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Contributions to the Ethnography of Micronesia.

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With 36 plates and 72 text-figures.

Introduction.

When the Imperial University of Tokyo despatched in the spring of 1915 a party of scientists to the South Sea Islands newly occupied by Japan, I was one of the number and was ordered to undertake anthropological studies. On the 8th of March, we left the Yokosuka Naval Station by the *Kaga Maru*, a steamship in the service of the Imperial Navy. After several days we reached Truk, one of the largest islands in the Caroline group. If this were an ordinary cruise, we should have returned home after visiting the principal islands of the East and West Caroline and Marshall groups. The *Kaga Maru*, however, was on a special mission. The ship stayed at Truk for two days, after which she sailed in a south-westerly direction and crossed the equator, reaching the Fiji Islands. After staying two days at the islands, our ship left straight for the Marshall Islands and touched at Jabor on Jaluit. Leaving this island, we directed our course to the west, and came back to Truk by way of Kusaie and Ponapé.

Then we again steamed westward, calling at Yap and Palau. The *Kaga Maru* then sailed for Angaur, which is well known for its production of phosphorite. I had, however, landed at Palau. On the return of the vessel to Palau, I joined her again. We then visited Yap for a second time, and Truk for the third time. On our homeward voyage, we came to Saipan in the Mariana Archipelago, where I went ashore. Finally, after touching at Peel Island in the Bonin group, we arrived back at Yokosuka on May 7th.

We spent sixty-four days on the voyage, covering 11,200 nautical miles. Thus, we were mostly at sea, spending only a very short time on land, and in fact only a few hours in the case of some of the islands. Under these circumstances, it was extremely difficult to undertake anything like exhaustive researches and collections. Happily, however, Mr. J. Shibata, Assistant in the Anthropological Institute of the University, and Dr. K. Hasebe were among our party, the former to undertake archæological researches and collect ethnographical objects, and the latter to study physical anthropology. Mr. Shibata, in particular, was always with me, rendering me valuable assistance not only during our voyage but also after our return to Tokyo, for which I desire to express my warm thanks.

I present, in this paper, chiefly the manners and customs of the islanders, of which I obtained information during the voyage. But as stated above, I was not in a position to carry out any extensive researches, so that there may be some unavoidable omissions and errors in the descriptions, which I shall correct when I get another opportunity to make further investigations.

I would like here to express my gratitude to the authorities of the Imperial University of Tokyo, the Educational Department, the Naval Office, and the Yokosuka Naval Station for the facilities

granted to our party on starting on our trip of exploration, and to the staff of our South Sea Defence Squadron, garrisons on different islands, the officers and crew of the *Kaga Maru* and our residents in the islands, for the hospitality extended to us during our cruise.

To Professors Sakurai and Ijima, I desire to express my sincere thanks for the assistance they have given me in publishing the present paper. For some of the descriptions contained in this article, my warm thanks are due to Mr. K. Mori, Interpreter to the Japanese garrisons, who after twenty years' residence in Truk could give valuable information about the natives. I also wish to acknowledge my obligations to Dr. Hasebe, who allowed me to use his sketches showing tattoos on natives of Ponapé, to Mr. U. Mori, of the Government-General of Formosa, who gave me several photographs of his own taking, and Dr. G. Koidzumi, who identified for me the plants used in producing certain ethnographical specimens. Last but not least, the writer's thanks are due to Messrs. S. Takahashi, T. Takai and H. Kigawa for the assistance or convenience kindly afforded him in the publication of this paper.

The South Sea Islands, now under Japanese occupation, fall into three geographical divisions, i.e., the Mariana, Caroline and Marshall groups. With the inclusion of British Gilbert or Kingsmill Islands, they are called Micronesia. I shall give a brief description of each of these archipelagos.

The **Mariana** or **Marianne Archipelago** consists of 15 volcanic islands fringed with coral reefs and scattered like so many checkers roughly between 13° and 21° N. lat., and 144° and 146° E. long. The islands extend for 420 miles from north to south, but

with a total area of only 420 square miles. The discovery of the islands began in 1521, when the famous navigator Magellan found two islands at the southern extremity of the group. He named them "Islas de las velas latinas,"¹ but "Islas de los Ladrones," the appellation given by his crew, has become the more famous. The latter means the "Islands of the Thieves" on account of the thieving propensity of the islanders. The present name of the archipelago, Mariana, was given in 1668 in honour of Maria Anna, queen to Philip IV. of Spain. The islands remained a Spanish possession until 1899, when they were sold to Germany, with the exception of Guam which had become an American possession a year before. Excluding Guam, the Mariana Islands occupied by Japan total only 180 square miles, of which more than half the area is uninhabited.

