marmoreá at a deserted rubber station where I would find no canoe, and that the only trail up the river was now, in many places, over head in water. He said also that the savages were two or three days' journey up the river or as far downstream, and that he had heard that they had recently gone down to near the mouth of the Marmoreá.

Finding myself at my wits' end here, I returned the next morning over the same path to Hyutanihan. I was planning a journey down the Purús to the mouth of the Marmoreá, when just at evening of the second day two men came into the village by the same trail we had followed, one a Cearense, the other a Hypuriná. They were from a rubber station on the upper Marmoreá and were after mail and food. Food was scarce at Hyutanihan, but they purchased a big turtle and prepared to set out for home the next morning. They reported that the Jamamadí were at home in their village on the upper river, but that the Hypurinás had gone downstream. As they said their boat would hold two more, I thought this my opportunity, and hiring Leocardo again, started next morning once more toward the Marmoreá. The Hypuriná, a strong fellow, carried the live turtle, weighing about 70 or 80 pounds, on his back. At noon we were again at Senhor Paulo's, but the Apahán was too deep to ford and the only canoe was up the river. At 3 o'clock the boat returned. It was rather late to undertake the 12 or 15 miles yet between us and the Marmoreá, but Antonio, the Hypuriná, loaded his turtle into the canoe, answering our questions in broken Portuguese that if God willed it we should get through. We were landed on the other side in flooded forest, and wading to the highland, we started almost at a run, as we did not wish to pass the night in the woods. Approaching the Marmoreá we passed through large extents of old clearing, now grown up to small timber, but with clumps of bananas and plantains still fruiting. These were old deserted plantations of the Jamamadí. Just at dark we came out to a clearing on the Marmoreá, here a rapid stream 100 feet wide. A well-built barracón of handsawed lumber and three or four thatched cabins stood near the bank, all vacant. The owner had failed and given up his place and gone down the river to work for someone else.

We passed the night in the empty barracón, Antonio waking us in the night by calling out that he had been bitten by a vampire bat.

The next day was passed in paddling the heavily laden canoe up the rapid stream. In many places the river had risen above its banks and was flowing across from one bend to another through the forest. Antonio, who served as steersman and pilot, made use of many of these cut-offs to shorten the distance, crowding the canoe through among the trees. At noon we stopped on the bank and the men went to an old Jamamadí clearing and brought back a load of sugar cane and half-ripe pineapples to help out our lunch of farina and fish.

Many of the forest trees were bright with red and white blossoms, and a giant convolvulus, with its feet in the water, climbed over the undergrowth on the banks and covered it to a height of 80 feet with immense festoons of pink flowers. The noise of our paddles frightened the game before us, but a great fresh-water porpoise followed us for several miles, frequently rising within a few feet of our boat with a startling splash and grunt.

Just before night we came to San João, the seat of Senhor João Nogueira and the only living rubber camp on the Marmoreá. The station was a new one, having been established but two years, but several acres were cleared along the river and planted to corn and manihot. The patrón, Senhor João, like the rest, was living in a palm-thatched barrack, but was getting out timber for a better house. Several men were at work under a shed making a big canoe to transport his rubber down the Marmoreá to the Purús and market. He seemed glad to see a stranger in this remote part of the world and did his best to make my stay pleasant. My hammock was hung that I might rest after my cramped ride in the canoe, and one of the few chickens he had saved from the vampire bats was sacrificed for my supper. Several monkeys of different species were running about or were chained to the walls. These, he told me, were purchased from the Jamamadí. On hearing that I wished to visit the malocca of these Indians, he agreed to go with me the next day, and we completed our simple arrangements for the trip that evening. It was a two-days' journey by boat up the river, but he thought by taking an old trail through the woods we could make it in a day.

The next morning, taking Antonio and Leocardo, we set out toward the headwaters of the stream, Senhor João, like the Indians, going barefoot. At first we followed a trail made by the rubber gatherers. A mile or so from the station we found a little shed, carefully covered with thatch, beside the path. This was placed over the grave of a little Jamamadí girl who had died while her parents were visiting at the station.

At first the small streams emptying into the river were crossed by logs cut for that purpose, but by and by these failed and we had to wade. Then the streams got deeper and we were soon fording some of them up to the waist, though Antonio did his best to guide us into

the shallower places. About noon Senhor João concluded that we must make the rest of the way by boat. Just then two naked Indians in a curious bark canoe came paddling down through the flooded woods. These were Hypurinás, Pedro Bom, and his brother. Climbing into their boat, we were paddled down to the river to a large open shed of palm thatch where Pedro Bom was living. His wife, as scantily clothed as he, was swinging a sick and crying child in an old bark hammock. Another hammock of three long strips of bark (the primitive type of hammock?) was hanging under the shed. These, with a rough clay pot for cooking, seemed to comprise his household goods. There seemed to be nothing to eat about the premises but a bunch of palm fruits which he had just brought in the canoe; but Pedro climbed to the roof of the barrack and brought down four fish (Matrinchao, an abundant fruit-eating fish of the Purús and its branches). These had been slowly roasted and smoked and dried until they would keep without salt. This process is called "moquiar" on the Amazon, and is probably used by all the tribes. Each of us finished a fish, which with a little farina made us a good dinner, the smoke in the fish seeming to take the place of salt.

Several bark canoes were drawn up on the bank near the shed. These were rude affairs, tied into shape and then dried over a fire; the ends were open and raised but little above the water level. They were made of a single piece of bark taken from the standing tree. The bark of the jutahý is said to be most commonly used. Pedro was easily persuaded to accompany us up the river, and seemed to think nothing of leaving his wife and sick baby alone in the woods. Our party, now numbering five, embarked in one of these canoes, all sitting flat on the bottom, and Pedro finding we were so deep that the water ran in at the open ends filled them with clay.

The river had now diminished to a channel of 20 or 30 feet in width, but rapid and deep and full of fallen timber. Some of this lay just above the water, and we would pull our boat beneath it, all lying down as we passed under; then a log would be just at the surface, and we would pull the light canoe up and over it, all climbing out on the log as we did so.

After three hours of this we reached so much fallen timber that we could follow the river no farther, so we drew our boat to land and went on afoot. Just here were drawn up the canoes of the Jamamadí village. They were also of bark, but much better made than those of the Hypurinás, the ends being raised up and sewed together, forming a hollow beak.

The trail now passed over high land and through large tracts of old clearings of the Jamamadí. Some of these had grown up to timber 100 feet in height, while in others there were remains of the cultivated plants, bananas, pineapples, and pupunya palms. Their method of

cultivation is the one common to all savage tribes of the earth. A piece of the forest is cut down and allowed to dry and then burned. By this means the surface of the ground is made ready for planting. The ground is generally used for two or three crops, but by this time young timber has sprung up from the roots and stumps and taken possession of the land and a new plantation is made.

At 5 o'clock we came out into a clearing of 15 or 20 acres already growing up to weeds and bushes, but with growing sugar cane and manihot and clumps of fruiting bananas, and near the center an immense deserted building, the malocca of the Jamamadí. I had expected to find a village of houses, but this was a great village house (fig. 9). It was a large cone-shaped affair, apparently all roof, 70 feet high and 130 in diameter. As we came near we found that there were neither doors nor windows, but that the roof was raised about 4 feet from the ground all around upon a circle of small posts. On stooping and entering we found that it was made of a skeleton of long poles reaching from near the ground to the peak. To this skeleton was tied the roof of overlapping horizontal layers of carefully braided thatch made from the leaves of the caranai palm. An inner circle of large posts was set 12 feet apart and about 12 feet from the outer walls. These aided in supporting the roof and outlined a series of cells, which served as family dwelling places. A horizontal pole reached from each post to the outer wall. These were placed about breast high and were divisions between the rooms. Inside the inner row of posts the whole center of the building, 100 feet in diameter, was left clear for assemblies and dances, there being no center pole. The building was deserted and there were no signs of recent occupation. Senhor João had told me the story of the tragedy leading to the abandonment.

In June, 1900, only nine months before, this was the home of 130 people and was surrounded by carefully kept fields of corn, sugar cane, and manihot. Then one of the tribe, who had been down to the Purús, brought back measles, caught from the people of a passing steamer, and soon they were dying faster than the living could bury them. When the fever and eruption came on, they would bathe in the river, and this seemed to drive the disease to the lungs and throat and they died of a cough. Finally those who could get away deserted the malocca and fled to the woods, and many died beside the paths and the streams. Señor João described the place, as he visited it about this time, the dead bodies and skeletons lying about, and the arms and clothing of the dead left in their places. After the disease had run its course scarcely 30 were left alive. These feared to return to the village, but settled near by.

After measuring and examining the building as well as possible, we went on, and after a half hour's walk came to a new clearing of 10 or 12 acres. The blackened logs and stumps were buried in tall Indian

corn, now ripe and dry, with the ripe ears hanging on the stalks; among this a crop of manihot was planted and just beginning to grow. Near one side of the field stood three large open sheds of palm thatch, and before these a motley crowd of men, boys, and dogs awaited us. These were the Jamamadí we were seeking. (Plate 2.)

They knew Senhor João and most of them came forward and shook hands. Some of these were clothed solely in the tanga, others had some bit of civilized clothing, a shirt or a pair of trousers, and one young fellow had on an old Derby hat. The young men had just come in from the hunt, and blowguns and bows and arrows lay scattered about on the ground. The older women remained under the sheds tending their babies or cooked at open fires on the ground. The younger ones seem to have fled to the woods at our coming. The old chief sat in his hut awaiting us. Another younger chief sat squatting on his heels on the ground, naked but for his tanga, and a big red macaw's feather stuck through the septum of his nose and standing out at one side of his face. He was weaving a big basket of vines to serve as a cage for a large gray monkey which had just been brought from the woods and lay at his side, tied hand and foot, snapping and growling at everything near. Several tame monkeys and an opossum were running about the village. A fire was burning on the ground beside the shed we approached, that of the old chief, and one of the women was sitting beside it scraping the roots of sweet manihot, and these were soon cooking in a little clay pot. As soon as it was cooked the dish was brought to me, while the others parched and ate the ripe corn at the fire. This parched corn with game seemed to be the present food of the Jamamadí. The old chief on being asked when they would have plenty of sweet manihot, made the shrill cry of the cicada as answer; that is, that in the dry season when the cicada sang they would feast on the manihot.

Senhor João spoke "lingõa geral," which was understood by the older men of the tribe. The old chief, under whose roof we had taken shelter, was generally called "Schau Assúc," contracted from Tuchaua Assucar, meaning Chief Sugar, but he gave his name in his own language as "Kōmīnch'," the final syllable being a curious slurred aspirate which was hard to attain. The younger chief was called "Kītan ū ē h'." They were all much interested in our attempts to get a list of words of their language. When we set them to counting we found they appeared to have but three names for numbers, "one," "two," and "ten." Three was "one," "two;" four, "two," "two," etc.

As soon as the cooking was done Schau Assúc seated himself at the fire and began making snuff by toasting green tobacco leaves until they were dry and grinding them in a little mortar and mixing this with ashes. Soon all the men and larger boys were taking snuff. Each

was provided with an old percussion-cap box or river shell for a snuff box and a hollow bone of a bird's leg, one end of which was rounded with beeswax and placed in the nostril and the snuff drawn through it. Snuff taking was a matter of importance, two persons being necessary for its proper performance. (Plate 5.) One poured perhaps a quarter of a teaspoonful of the greenish stuff into the palm of his hand, which he then held out to his neighbor, who bent over and with one end of the nose bone in his nostril passed the other along the edge of the snuff, drawing it up with deep breaths.

As night came on pieces of resin were set on fire and placed on upturned earthen pots in each shed for light. Soon two or three of the young men started a monotonous chant, and Pedro Bom, who had already taken snuff with his old enemies, to further show his good will, struck in with a few words of the chorus. Señor João now opened my bale of goods, and soon the whole tribe was gathered round admiring the little looking-glasses and bright-colored handkerchiefs and beads. Finding I would trade for anything they possessed, the women began taking off their bracelets, necklaces, earrings, and tangas and exchanging them for handkerchiefs and looking-glasses. The young men brought out a fine blowgun and bundle of bows and arrows, and the younger chief pulled out the hollow wooden cylinder in his nose with the red macaw's feather and traded it for a little looking-glass and his earplugs for some fishhooks. Even old Schau Assúc sold his mortar and pestle for making snuff and a pretty coronet of toucan's feathers, and his wife pulled off a string of monkey's teeth from her neck and the mother-of-pearl disks from her ears and her bark armlet, and then a beautiful girdle of little river shells, her baby's only ornament. (Plate 4.) I also purchased the clay kettle in which my supper was cooked, and finally an old bark hammock. With this I seemed to have procured a complete assortment of all their worldly goods.

Leocardo had hung my hammock and mosquito net under Schau Assúc's shed, and I now took refuge under it from the mosquitoes, which came in swarms as the fires went down. The children had long ago gone to sleep in the hammocks, but I was awakened by their crying, and I saw Schau Assúc taking down his hammock and with his wife dragging their children into the woods followed by the rest, so that soon I was the only occupant of the village. This seemed to be a common occurrence with this people, to dash into the woods at night and sleep under the trees or in little sheds made for the purpose, thus escaping the mosquitoes, which swarm into the clearings at that time. In the morning at daybreak the people returned to the village.

Kitanũ ĕ'h now brought a string of skulls of the black peccary to show me what a great hunter he was, and then he gave me an object lesson in their method of hunting. First he showed how they used the blow gun. Taking a broad belt of bark, he drew it closely about his body,

beneath the chest, and wrapping the end of a little poisoned arrow with silk cotton to make it fit the bore of the gun, and filling his lungs, he blew the arrow into the top of a tall tree standing in the edge of the forest near by. (Plate 6.) Then, taking his blow gun and bows and arrows on his shoulders, he bent down and silently crept through the forest, looking carefully on every side, and then catching sight of the game dropped the blow gun and, sorting out three arrows, shot them rapidly into the bushes. Going where the arrows struck, he made marks on the ground with the tips of his fingers to represent the tracks of the wounded game; and following these a short distance he stooped over and spread his hands before him, palms down, to show where the game lay, dead. Señor João asked Schau Assúe to show us how the different birds and beasts sang, and he gave us the notes of the parrots and toucans, then the cries of the tapirs, peccaries, and monkeys, all with wonderful likeness to life. Then he made the strange, rattling roar of the jaguar so vividly that it made one's flesh creep. They make use of this art of imitating the notes of the animals in their hunting. Our Indians, the Hypurinás, had filled their baskets with the ripe corn, apparently without taking the trouble to ask leave, and, taking a young Jamamadí with us to carry part of our load to the river, we set out on our return.

As near as I could learn, the Jamamadí are now reduced to two or three small settlements like the one we visited, all on the Marmorea Mirí, which is their ancient seat. They appear to have first come in contact with the rubber gatherers and civilization about thirty years ago, but in this time have become greatly reduced in numbers. Though having many customs like those of the neighboring tribes, they differ from them in language, in using the blow gun, in the form of their dwellings and their canoes, in the character of their headdress and other ornaments, and doubtless in many other ways which a longer stay would have made manifest.

On reaching the river and again embarking in Pedro Boni's bark boat a heavy rain storm overtook us, lasting until we had nearly reached the station of San João.

This station is rich in india rubber, there being rubber paths for 50 men already opened, with room for 50 more. But Senor João had but 15 or 20 men in his employ and little chance for getting more, as the station is 50 miles from even the rude settlements of the Purús below. The location also seemed to be unhealthy, as some of his people were suffering with fever. I left what quinine I had for those with fever, and some white soap for a poor fellow whose legs were covered with ulcers caused by the bites of mosquitoes and sand flies.

On our way down the Marmoreá from San João we visited a malocca of the Hypurinás. This was 2 or 3 miles from the river. The owners were away down the river on a hunting expedition, except Pedro Bom, who had gone up the river where we had found him.

The village consisted of three communal houses. These were much smaller than that of the Jamamadí and only fitted for three or four families each. They were oval in shape, 25 to 30 feet in height, with roof coming to the ground all around. There was a door in the center of each of the two longer sides, with pieces of thatch to be placed against them in time of storm. Everything was much ruder and more carelessly made than in the Jamamadí house.

The Hypurinás are the most numerous and most warlike of the tribes in this region. I could get little idea of their numbers, some of their villages being said to be still unvisited by civilized people. Their presence on the Marmoreá was probably as parasites to prey on the weaker but more industrious Jamamadí. I saw nothing of them in 1875 on this river, and their appearance there is probably recent. They are hunters and fishermen and also cultivate the land. There appears to be no question but that they are cannibals, eating the flesh of their enemies killed in battle. They live in small communities, on the smaller streams of the interior, but keep up communication between their villages, and gather from these to a common center for their great feasts and dances.

Our return journey on foot from the Marmoreá to the Purús was made more difficult by the collections we had made, among these being a large gray monkey in his cage and a bundle of arms from the savages. The latter fell to my lot to carry, but because of its length it continually struck the trees and undergrowth on the sides of the path. A day of heat and rain and hurry found us again at Hyutanihan ready for the steamer.

THE HYPURINAS.

The Hypurinás^a (unclassified) are forest Indians. Those studied were living in small villages upon narrow streams flowing into the Purús from the west, below the rapids. They reach the territory of the Jamamadí and Paumari' (Arauan family) on the Marmoreá Mirí and about the rapids of the Purús, though but little idea was gained of their distribution or numbers. The settlers say that there are villages still unvisited by civilized man. Their language seems to have no verbal similarity to those of the other two tribes to be studied.

They are much stronger mentally and physically than their neighbors and better able to cope with the type of civilization which has reached them. Some of them are employed in rubber camps and as servants, and several have reached Pará in this latter capacity. They dress in the tanga, as do the neighboring tribes, and go bareheaded and barefooted. Those near the settlements had thrown away their native arms and had procured cheap guns from the rubber-gatherers

^aChandless, Proceedings of the Royal Geographical Society, London, 1889, p. 501.

as far as they were able. They have the same habit of snuff-taking already described for the Jamamadí and the Paumari'. They were cannibals up to the time of the settlement of the river, and the custom is said to be still retained in the villages not yet reached by civiliza-

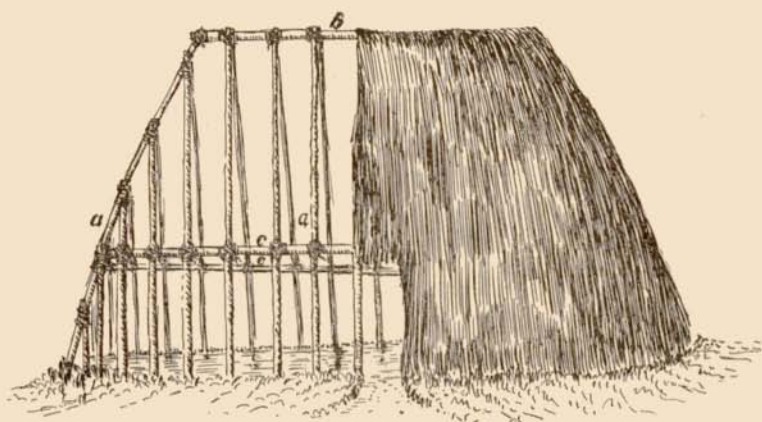


FIG. 1.—Side elevation of Hypuriná Indian house. *a*, rafters; *b*, ridge pole; *c*, hoop supporting rafters.

tion. Though warlike, they have never attacked the intruding settlers, as the wild tribes about the rapids of the Madeira have done.

They sleep in bark hammocks. One was seen in use among them made of three long, broad strips of bark, tied together at their ends. They preserve the bones of their dead, wrapping them in bundles and hanging them to the roof of one of their houses, deserted for the purpose.

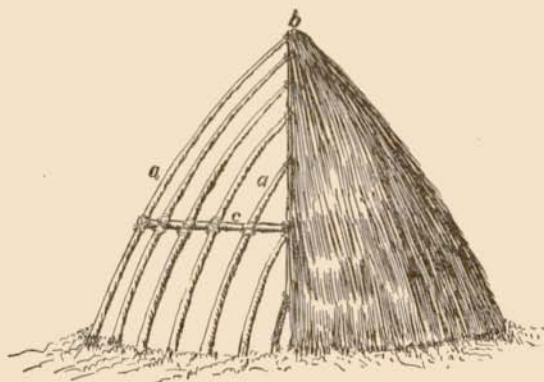


FIG. 2.—End elevation of Hypuriná Indian house. For lettering, see fig. 1.

The village visited consisted of three houses, each fitted to hold three or four families. These were oval in shape, or rather were made with two straight parallel sides and rounded ends. They were about 25 by 40 feet in diameter (fig. 1). There was no distinction of wall and roof, the roof of thatch coming to the ground. The framework was

made of long slender poles stuck into the ground and tied above to a ridge pole; this was covered with horizontal and overlapping layers of palm-leaf thatch, the strips being tied by vines to each rafter (fig. 2). A door was left in the center of each side; these were closed with strips of thatch. Low half-moon ridges of earth were heaped up inside of each door to prevent the entrance of water. A little room about 6 feet square was cut off at one end by walls of thatch. Five little heaps of ashes and firebrands around the walls and several posts for hanging hammocks showed where the different families made their homes (fig. 3).

Their method of cultivation is like that of the Jamamadí already described, but their fields are much smaller and less carefully tended.

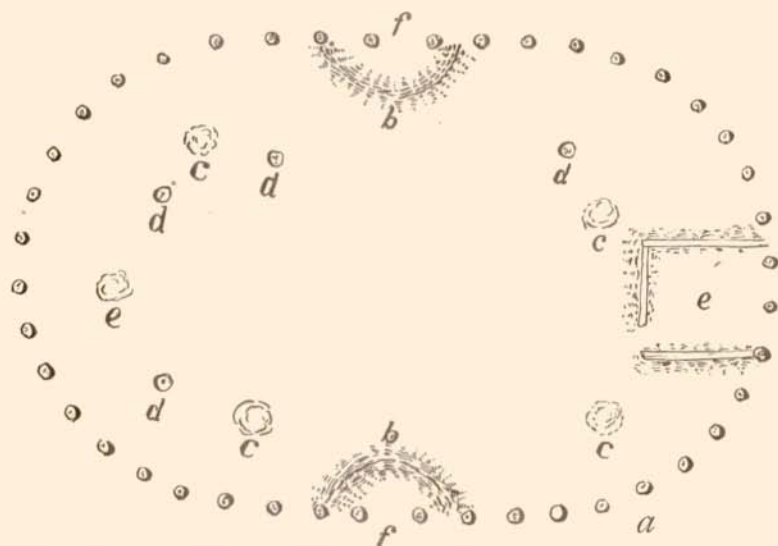


FIG. 3.—Ground plan of Hypuriná house. *a*, foot of rafters; *b*, mound of earth inside of door; *c*, fireplaces; *d*, posts for hammocks; *e*, room; *f*, door.

They depend much on hunting, and especially on fishing, for a living. The family of the Hypuriná, Pedro Bom, were living on fish when visited. One of their methods of fishing is with a basket attached to a spring pole; this is set and baited under water. The fish caught are dragged out of the water head down, so that they can not escape (figs. 4 and 5).

They frequently all leave their villages on extended hunting and fishing excursions, living during this time in open sheds of thatch (papíra), which are built wherever they stop for the night. Their canoes are each made of a single piece of bark, like those of the Jamamadí (fig. 12), but they are more rude and the ends are left open. They are probably never used for navigating the Purús, serving only for the narrow streams flowing into it. Several villages are accus-

tomed to gather together for great feasts. These are accompanied with music, dancing, and rude acting. In these they make use of

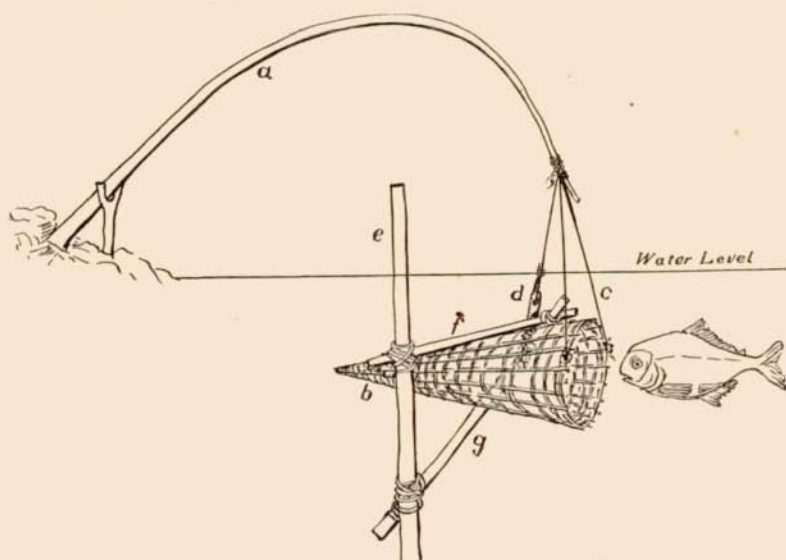


FIG. 4.—Fish trap of Hypuriná Indians. *a*, spring pole; *b*, fish basket; *c*, bait of fish basket; *d*, trigger; *e*, post planted in the water, *f*, *g*, supports tied to *e* under water to hold *b*.