Of the Mariana group, Saipan, Tinian and Guam are larger islands. They are densely wooded and very fertile. **Saipan** (Saypan, Seypan) has a length of 13 miles and a breadth of 6 miles at the widest point, the area measuring 72 square miles. About 1889, the population of the island was only 920, which, however, increased to 2,752, according to a census taken in January, 1916. The Chamorro tribe and settlers from the Caroline Islands make up the largest portion of the population. Most of the latter bear a great resemblance to the natives of Truk, in features, manners and customs, and stage of civilization.

The **Caroline Archipelago** consists of 48 clusters comprising some 680 islands, which lie scattered over the wide expanse of the Pacific roughly from 4° to 10° N. lat., and from 134° to 165° E. long., and extending for a distance of 1,800 miles from west to

¹ So called after a kind of canoe found there with two bows and triangular matting-sails, meaning "Islands of the Lateen Sails."

east. The total area of the islands, however, is only 560 square miles. They are mostly coral islands, with the exception of a few which are of volcanic and other formations. The greater part of the former are uninhabited. Palau, Yap, Truk, Ponapé, and Kusaie are the larger islands and the more important in the archipelago, containing three-fourths of both the total population and area.

A part of the islands, it appears, were first discovered by Portuguese in about 1526, and the rest in the course of time. They were first called Sequeira. Their present name comes from the appellation given in 1686 by Admiral Francisco Lezcano in honour of Carlos II. of Spain. This name, however, was originally given to an island at the south end of the Mariana Archipelago, or probably Yap; but it came to cover the whole of the islands. The appellation was later changed to Nuevas Filipinas, but the name Carolines has become quite common.

The islands were in the hands of Spain from the discovery of the archipelago down to 1899, when they, together with the Mariana group, were sold to Germany for 25,000,000 pesetas.

A brief description will be given of five or six of the islands, on which I landed. I shall begin with those on the western extremity.

The **Palau Islands** (Palaos, Pelau, Pelew, Pellew) lie from 6° 50' to 8° N. lat., and 134° 11' to 134° 50' E. long., some 600 miles east of the Philippines. The islands, which are covered with trees and fertile, number 25 or 26, totalling some 190 square miles in area. They form the largest group in the Caroline Archipelago. Of the above total area the largest island Babeltaob (Bab-el-Thaob, Babelthaup, Babelthouap, Babeltoab, Babeltop, Bebelthuap) occupies 116 square miles. Excepting five or six important ones, such as Babeltaob, Koror, Pililiu, Angaur and one or two others, the islands

are not inhabited. The investigations made in January, 1916, place the population of the natives at only 4,880.

The Palau Islands were discovered by the Spaniards in 1543 (it is claimed that the discovery was made by Drake in 1579). It appears that Palau was not a native word and that the Spaniards originally vaguely applied this name to the whole of the islands lying east of Mindanao. According to Captain Henry Wilson,¹ they received the name of Palos from the Spaniards in the Philippine Islands. This meant "mast" in Spanish, because, it is said, the coconut trees growing wild upon the islands appeared, when looked at from far away, as if they were a cluster of masts. The Palau Islands are sometimes distinguished from the Carolines as an independent group of islands, and are occasionally also called the West Caroline Islands.

Yap (Eap, Guap, Jap, Oyap, Uap) is situated roughly between 9° 25' and 9° 36' N. lat., and 138° and 138° 8' E. long. It lies 240 miles north-east of Palau, consisting of ten odd islands surrounded by fringing reefs. The area is no more than 79 square miles. Though there are hardly any rivulets, swamps are found here and there, so the islands are probably suited to the cultivation of certain plants. The population was 5,790, according to investigations made in December, 1915. Yap was discovered in 1543 by a Spaniard, Ruy Lopez de Villalobos.² In the native language, the name signifies the "land."

Truk (Ruck, Rug, Ruk) comprises scores of islets and islands lying roughly between 7° and 7° 40' N. lat., and 151° 20' and

¹ G. Keate, "An Account of Pelew Islands, situated in the Western part of the Pacific Ocean. Composed from the Journals and Communications of Captain Henry Wilson, and...." 2nd ed., London, 1788, p. ix.

² W. H. Furness mentions that "they (Yap) have been known to the civilized world since 1527, when they were discovered by the Portuguese." See "The Island of Stone Money," Philadelphia, 1912, p. 16.

152° E. long. It is surrounded by a large barrier reef, the circumference of which is 125 miles. The central lagoon is the largest in the Caroline Islands, measuring 35 miles in diameter. The largest island in this huge basin of water is Uola (Wola), which is over four miles from west to east, and three and a half miles at the widest point from north to south. Toloas, Fefän, Umol, Udot and Tol are more or less larger islands. The area of these larger ones, which are composed of basalt, and scores of the remaining islets total no more than 50 square miles or thereabouts, with a population of only 13,220 according to investigations made in March, 1916.