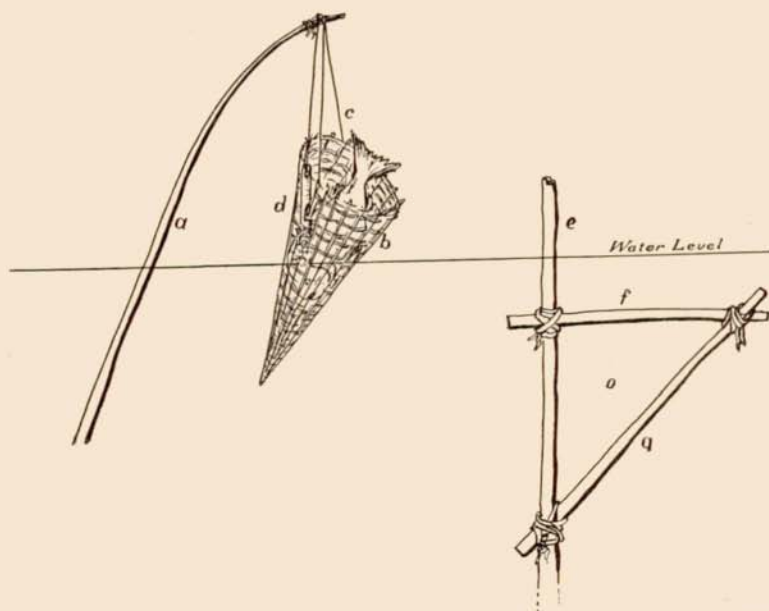


FIG. 5.—Fish trap of Hypuriná Indians. For lettering, see fig. 4. *o*, opening in which basket is secured and set.

rude wooden figures of birds and other animals, and imitate their notes. (Plate 1.) Their musical instruments are wooden drums, and

horns and trumpets of bark and hollow cane. The songs procured were generally of war. The following are the text and translation of some of them. (For music see figs. 6 and 7.)



FIG. 6.—Hypuriná Indian war song.



FIG. 7.—Hypuriná Indian girl's song.

SONGS OF THE HYPURINAS.

1. iwāhā nīsipīngā nīpīnā pūrī pānī': I go down below (down the river), who knows whether I shall return—or die there.
2. kōnāi itākūrī mākōkwā' wīchī mīngānī: When the macocaua sings it sings well.
3. shāmbānā ūmbārī kīrāpārā hīnī shāmbānānī: The leaf that calls my lover when tied in my girdle.
4. mārākūmbī mākūlīnā pōngātā mārākūmbī hātīnīrī sāvākī' pōngātā: Bring your arrows, I am a warrior. I have my arrows ready and wish to kill you.
5. nāwī mārī kōnīpī' mārūtārī nāwī mārīnā pāri': Now no one can say I am not a warrior, I return victorious from the battle.
6. kākōtīrī nāpīrī kūtīpānā' pērītī: I am a serpent, when I bite my enemy dies.
7. wainī kīū kānānīpānī yūlīnā pānī kānū: I go to die, my enemy shall eat me.
8. kū wīrītū kōowārū kosānātī wākūrī shīnīnē: I am wounded in the fight, but I shall not die.

LIST OF WORDS FROM HYPURINA.

The first column of names of parts of the body was taken while there were several of the tribe present to correct it. The second column was taken from a boy who could speak nothing else. The other Hypurinas said this list was from a dialect called (Sīngānānērī'), that of the toucan-clan or people.

Both lists of parts of the body seem to have the personal pronoun (I or my) in composition, in the first prefixed nī' or nī'u, in the second suffixed āchī' or ānchī'. Thus: tō hū(n) or tāwān, the forehead, gives, first, nītōhū'(n); second, tāwānchī'. Pōtō or pōtū, the mouth, gives, first, nīpōtū'; second, pōtōnchī'. Kītī', the foot, gives, first, nīkītī', and, second, kītīnchī', etc.

head: Ikīwī'

hair of head: kīwīshākī'—kīwīśīkēchī'

forehead: nītōhū'(n)—tāwānchī'

ears: nīkīmbī'—kēmbītaichī'

eyes: nīnōkī'—ōkī'

nose: nīkīrīpī'—kīrīnchī'

mouth: nīpōtū'—pōtōnchī'

inside of mouth: nīnāmāhā'

tongue: nīnīnī'—īnānī'

teeth: nīśērīhī'(n)—śērīnchī'

beard: shiwāpātō'—shāmbōtō'
 neck: nīnōpī'
 breast: nītōrōtā'—tōrōtānchī'
 shoulder: nīsōtārītā'—sūtārītānchī'
 arm: nīkānōkī'—kānōkīnchī'
 hand: nīwā kūnūtā'—wākūnchī'
 finger: biōkīchī'
 finger-nail: nīsāwātā'—sāwātāichī'
 heart: nānkīpā'—ānkūpaichī'
 stomach: nītūrūmā—tūrūmānchī'
 blood: nīhīrīngā'—ārānkāchī'
 thigh: nīpōrīnā'—pōrōkānchī'
 leg: nītāpīkī'—kāpīkānchī'
 knee: nīpōtōrīkī'—pōtōrākīnchī'
 foot: nīkītī'—kītīnchī'
 toe: nīkītīkī'—kītīkī'
 toe nail: nīsāwātā'—sawātāikīchī'
 God: ———
 devil: Kāmīrī'
 man: kīkī'
 woman: sītū'
 husband: nūdānīrī'
 wife: nīndānīrū'
 boy: nātā kūnī' wākūnī'
 girl: nātā kūrū' wākūrī'
 father: nīrī'
 mother: nātū'
 son: nāmārī'
 daughter: nīhātīrū'
 brother: nīpīrī'
 sister: nītārū'
 chief: tūshā'wā
 dog: hāngītīkī'
 hen: pātārī'
 tapir: kīāmā'
 fish: shīmākī'
 scale: ōtāntā'
 tail of fish: ōshitā'
 bird: kōtī pīrīkī'
 feather: Imīngī'
 wing: Ykīrītā'
 beak: Imīngītā'
 snake: Imīnī'
 frog: tūrūtī'
 turtle: kūmbīrī'
 turtle shell: kūmbīrī' ōtāhā'(n)
 egg: nākī'
 deer: mānītī'
 otter: ēnlārī'
 paca: kaiātī'
 duck: ōpāi'
 toucan: sīngānī'
 tree: Imīnā'
 vine: āhā(n) pīsā'

leaf: āhā sūpā'
 branch: āhā pōrī'
 root: āhā kōsā'
 flower: āhāwī'
 fruit: kāripīnkā'
 tobacco: āwīrī'
 banana: sīpārī'
 sweet potato: chipālī'
 corn: kēmī'
 cotton: nāpōāchā'
 rum: kāwī'
 stone: kālīsūnī'
 sand: kīpāchī'
 bow: tāpūchī'
 arrows, war: mākūrīnā'
 arrows for fish: sīrī pīchī'
 bow-cord: tāpū chīchā'
 blow gun: Ikānā'
 axe: kētaī'
 spear: kāwādā'
 knife: iwātā'
 pot: kōpītī'
 canoe: āhātā'
 paddle: mēkūchī'
 hammock: kīkōchī'
 house: āwīkū'
 mat: kōchītā'
 water: Imbōrāhā(n)'
 river: wēnī'
 rain: Imbōrāhā(n)'
 sun: ātōkākī'
 moon: kāsīrī'
 stars: Iwīrīkī'
 night: Ingītā'
 dark: māpīāhā'(n)
 morning: pākāmārā' pīsā'
 day: pākāmārā'
 fire: shāmīnā'
 smoke: shāmīnā' sīnī'
 ashes: shāmīnā' Ichīkū'
 bone: āpī'
 large: nūtāhōwītī'
 small: wāshāngītīkīkā'
 cold: kāchīngārē'
 hot: kāpūtākā'
 good: hārārī'
 bad: kōnāhārā'
 sweet: pūchūā'li
 sour: kāchīūrī'
 bitter: kīpīshī'
 tall: Itanū'
 short: kōnūtānūrī'
 round: Ipōkītā'
 sick: āmīānātā'

lame: māhītūrī'
 blind: kona kōwkinī'
 asleep: imā kāpikā'
 distant: ōtākūlī'
 near: kōnaitākūlī'
 wet: ihāngā'
 dry: ȳpīpīngā'
 to kill: nōkāri'
 to cook: nāshītā'
 to eat: nīnikā'
 to drink: nīhātā'
 to fish: nīsāpīhātā'
 to hunt: ālātā'
 to walk, to go: nīsīpīngā'
 to die: wachānīpē'mbi
 to cry: nīchīhī'ntā
 to laugh: nīsīrī'
 to talk: nīsāngīrē'

to sing: nīshīpōātā'
 to sleep: mīnāpē'
 to smoke: nāwīrī pīhā'tā
 one: hātīkā'
 two: ȳpīkā'
 three: ȳpīpākīnī'
 four: māpākā'
 many: Itūrī'
 I: nōtā'
 thou: pītā'
 he: haitārī'
 we: ātānānī'
 no: kōnā'
 yes: ārī'
 to-day: wāchārī'
 to-morrow: ātānā'
 yesterday: kīta'

THE JAMAMADÍ.

The Jamamadí are a small tribe of forest Indians, apparently limited to the vicinity of the Marmoreá Mirí, a small stream entering the Purús from the southwest, at about latitude 8 south, longitude 67 west from Greenwich. A further study of the Indians of this region may prove them to be an isolated group of a more extended tribe. Their language is related to that of the Paumarí (Arauan family). Their name seems to be from the Paumarí and to mean "wild men" (*jūwā-māgī*).

In 1873 the pioneer rubber gatherers on the upper Purús had just come into contact with them.

At this time (1901) they seem to be reduced to two small villages, one on the upper Marmoreá and the other near its mouth, and they do not number probably more than 100 persons in all.

The village visited had been so nearly destroyed recently by pestilence that but a faint idea could be gained of their normal condition. They had two chiefs or headmen, but these seemed to have little power over them. Like the neighboring tribes, they go naked but for the tanga, this being a little apron of cotton threads, colored red with anatto, and 3 by 4 inches in size for the men and 3 by 6 for the women (see fig. 15). It is supported by a bark cord around the loins. This cord is hidden by the women under a belt of cotton or bark cords as broad as the three fingers and colored red.

Both sexes pierce the lobes of the ears and the septum of the nose. The men wear little plugs of reed or resin in the ears. The women use as ear ornaments little disks of mother-of-pearl fastened to small cords, which are drawn through the ears and secured behind the head, the disks thus showing in front of the lobe (Plate 4, fig. 4). Both sexes use little hollow pieces of wood in the nose. The younger chief

had placed in this nose cylinder a long red macaw's feather, which thus stood out at the side of his face (Plate 4, figs. 7 and 8). Their hair is allowed to fall down in front and is cut straight across the forehead about 2 inches above the eyes. The hair of the temples is allowed to fall to the level of the eyes, where it is cut straight to the ear. The hair behind is cut at the neck. The men have a narrow mustache and a few bristling hairs on the chin (Plates 2 and 3).

The men generally wear a narrow belt of cords with a tassel of feathers or anta's (tapir's) hoofs at one side (Plate 4, fig. 3). The women wear necklaces of monkey's teeth and bright shells (Plate 4, figs. 5 and 6) and armlets of white beads and bark. On feast days the men wear curious crowns, shaped like a hat brim. These are about 2½ inches in width and made of palm leaf, with warp of bark cord. To the outer edge of this is attached a fringe of red and black toucan feathers (Plate 4, fig. 1). This is worn like a crownless hat, the top of the head standing up through it. The chiefs are distinguished from the others by wearing a crown made of numerous tassels of red and black toucan's feathers fastened by short cords to a narrow band about the head (Plate 4, fig. 2).

In common with the neighboring tribes they are snuff takers. This habit is general among them, the women using it also, but not so often nor so openly as the men. The green tobacco leaves are toasted upon the bottom of a clay pot (Plate 5, fig. 3) turned over the coals. They are then tented out on sticks over the fire until they are perfectly dry. The mortar is made of the shell of the Brazil nut (Plate 5, figs. 1, 2, and 8), the pestle of heavy wood. The mortar is partly filled with live coals, which are shaken in it to thoroughly heat it without burning. Then the leaves are pounded and ground into the finest dust, which is of a greenish color. The red bark of the root of a certain shrub is scraped to clean it of dead bark and earth and is then burned and the ashes carefully collected and mixed with the snuff in about equal parts.

For taking the snuff they are each provided with a hollow bone of a bird's leg, this being about 5 or 6 inches long and one-fourth inch thick (Plate 5, figs. 4, 6, and 7). One end is rounded with beeswax to make it fit the nostril. The snuff is carried in boxes made of river shells (*Ampularia*) (Plate 5, fig. 5), but several of the young men had procured percussion-cap boxes of the rubber gatherers. Snuff taking was a matter of importance with them, two persons being necessary for its proper performance. One of these put as much as a half or a fourth teaspoonful of the snuff into the palm of his hand and held it out to his neighbor, who placed the rounded end of the bone in his nostril and, stooping over, drew the other end slowly along the edge of the snuff, drawing it up with deep breaths, then changing to the other nostril. After he had finished he drew a long feather through the

bone, that nothing might be lost, and then offered his palm and snuff to his friend, who went through the same performance. The others who were near watched the performance with interest, making remarks as it proceeded. The one who holds out his palm stands perfectly motionless during the snuff taking.

The permanent residence of the Jamamadí is a great conical, communal house, fitted with cells or rooms for all the families of the village. These are arranged in a circle within the outer wall of the building, leaving the center clear for dances and assemblies (fig. 8).

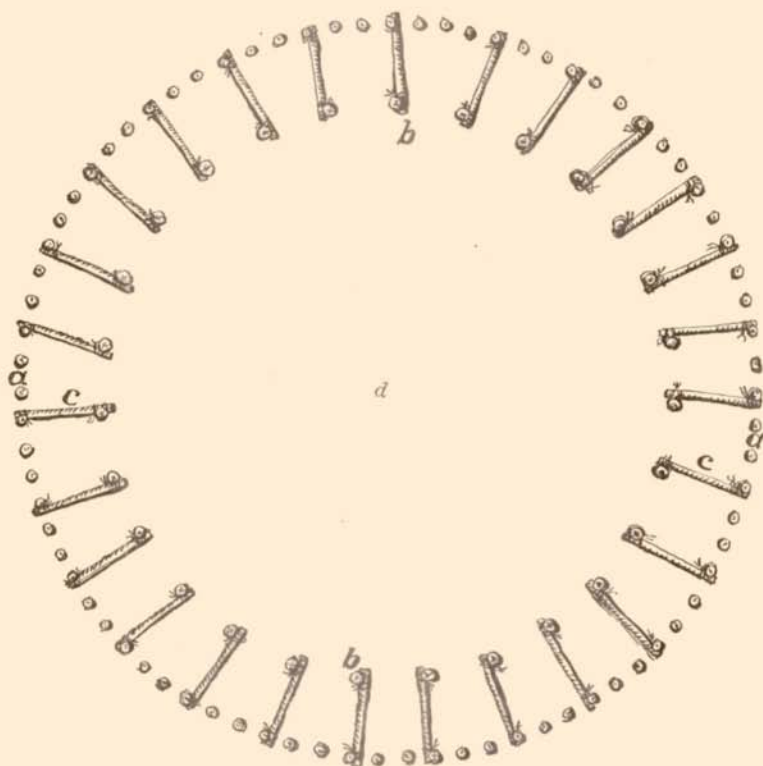


FIG. 8.—Ground plan of Jamamadí Indian house. *a*, outer posts; *b*, inner posts; *c*, room; *d*, inner open space.

The building visited was about 130 feet in diameter and about 70 feet high. The framework consisted of 100 small posts, $4\frac{1}{2}$ feet high and about 4 feet apart. Near the top of these posts a strong hoop of poles was fastened, being tied with vines to each post. Inside of this outer circle of posts, at a distance of about 12 feet, a second circle of stronger posts was set, about 14 feet high and 12 feet apart. The tops of these posts were notched, and in these notches a second hoop of poles, tied end to end, was placed. Long, slender poles, rafters, were now lashed at their larger ends to the bottom hoop about 2 feet apart and leaned

upon the inner hoop toward the peak of the building (fig. 9). A few of the longer ones reached the peak above, where they were fastened together (fig. 10). Upon this skeleton was tied a roof of thatch. This was made of strips 2 feet in width and 8 or 10 in length of the leaves of the caranaí palm, split, and braided over a narrow piece of wood.

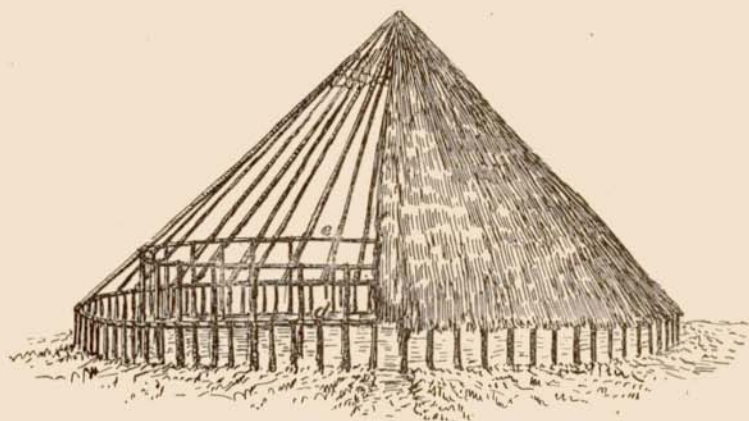


FIG. 9.—Section of Jamamadi Indian house. *d*, lower hoop; *e*, upper hoop.

The first course of thatch was laid upon the foot of the rafters, just over the lower posts, and carefully attached to each rafter, the strips being tied end to end so that they reached around the building. Another course was laid on above this, overlapping it about a foot,

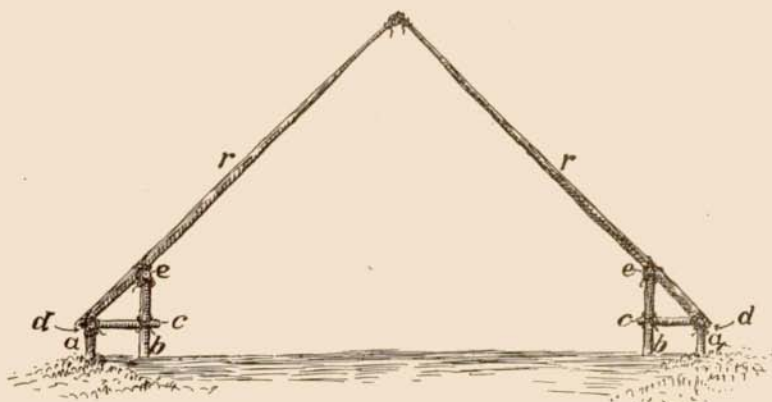


FIG. 10.—Cross section of Jamamadi Indian house. *a*, outer circle of posts; *b*, inner circle of posts; *c*, pole dividing the rooms; *d*, section of lower hoop; *e*, section of upper hoop; *r*, rafters.

and so on till the peak was reached. There were no doors or windows, the spaces between the posts of the outer circle and below the lower layer of thatch serving for entrance and light and air. The space between the outer and inner circles of posts was divided into rooms by tying a pole from each inner post at about breast high to the

top of an outer post opposite. This provided 25 cells or rooms about 12 feet square. The poles served for supporting the hammocks of the occupants. The whole building was most carefully made, even the vines used for holding it together being peeled and scraped (fig. 11).

The Jamamadí had left this great building on account of the pestilence, and had erected several sheds 14 feet square, with thatched roofs. These were entirely open at the sides and had platforms of split palm

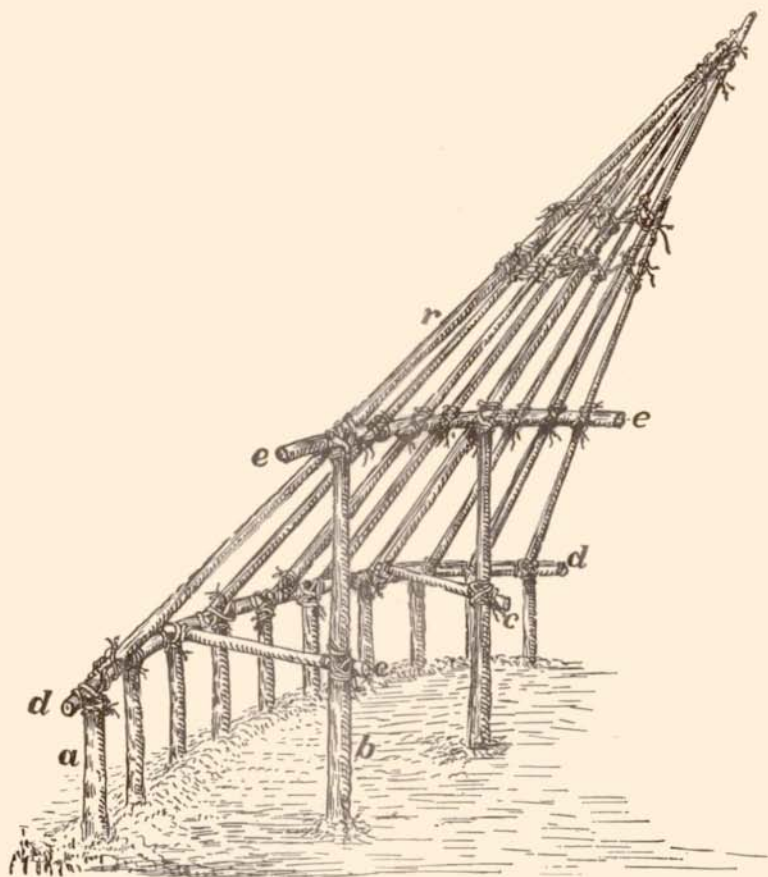


FIG. 11.—Detail of construction of Jamamadí Indian house. *a*, outer posts; *b*, inner posts; *c*, pole dividing the rooms; *d*, lower hoop; *e*, upper hoop; *r*, rafters.

wood raised 2 feet from the ground to serve as floors. These were much like the poorer dwellings of the Tapuios, and probably made in imitation of them.

The Jamamadí are agriculturists and hunters. Their method of cultivation is with fire. They cut the timber and burn the leaves and smaller brush during the dry season, thus clearing the surface of the soil, which they then plant among the logs and stumps. They get about two crops and then allow the land to grow up to forest again.

The first civilized men to visit them say they were then girdling the trees with stone axes by pounding off the bark. Afterwards these were burned down by piling logs against them. They now have a few steel axes which they have procured from the rubber gatherers.

They raise corn and manihot, pineapples, bananas, and plantains, the pupunya palm, tobacco, sugar cane, and a few other plants. Their corn is quite distinct from that cultivated by the Tapuios, being much taller and having a softer grain. They were found parching the ripe corn for food. They cultivate both species of manihot, but the more ordinary one seems to be the nonpoisonous, called maka-shē'ra. This is cooked like potatoes, and a flour is also made from it, which is baked into cakes (beju). In pressing the juice from the manihot they employ the "tipi-ti," a long tube of woven rattan, common among the Tapuios for the same purpose. (Plate 7, fig. 1.) The only use I saw them make of the sugar cane was to chew it to get the sweet juice. The fruits of the pupunya palm are eaten and the old wood is made into bows.

They are great hunters, the weapons being the blowgun and poisoned arrows, and the bow and arrows. (Plate 6, figs. 3, 5, 6, 7, etc.) The blowgun is a carefully made weapon of heavy wood, 10 or 12 feet long, round and tapering, and covered with rattan. It is in every respect like those of the tribes on the Peruvian Amazon. The arrows are needle-like splinters of palm wood. The quiver is of palm leaf carried by a string around the neck. A small calabash with a hole in one side is also hung from the neck. (See Plate 6, fig. 13.) In this is carried the tree cotton for wrapping the end of the arrow to make it fit the bore of the gun. The poison, unlike that of the upper Amazon, is fluid, and is heated until it foams, when the points of the arrows are dipped into it and passed through the fire to dry. The poison is said to be made only by the chiefs, who keep the formula secret. They also prepare a counter poison, which consists largely of salt, with which they cure animals slightly wounded which they wish to tame. They carry with them on the hunt a broad band of bark which is drawn about the body beneath the ribs; when they are going to shoot they draw this tightly around them. (Plate 6, fig. 2.) The blowgun is used for birds and monkeys and game in the trees. For game on the ground they use the bow and arrows. The bow is short and stiff and made of black palm wood, the arrows are long and heavy, the shafts of reed and the points of palm wood. They are said to sometimes poison these.

The Jamamadí use bark boats (fig. 12), made from a single piece (fig. 13), taken from a standing tree said to be the jutahý. The canoes are about 16 feet long and 3 feet wide, flat on the bottom, and the ends are drawn up and tied, thus forming hollow beaks. They are lashed and braced into shape and are then turned over the fire and heated

until they are dry and hard. They seem to be used as a means of conveyance up and down the river rather than as fishing boats. The paddles are long and pointed.

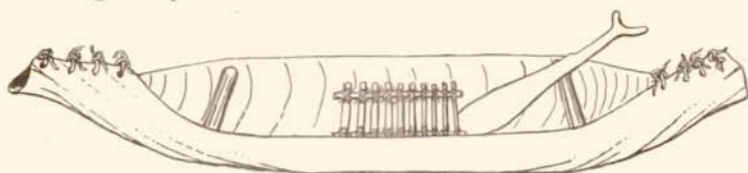


FIG. 12.—Bark canoe of Jamamadí Indians.