Truk was discovered by Duperry in 1824.¹ The word comes from the name of one of the islands, Truk (Fefän), which, it is said, means "mountain" in the native language. Truk is also called Hogolu.

Ponapé (Bonabe, Bonibet, Bornabi, Falope, Faunupëi, Funopet, Hunepet, Panapee, Ponapi, Puinipet, Puynipet) extends from about 6° 45' to 7° N. lat., and from 158° 8' to 158° 25' E. long. It consists of a large basaltic island some 13 miles long from west to east and 12 miles wide from north to south, as well as of scores of smaller islets scattered around it. Like Truk, Ponapé is encircled with a barrier reef, having a circumference of 50 miles. It has a total area of 134 square miles, being the largest in the East Caroline group.

Ponapé was discovered in 1595. The French call it Ascension Island. It is also called Seniavin, which is the name given by Admiral Lütke. The population was 5,000 in the year 1846. In

¹ According to F. W. Christian, in about 1528 Alvaro de Saavedra sailed into the wide lagoon of Hogolu or Ruk. See "The Caroline Islands," London, 1899, p. 23.

1858, when the Austrian frigate *Novara*¹ reached Ponapé, the population had been reduced to some 2,000. This was said to have been due to the ravages of small pox. But according to the investigations of 1915, the number had again increased to 3,600.

I landed at Ponapé harbour, and visited Jokaj (Chokach, Dschokasch) district situated west of the harbour. The natives of this district, who were dissatisfied with the conduct of the Germans, rose against the authorities on October 18th, 1910, in connection with the construction of roads. They attacked and killed the governor and a few other officials who came on a circuit to inspect the roads, whereupon the Germans obtained the assistance of a warship and suppressed the native uprising. More than ten of the ringleaders were put to death and those who had participated in the uprising were deported to Yap without any distinction of sex. They were later removed to Palau. To Jokaj, however, some 150 men and women were brought from each of the four islands of Mokil, Pingelap, Ngatik and Moltlock, which are from 80 to 250 miles from Ponapé. So the natives I studied here were mostly these settlers from the above islands.

Kusaie (Kusai), which is composed of basalt, is situated at the eastern end of the Caroline Islands, between 5° 16' and 5° 23' N. lat., and 162° 58' and 163° 6' E. long. It is surrounded by a fringing reef and has an area of some 30 square miles. According to the investigations of 1915, the population was only 500, half of which number lived on the islet of Lele (Lela, Lolo). This islet, narrow in shape, lies to the east of Kusaie. The name Lele, we are told, comes from a native word meaning "permission." On this islet there is a village, which has only 17 families, but

¹ "Reise der Oesterreichischen Fregatte *Novara* um die Erde, in den Jahren 1857, 1858, 1859." Wien, 1861, III, p. 396.

the inhabitants number some 220, as mentioned above. Ships cast anchor, most of them, off this village. Lele has wellknown ruins with stone walls.

Kusaie was discovered in 1804 by Crozer, an American, who gave it the name of Strong Island, in honour, it is said, of the governor of Massachusetts, United States, at that time.¹ It is also called Ualan.

The five islands or groups of islands above described are usually divided into two groups. Palau and Yap form the West Caroline Islands, while the rest are called the East Caroline Islands.

The **Marshall Islands** include two chains of atolls, running nearly parallel to each other from north-west to south-east, between 4° 30' and 15° N. lat., and 161° and 172° E. long. The eastern group, called Ratak (Radak), has 15 atolls with a total area of 51 square miles. The western one, called Ralik, includes 18 islands, the area measuring 170 square miles. The island that occupies the most important position is Jaluit (Jalut), which is the only trade center for the whole archipelago. It has a native population of 1,000. There is a long shaped islet of the same name belonging to Jaluit. The islet has a native village, Jabor, at its north end on the widest part. There the ships cast anchor. I also visited this village. I was informed that, owing to the number of ships visiting the island, the natives had lost their former simplicity, and had become cunning from contact with the outside world.

The discovery of the Marshall Islands began in 1529, when Alvaro de Saavedra found part of the archipelago.² He called them "Los Pintados," after observing the fine tattooing of the

¹ According to Christian, Kusaie was discovered in September of 1529, by Alvaro de Saavedra. See "The Caroline Islands," p. 23.

² It is also said that in 1526 Alonzo de Salazar discovered one of the Islands of the Marshall group. F. W. Christian, *ibid.*, p. 23.

natives. The discovery of the whole group was gradually made during three hundred years from that date. Jaluit, for instance, was discovered by an Englishman, Peterson, in 1809. The present name of the archipelago comes, it is believed, from the British Captain Marshall, who explored the group in 1788. In 1883, several Japanese got adrift on Laë (Lai), one of the islands. On the receipt of a report that these Japanese had been murdered by the natives, our Government despatched Mōtaro Gotō and Keikun Suzuki to the islands in the following year to carry out investigations on the spot. At this time, it was still undecided which country possessed the Marshall Islands so they subjugated the native chiefs and returned home.¹ But after this, in 1885, Germany acquired possession of the islands.