These Indians make earthen pots of fire clay for holding water and for cooking purposes. No ornamentation or painting was seen upon any of them. They were once noted for making fine bark hammocks,

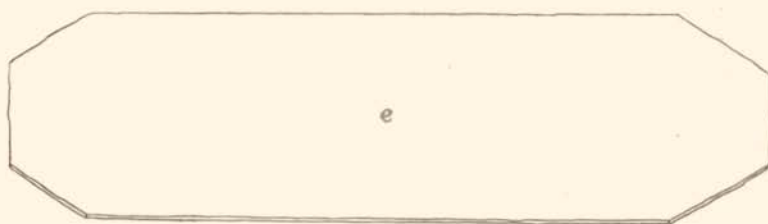


FIG. 13.—Strip of bark from which canoe is made. (See fig. 12.)

but they now prefer to trade tame monkeys to the rubber gatherers for cheap cotton hammocks from Pará. (Plate 7, fig 5.) During the season they collect a few nuts and a little sarsaparilla for trade with the settlers.

LIST OF WORDS OF JAMAMADÍ.

head: tā tī'	foot: té'mé
hair: tātī'-kōné'	thigh: fānākō'
forehead: nōkūbākō'	toes: nāmīdīnī'
eyes: nōkō'	ear: vā'rābō
face: ēbētē'	man: yā'rā
nose: wīdī'	woman: fānāwī'
upper lip: bōnō'	boy: mādā hā' (n)
under lip: ifū'	baby: yāuinī'
tongue: ēbēnē'	fish: ābā'
teeth: inū'	dog: jūmaī'
chin: ēnēdē kōnē'—perhaps beard	tapir: āwī'
neck: nāmīdē'	tobacco: cīnā'
shoulder: kārōwī'	corn: kīmī'
arm: mānū'	sugar cane: cānā'
hand: yēfē dābō'	cotton: mōfū'
fingers: yēfē kāwī tārinī'	pot: jīwāhā' (n)
finger nails: ātūrinī'	boat: kīnāwā'
breast: yūhārī'	paddle: kūyārī'
belly: dūrū'	blow gun: kārābōhā' (n)
leg: I'sū'	belt for blow gun: kāmātā'

mortar for snuff: mōi māki'
 bone tube for snuff: maupā'
 shell for snuff: wāhū'
 snuff: aūrini'
 tanga: siū'
 house: ūbē'
 bow: dīdīsā'
 string: madīni'
 sun: lūkāti'

moon: kāsiri'
 water: pā hā' (n)
 fire: hīmāni'
 one: ūhārini'
 two: fāmīni'
 three: ūhārini' fāmīni'
 four: fāmīni' fāmīni'
 ten: dāmīni'

THE PAUMARI.

The Paumarī (Arauan family) are river Indians, strictly confined to the main stream of the Purús and the chains of lakes in immediate connection with it. They are said to have once inhabited the Purús to near its mouth, but appear to be limited at present to the territory between the Ituchý and the Rapids. They are unable to endure contact with the forms of civilization existing among the rude rubber gatherers of the river, and are rapidly diminishing in numbers. They exist in small communities of a few families each, every one of which has its own chief or headman, though this person seems to have no great authority over them. They belong to several clans or subtribes, of which the following names were given:

The Otter people: Sābou kā Pāumārī.

The Alligator people: Kāsīi kā Pāumārī.

The Vulture people: Mājūrī kā Pāumārī.

The Peccary people: Hirārī kā Pāumārī.

They are a humble, cowardly people, living in deadly fear of the Hypurinás, their neighbors on the upper river. They are so childish and simple that they are easily imposed upon by the settlers on the river, and are persuaded to undertake long and exhausting labor at the paddle for a few drinks of rum, of which they are inordinately fond.

They love music and make Pan's pipes of reeds, and rude trumpets of earthenware. While they are pulling at the paddle they are continually singing (fig. 14). The following are translations of some of their boat songs:



FIG. 14.—Paumarí Indian canoe song.

1. My mother when I was little carried me with a strap on her back. But now I am a man and don't need my mother any more (fig. 14).
2. The toucan eats fruit in the edge of my garden, and after he eats he sings.
3. The jaguar fought with me, and I am weary, I am weary.

The following they call the song of the turtle:

I wander, always wander, and when I get where I want to go I shall not stop, but still go on.

They pass much of their time along the river, roaming from one sand bar to another in search of food, but have more permanent villages on the lakes inland, which they occupy during the rainy season.

They are all marked with a peculiar skin disease which leaves large white spots on the hands and feet, and shows on the face and other parts of the body in dark, ashy blotches, which itch continually. One

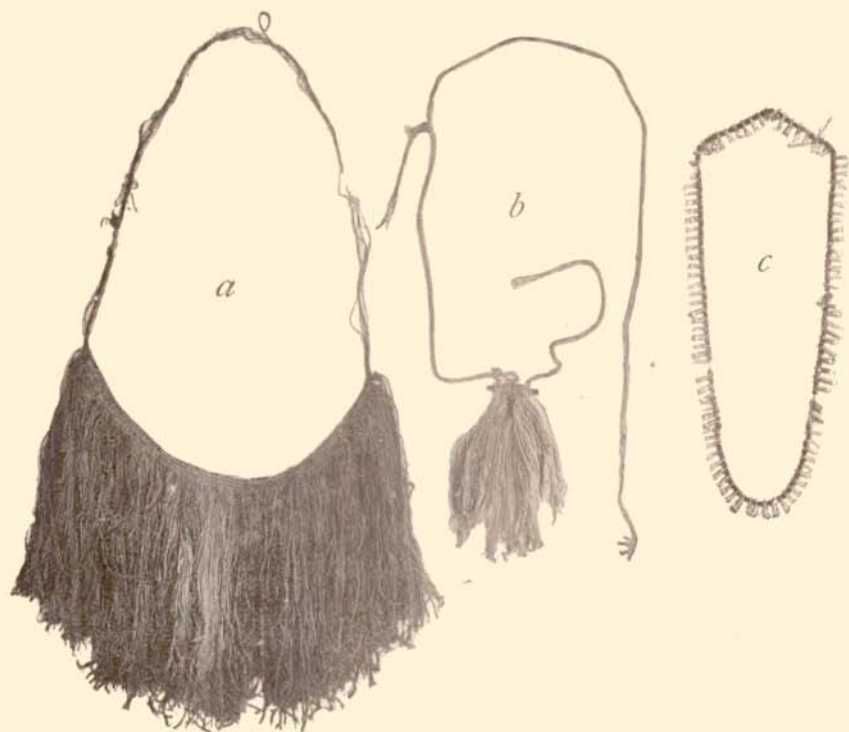


FIG. 15.—Clothing of Paumari Indians. *a*, woman's apron (tanga); *b*, man's apron (tanga); *c*, necklace of monkey's teeth.

old fellow, covered with this disease, was seen lying naked on a mat scraping himself with a clam shell. They make much greater use of paint than the other tribes of the Purús, covering their bodies and limbs with broad, horizontal, red stripes. Their paint is made by mixing annatto with balsam copaiba. The painting is done by dipping the ends of the fingers in the paint and drawing them around the body and limbs. The face may be entirely covered or painted in fanciful stripes. They go bareheaded and barefooted, and dress in the tanga, a little apron 2 by 4 inches in size, made of cotton threads and colored red with annatto (fig. 15). The aprons of the women are a little larger

(fig. 15). The hair is cut square across the forehead and allowed to hang down the neck. They pierce the lips and the septum of the nose, ordinarily wearing plugs of wood in the orifices, but are said to don tusks of wild animals on feast days. When they were given rum they carefully pressed in the plugs so as to lose none of the drink.

The average height of several men measured was 5 feet 2½ inches.

They with the other Purús tribes cultivate a little tobacco, which they only use as snuff. The green leaves are toasted over the fire and powdered in little mortars made of the case of the Brazil nut (Plate 8, fig. 3) and then mixed with ashes. The ashes from the hulls of the fruit of the chocolate bean are used for this purpose. They inhale the snuff through a pair of hollow bones of a bird's leg (Plate 8, fig. 1). These are fastened side by side with a braid of cotton thread, and the upper ends are rounded with beeswax to fit the nostrils. A quarter or half teaspoonful of snuff is placed in the palm of the hand or in a clam shell and drawn up with one or two long breaths. The snuff box is made of a river shell to which a neck formed of bone has been cemented (Plate 8, fig. 2). They are said to make a fermented drink from fruits, but this was not seen.

They pass much of their lives in their canoes; these are narrow dug-outs 12 or 14 feet in length, and sharp at both ends (Plate 9). Their paddles, instead of being round-bladed like those of the Tapuios, are long and narrow.

The great level sand bars along the river are made use of by them in towing their canoes on their voyages upstream. A Paumari would be frequently seen walking along the edge of the bar towing his canoe, holding his family and all his possessions, to new fishing grounds, his wife sitting in the stern with a steering paddle holding the canoe from the shore.

They live in little oven-shaped huts, so low that they have to get on their hands and knees to enter them. These are made of long, narrow palm-leaf mats, spread over a framework of sticks bent and stuck into the ground at both ends. The mats are carried in their canoes, so that they always have their houses with them. Their more permanent villages on the inland lakes are made of houses of the same kind.

When the water rises over the sand bars in the rainy season they move their villages upon large rafts anchored in the lakes. These rafts are made of logs of light timber on which a floor of strips of palm wood is tied with vines. On this they remain, rising and falling with the flood and its ebb until the dry season uncovers the sand bars again. They have a tradition accounting for this curious custom. Long ago the people of their tribe built their villages only on the land like the other tribes, but one year the flood rose to a much greater height than usual, covering the sand bars, and then the lowland, and finally the terra firma. The people climbed into the trees, and lived

for a time upon fruits and leaves, but finally all were drowned or died of hunger but two; these lived until the flood abated, when they descended and took possession of the earth again. These were the ancestors of the present tribe of the Paumari. At the beginning of the rainy season they built a raft and moved their hut upon it, that they might not be drowned with the flood, and their descendants have kept up the custom to this day.

They are said to bury their dead in a sitting posture, breaking up the weapons and personal possessions of the deceased and burying them with the body, and building a cover of the same character as their houses over the grave.

They live chiefly upon fish, turtles, and turtles' eggs. They are said to be so expert in catching turtles, that they can dive to the bottom of the river and take them there. They capture large numbers as they come out to the sand bars to lay their eggs and keep them alive for future use in pens made of stakes placed in the lakes near their villages.

They gather wild fruits and have small gardens. They keep a few dogs procured from the settlers, and some chickens which seem to accommodate themselves well to the wandering lives of their owners. They make a small amount of india rubber to trade with the settlers, and collect a little balsam copaiba, and in the season, make oil from turtles' eggs. This is the famed turtle butter (*manteiga de tartaruga*) which is an article of commerce and made use of by the civilized Brazilians in cooking. They collect the eggs from the sand bars, using a sharp stick to find the deposits and their paddles as spades to dig them out. A canoe is filled half full of eggs and the owners get in and dance upon them with their bare feet. When all the eggs are crushed the oil rises to the surface and is skimmed off into pots.

Their pottery is rude and unpainted, and the mats used in covering or flooring their houses are usually without colors or figures.

LIST OF WORDS OF THE PAUMARI.

head: dādī'	shoulder: māntōsī'
hair: dādī' kāfō'nī	arm: wādī'
forehead: ātai'	hand: sā ai' kai dā'nī (upper side)
face: nōkū'i	hand: sā ai' kābōdīnī (under side)
ears: mōrōbū'i	finger: sāai'
eyes: nōkū'i bādā'nī	finger nail: sāai kânā kōdī'nī
nose: wīridī'	heart: wāi
mouth: bōdī'	blood: āmā'
lip: ī hī'	skin: āsū fīnī'
tongue: ā bā'nī	thigh: kābāhai'i
teeth: Inū'i	leg: ā wai'i
chin: kânādai'i	foot: dāmāi'
beard: nādāi' kū sanīnī'	big toe: dāmāi' nōkū'nī
neck: nābidi'	toe nail: dāmāi' kânā kōdī'nī
breast: mākōini'	devil: bāiadī'

man: mākē'rā
 woman: gāmō'
 girl: gāmō' pāisī'
 boy: mākē'rā pāisī'
 father: bū'
 mother: mīā'
 son: kō'dī sāi' (my son)
 brother: kō'dī kai ū' (my brother)
 chief: kái'dī tūshau'ā (my chief)?
 dog: jūmahī' jaguar—jūmahī'
 tapir: dā'mā
 fish: ābāhīsā'nā
 bird: Igitā'
 feather: bībī'
 snake: mākā'
 turtle: sīrī'
 egg: bānāfā'
 deer: ōtairī'
 duck: wādāmā'
 parrot: wilū'
 toucan: jākwā kwā'
 tree: āwā'
 leaf: āfānī'
 root: āwā' dāmā'nī
 fruit: āwā' bōnō'nī
 tobacco: ājīrī'
 banana: sīpātī'
 corn: jār wā'
 cotton: wāgānī'nī
 mandioca: bōdā'
 rubber: sīrīgā'
 chocolate bean: kānākā'
 cacao tree: kānākā' āwā'nī
 stone: jādī'
 sand: kāsī'
 bow: kōdā hī'(n)
 arrow: ābī hā'(n)
 cord: ātū'(n)
 blow gun: kārābōhā'(n)
 spear: jūmīdī'
 knife: ādī'
 cup: wōū'
 pot: sīā hā'(n)
 canoe: kānā'wā
 paddle: wānāmī'
 cloth: mākārī'
 hammock: sī hū'nā
 house: gūrā'
 roof: kūtīhī'(n)
 mat: kāwāsī'
 water: pā(n)hā'(n)
 river: wāi nī'
 lake: dākū'
 rain: bā hī'

current: jūrā'nī
 sun: sāfī'nī
 moon: māsīkū'
 stars: bōrī'
 night: jūmā'
 fire: sī hū'(n)
 smoke: kāū jī'nī
 ashes: kāū fū'nī
 large: kārāhō'
 small: p ī sī'
 cold: kā fūi'
 hot: kā fō'nī
 good: jāhāmā'nī
 bad: jāhārī'
 sweet: chīnākī'
 sour: chīkātākī'
 bitter: ārāpākī'
 sick: kāwāmūnīkī'
 lame: tōnōrōhī'
 blind: sākāwānī'
 asleep: wādī'
 fat: bāsīnā'
 distant: nāpāi'
 near: mā'kārī
 wet: abākī'
 dry: yānāfōrā'
 dead: ābīnī'

VERBS

to kill: inābīnī'
 to cook: Isādōmāhā'
 to eat: ihā'
 to drink: iāwī'
 to fish: nābādā'
 to hunt: kārābōhā'(n)
 to run: kīdārāhāi'
 to cry: āsārā'
 to laugh: ōhā'nī
 to talk: wārīwārī'
 to sing: a hī'(n)
 to sleep: wādī'
 to stand: gā'
 to work: mārīnī'
 to smoke: kāsīsī'
 to sit: āwītī'
 one: wārānā'
 two: bāmīkī'
 three: āwhāārā bākōstīkī'
 four: ākū bāmāhā kāmākī'
 five: sāai-kā whāārānī' (once the fingers)
 six: sāai kū whārīhā'
 part: pītānī'
 many: Ipōikī'
 I: ōwā'nī

thou: iwā'nī
 the: iōnyā'
 no: nyā'
 yes: yā'
 to-day: idākābai'
 to-morrow: āfūi kaiūmā'
 yesterday: idānījā'

COMPARISON OF ADJECTIVES

sweet: chinākī'
 very sweet: chinākā'wākī'
 sour: chīkātākī'
 very sour: chīkātākā'wākī'
 bitter: ārāpākī'
 very bitter, poison: ārāpākā'wākī'

SENTENCES FROM THE PAUMARI.

1. I am going with you: kādānyā' ōkākīhō'
2. I am going to fish—I wish to go fishing: bāhāmā' ōkābūrū' kibānāhō'
3. I am going hunting—I wish to hunt: ōkārābōā'(n) kibānāhō'
4. Yesterday I went hunting: idānījā' ōkārābōājā'
5. To-morrow I go hunting: āfōkaimā' ōkārābōā'n kiānā' kibānāhō'
6. I am going to sleep—I wish to sleep: ōwādī' kibānāhō'
7. I did not sleep last night: hīdānījā' jūmā' wādīrīhī'
8. Let us go to sleep: yābānā' āwādiā'wā
9. Yesterday I killed a deer: hīdānījā' ōnābīnī' hōtāirī'
10. The night is very dark: jūmā' bākī bākī'
11. I have two brothers: hīdāhō' jāmānī' ā'jū bāmīkī'?
12. My father is dead: bīī' ābīnī' hīdākābai' wānī' kābūirī' kābai' ōhō' jākīhō'.?—
13. My mother is dead: miā' hīdākābai' ābīnī'
14. I am sick: ōkōwāmū'nī' kīhō'
15. Yesterday I was sick a little: hīdānījā' whārihā' ōkōwāmūnī' paīsi
16. I go to take a bath—I wish to bathe: ōkānāhā' kibānāhō'
17. I am very warm this evening: āfākī' jūmā' wānīkwā'
18. The river has many fish: hīhīdā' wānī' kābākī'
19. The river runs much: wānī jōrākī' kwānā' wānāmīnī' jāhārīkī'
20. The deer runs fast: nāhīnā' tīhīdā' otāirī' binākī' dārāhā'(n) dānōkī'
21. I have a good canoe: kānāwā' kājābākī' kōdiānyā' hōjairā'
22. My canoe is old: kānā'wā bōdā'
23. My canoe is new: kōdī kānā'wā jādī'nī
24. I am sick to-day: hīdākābai' i ōkōwāmū'nī
25. I shall be sick to-morrow perhaps: hīdākābai' i wābīnī' fōkaimā' ōkōwā-mū'nī??
26. My brother is sick: kōdī ājō kōwāmū'nī kiādā' hīdākābai' i
27. My brother will be sick to-morrow perhaps: hīdānījā' wāhā'binī kōwāmū'nī
 ā'jō
28. My brother was sick yesterday: kōdī ā'jō kōwāmū'nī hīdākābai' bīwā hōjā'-
 wīnī?
29. My brothers are sick to-day: ā'jū kōwāmū'nī dākābai'?
30. My brothers were sick yesterday: hīdānījā' wīgāmī'nī kōwāmū'nī
31. My brothers will be sick to-morrow: fōkaimā wīgāmī'nī kōwāmū'nī wā'bīnī

PAUMARI SONGS.

toucan my sing eat sings.

1. Jāk-wāk-wā' kōdī' sīrūī āhīāīī bīhākī' āhī'.

The toucan eats fruit in the edge of my garden, and after he eats he sings

2. Miā ōnī jānā rihī āī' sātī mähā wājāmā' rihī miā āī sātī', mähā wājāmā' ōrā
ijā tīrihī'

My mother carried me when I was young, with a strap on her back, with a strap she carried me on her back but now I am a man and I do not need her any more

3. Jūmahī' wiā hārī bānī hidā āwā kodī kōjā hārī kākā bārūbū hidā'

I did not call the onca (jaguar) to my house, but my good drink called him

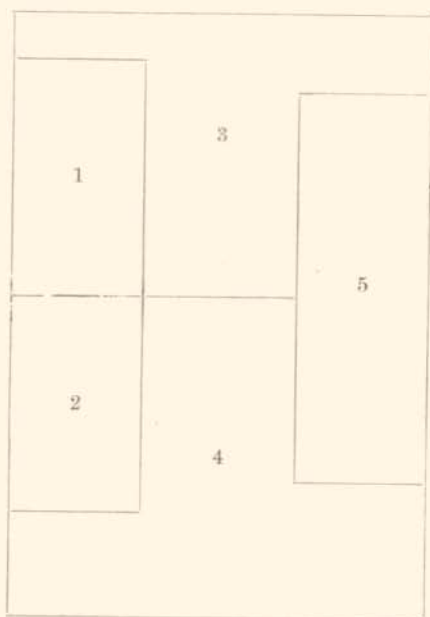
4. Hārī āī bānāhō wājūī yānāhī āī sātī mähā kōjā hārīā āwā kā tīrihī'

Good-by; you will give me nothing more; I am going

5. Miā āī hō bāsūri kā pāmwarī' hī kāmīā ōhō jāī

O, my mother I am living among the porpoise people (that is people colored like the porpoise-white people)

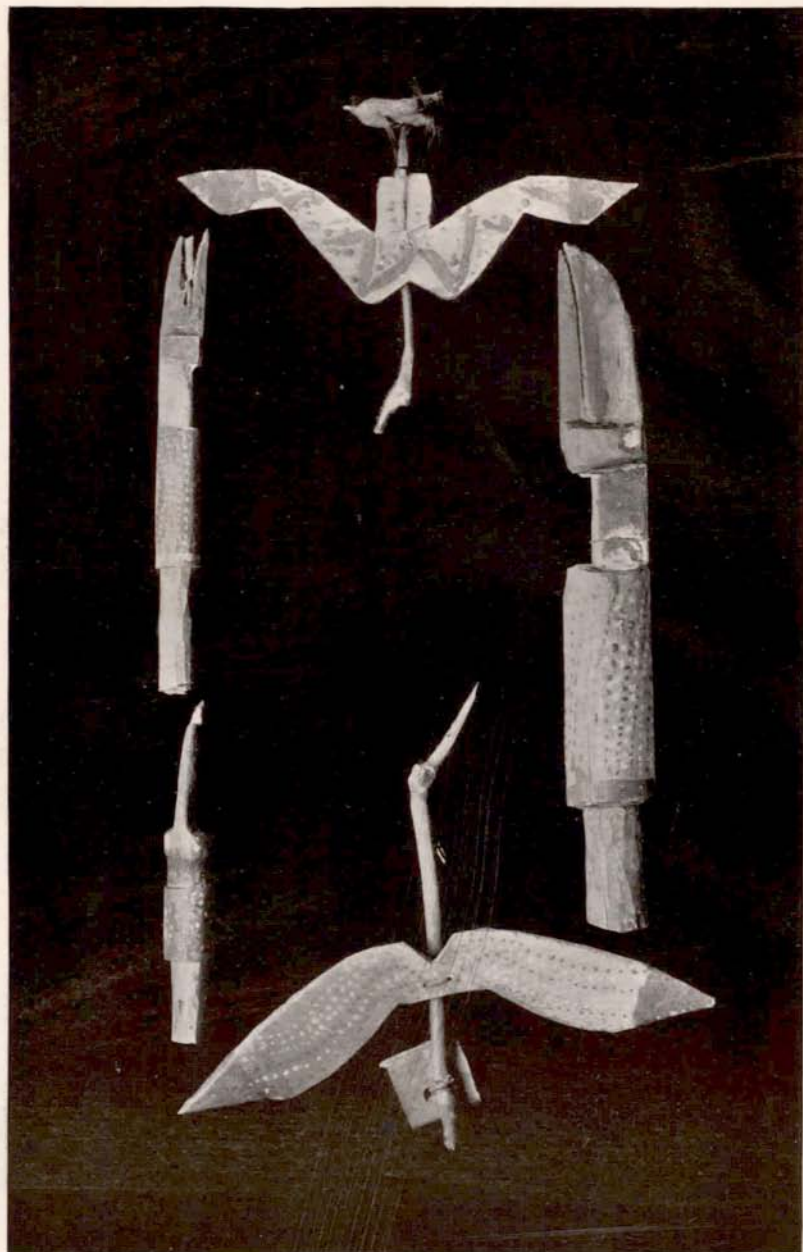
EXPLANATION OF PLATE 1.



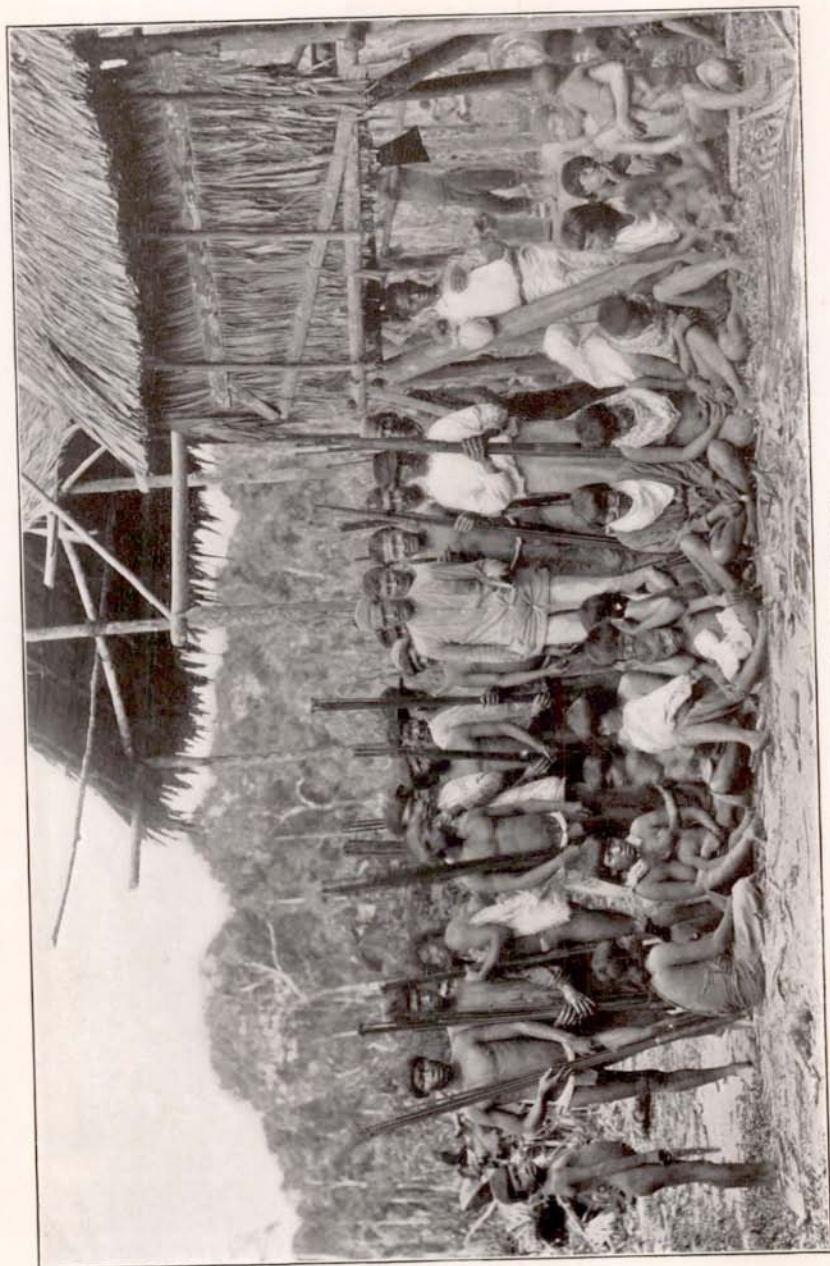
WOODEN BIRD FIGURES OF HYPURINA INDIANS.

Figs. 1, 2, and 5. TOUCANS.

Figs. 3 and 4. GULLS.



WOODEN BIRD FIGURES OF HYPURINA INDIANS.

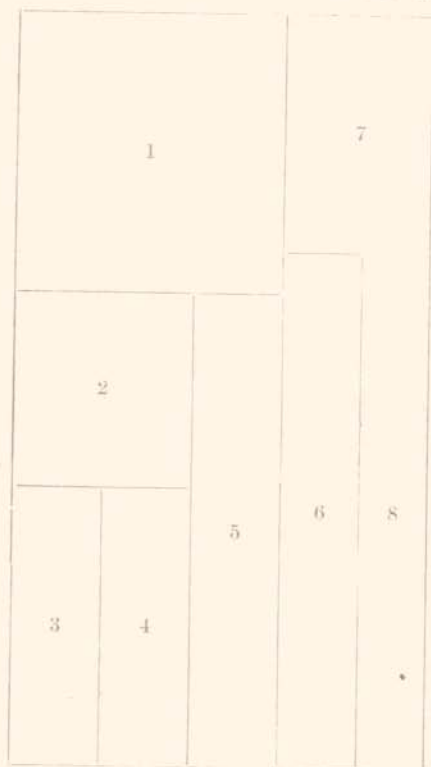


GROUP OF JAMAMADI INDIANS.



GROUP OF JAMAMADI INDIANS.

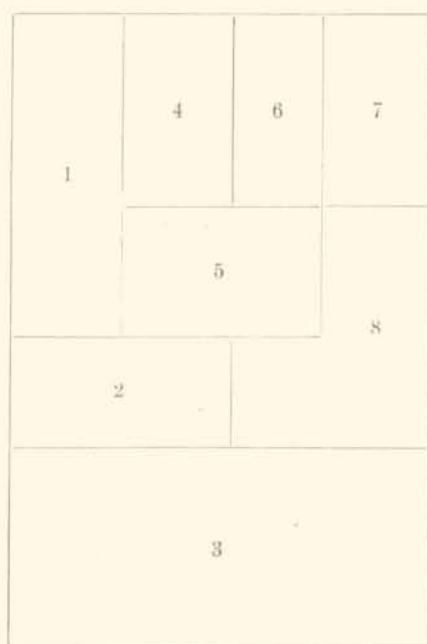
EXPLANATION OF PLATE 4.



ORNAMENTS OF JAMAMADI INDIANS.

- Fig. 1. CROWN OF TOUCAN FEATHERS.
 Fig. 2. CHIEF'S CORONET OF TOUCAN FEATHERS.
 Fig. 3. GIRDLE ORNAMENT OF TAPIR'S HOOFS.
 Fig. 4. PEARL DISKS FOR THE EARS.
 Fig. 5. CHILD'S GIRDLE OF RIVER SHELLS.
 Fig. 6. NECKLACE OF MONKEY TEETH WITH TASSEL OF TOUCAN FEATHERS.
 Figs. 7 and 8. MACAW FEATHER NOSE ORNAMENT.

EXPLANATION OF PLATE 5.



OBJECTS USED BY JAMAMADI INDIANS IN SNUFF MAKING, SNUFFING, AND COOKING.

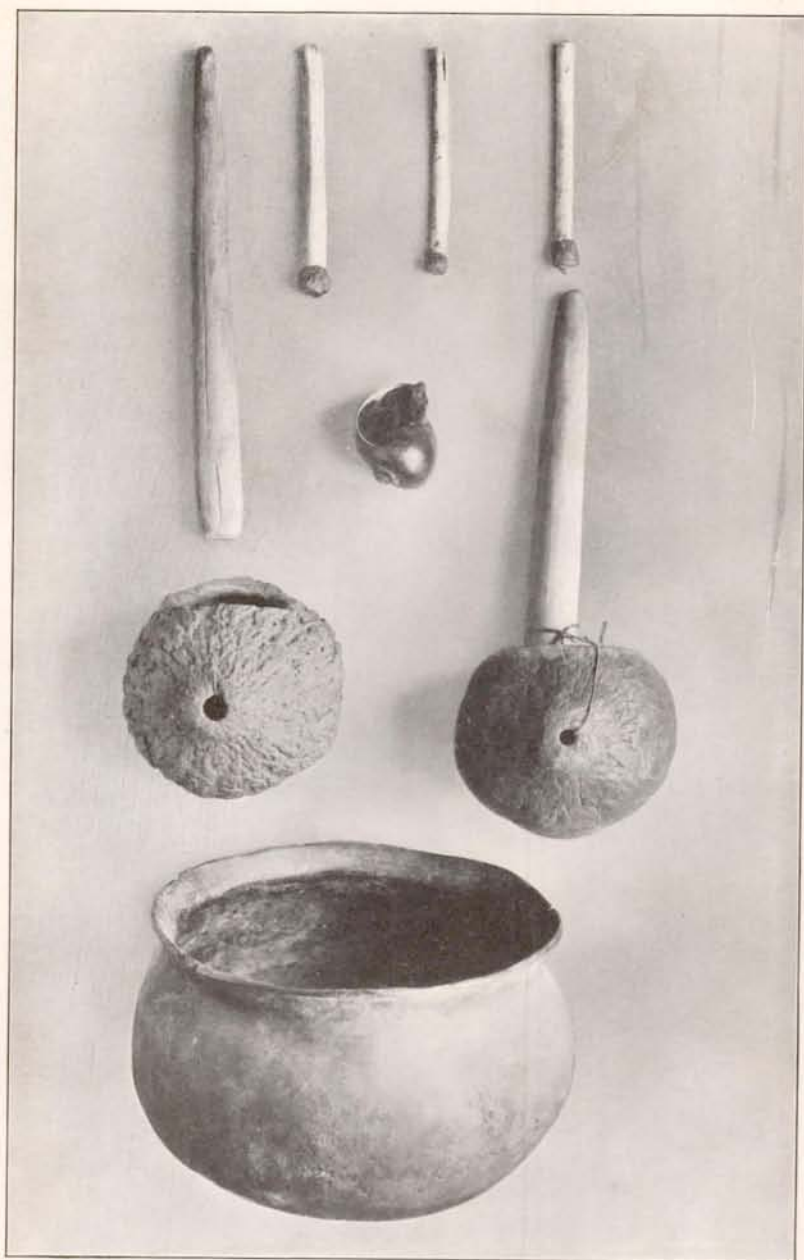
Figs. 1, 2. PESTLE AND MORTAR (Hypurida).

Fig. 3. CLAY POT FOR COOKING.

Figs. 4, 6, and 7. BONE TUBES FOR SNUFFING.

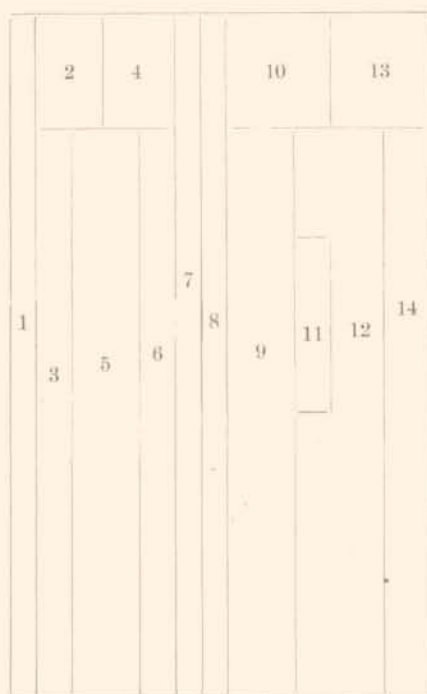
Fig. 5. SHELL SNUFFBOX.

Fig. 8. PESTLE AND MORTAR USED IN SNUFF MAKING.



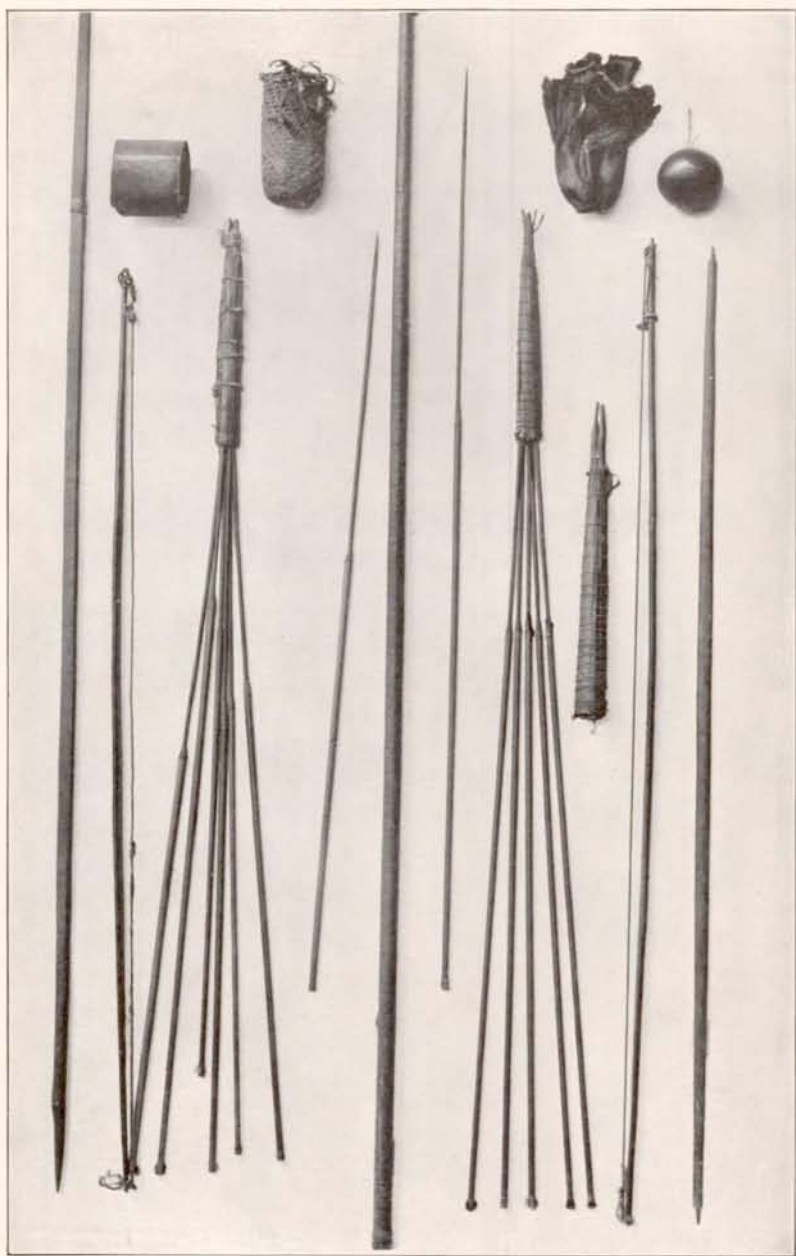
OBJECTS USED BY JAMAMADI INDIANS IN SNUFF MAKING, SNUFFING, AND COOKING.

EXPLANATION OF PLATE 6.



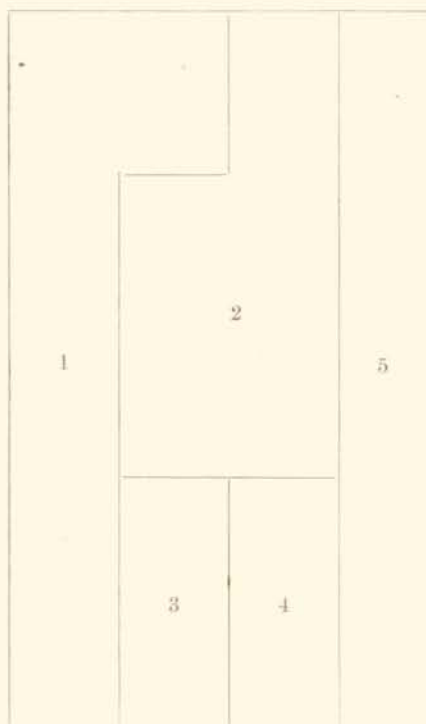
ARMS, ETC., OF THE JAMAMADI INDIANS.

- Fig. 1. WOODEN LANCE.
 Fig. 2. BARK BAND WORN WHILE SHOOTING WITH THE BLOWGUN.
 Fig. 3. BOW.
 Fig. 4. WOMAN'S BARK BASKET.
 Figs. 5 and 9. ARROWS IN LEAF QUIVER.
 Figs. 6 and 8. SINGLE ARROWS.
 Fig. 7. BLOWGUN.
 Fig. 10. BARK BAG.
 Fig. 11. QUIVER OF POISONED BLOWGUN ARROWS.
 Fig. 12. BOW.
 Fig. 13. CALABASH FOR HOLDING TREE COTTON.
 Fig. 14. BOW.



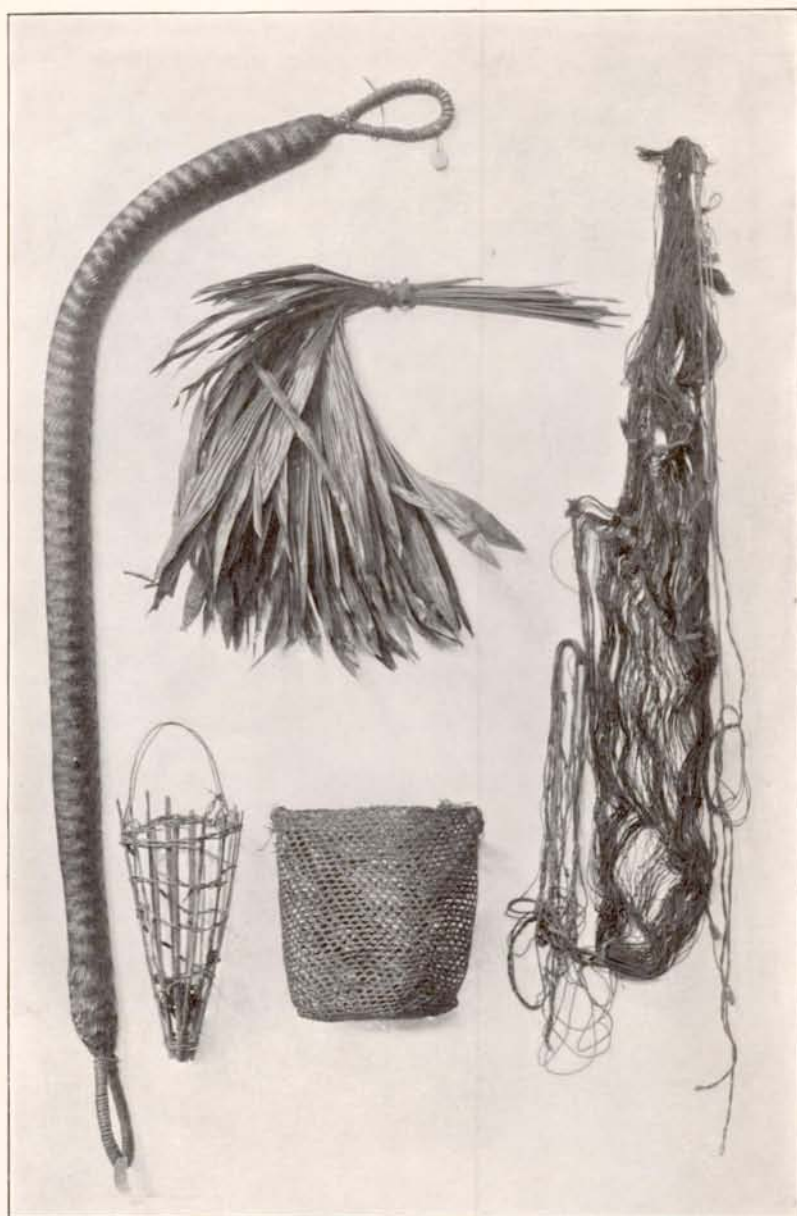
ARMS, ETC., OF JAMAMADI INDIANS.

EXPLANATION OF PLATE 7.



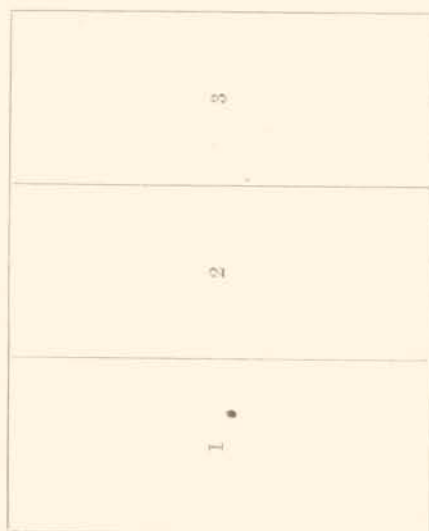
OBJECTS OF DOMESTIC USE OF JAMAMADI INDIANS

- Fig. 1. CASSAVA PRESS, *tipiti*.
 Fig. 2. BUNDLE OF LEAVES OF THE CARANAI PALM USED FOR HATCHING.
 Fig. 3. FISH NET USED WITH THE TRAP DESCRIBED IN THE TEXT.
 Fig. 4. CARRYING BASKET.
 Fig. 5. BARK HAMMOCK.



OBJECTS OF DOMESTIC USE OF JAMAMADI INDIANS.

EXPLANATION OF PLATE 8.

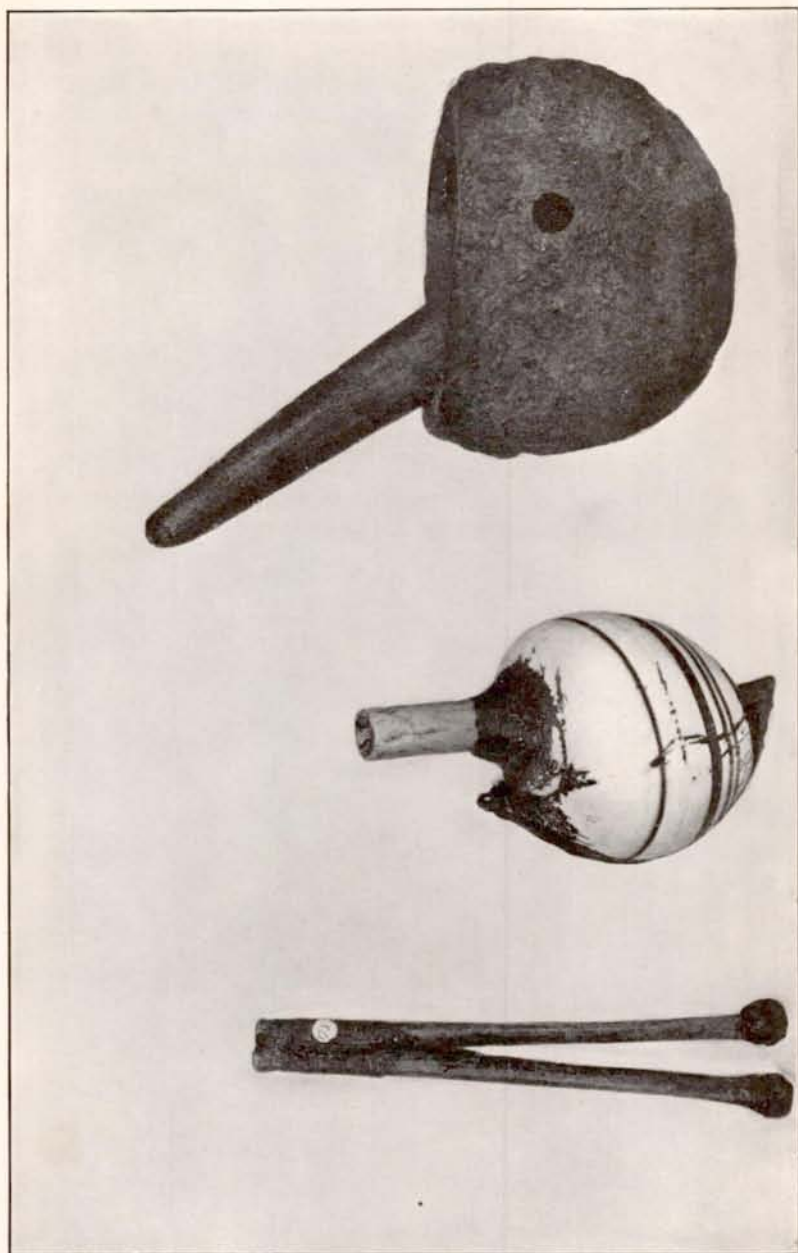


IMPLEMENTS USED IN SNUFF MAKING AND SNUFFING BY THE PAUMARI INDIANS.

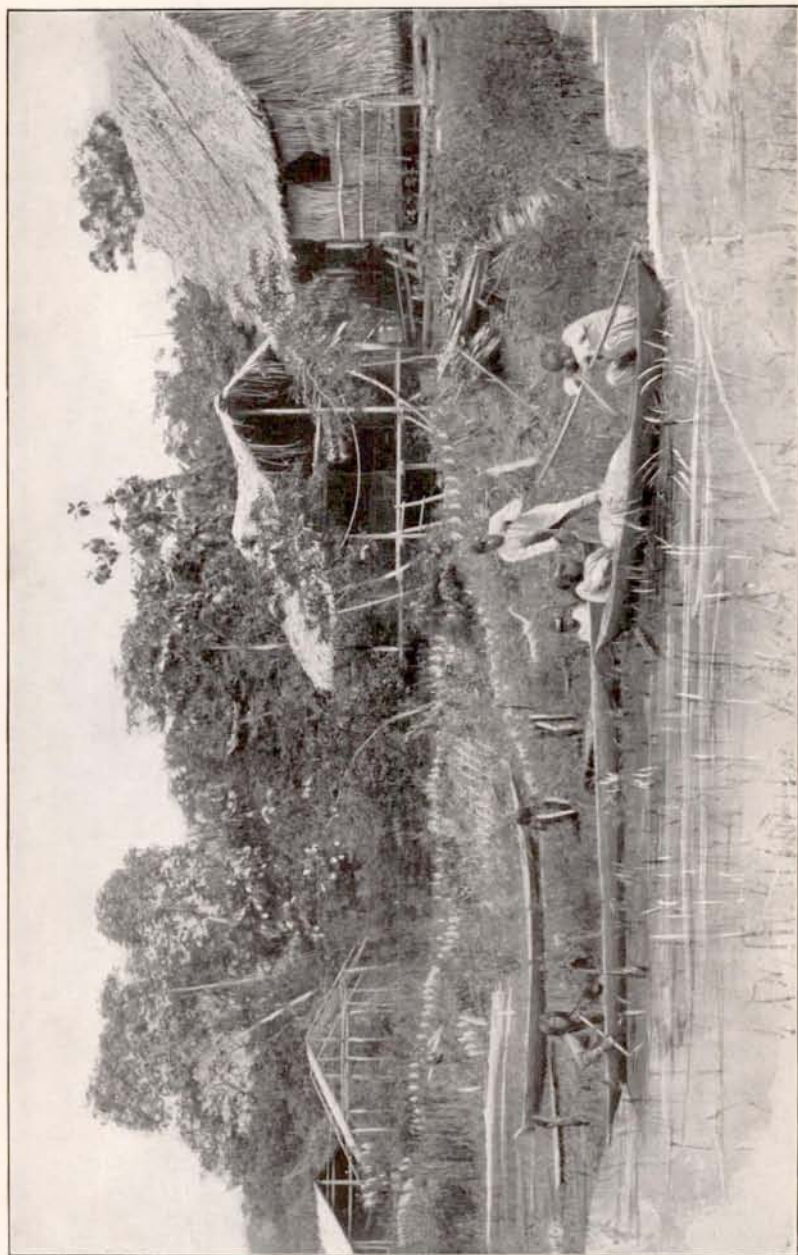
Fig. 1. DOUBLE BONE NOSE TUBE FOR TAKING SNUFF.

Fig. 2. SHELL SNUFFBOX.

Fig. 3. MORTAR AND CASE OF BRAZILNUT AND PESTLE FOR MAKING SNUFF.



IMPLEMENTS USED IN SNUFF MAKING AND SNUFFING BY THE PAUMOTU INDIANS.



PAUMARI INDIAN CANOES.