The natives studied during our cruise among the islands above described may be classified into four races:

1. Papuans
2. Samoans
3. Chamorros
4. Caroline and Marshall Islanders.

I shall briefly describe each of these races.

1. The Papuans whom I observed were those who had been brought by the German authorities from New Guinea, Solomon Islands, New Ireland, Admiralty and other islands, to be employed as guards. More than twenty of these were on Jaluit and Ponapé. The Japanese garrisons also employed them in the same service, but later they sent them back to their native islands.

2. The Samoans on Saipan were those who were banished

¹ For details see K. Suzuki, "An Account of the South Sea Islands," (in Japanese), Tokyo, 1892.

to that island. They had their wives and children with them, so their number was over sixty. They lived near the village Tanapag, which is over two miles north-east of the village Garapan. They consisted of more than ten families and lived in the same way as in their native islands.

3. I observed the Chamorros living on Saipan. It is probable that they were originally natives of the Mariana Islands. So they are also found on Guam. Of the islands under Japanese occupation Yap is the only place where they are living near villages of the aboriginal tribe. We not only noticed that they have a comparatively large share of European blood in their veins, but also that their language, which was originally allied to that of the Tagal in the Philippine Islands, contains a very large number of Spanish words. Besides, we observe that they differ from the natives of the Caroline Islands in their physical characters.

4. The Caroline and Marshall Islanders are the most important tribes on the islands occupied by Japan. They not only inhabit the Caroline and Marshall groups, but the settlers of the former are also found on Saipan in the Mariana Islands. These tribes are called Kanakas on Truk, Saipan, Jaluit and other islands. The name Kanaka signifies "men" in the Polynesian language, and was originally applied only to the Polynesians. But later Kanaka came to cover the natives of Polynesia as well as of Melanesia, with no regard to ethnological distinctions. It is, therefore, possible that the important tribes on the islands now under our occupation also got this name under the same circumstances. It might, however, be considered that since in the classification of races these tribes are frequently placed in the Polynesian family, the word Kanaka, another name for Polynesians, came to be used also as the name for the natives of Micronesia.

It seems extremely doubtful to me whether the Micronesians are a Polynesian race, as has been said by so many authors. Among the races of the world, the Polynesians are conspicuous for their high stature and are mostly brachycephalic, as is evident from past researches. The Caroline and Marshall Islanders, on the contrary, are of middle stature, and dolichocephalic or mesocephalic, and their faces are naturally long. In other respects also, the Micronesians differ from the Polynesians. I had opportunity to observe these two races at one place and make a comparative study of them. On Saipan, I compared a tribe of Kanakas who had come from the Caroline Islands, and the Samoans, a sub-division of the Polynesians, who had been banished to the island. I recognized a great difference, which convinced me that it is proper to distinguish the Micronesians from the Polynesians.

Though the islands of the Caroline and Marshall groups are all very small, they are many in number, extending over a vast area in the Pacific. It is, therefore, inevitable that there should be some difference between the natives of the various islands. They may be divided into two different groups, i. e., the one representing the East Caroline Islands including Truk, Ponapé, and Kusaie, and the other the West Caroline Islands including Palau and Yap. The first group is dolichocephalic and of middle stature, while the second is mesocephalic and of higher stature than the first. The two groups differ not only in their physical characters, but also in ethnographical respects. Of course, the Marshall Islanders differ more or less from the natives of the Caroline Islands. But we include the former under the East Caroline group, for the sake of convenience.

It will be understood from their geographical position that mixture of races is inevitable in these islands. For instance, two

different types may be distinguished in the natives of Truk. On Yap and Palau, we notice that some of the natives have frizzy hair. We may possibly regard these facts as testifying to the mixture of races.

The ethnographical studies that will be presented in the following pages relate primarily to the general mode of life, of clothing, food and habitation of the natives of the Caroline and Marshall archipelagos. To supply the deficiencies in descriptions, I have selected some sixty out of the photographs I took during our cruise and reproduce them at the end of this paper; and in the text I also give photographic reproductions of part of my collections.

PART I.

The East Caroline Islands.

Chapter I.

Clothing and Personal Adornment.

It goes without saying that food and drink are the first essentials to the maintenance of life. It is only after this primary necessity has been satisfied that men begin to cover their body with anything like clothing. Of many savage tribes it can not be said even in the present age that clothing is an essential condition of their life. However, among uncivilized races in the tropical regions who live on what they find near at hand and who need not trouble themselves much about the acquisition of food, personal adornment is perhaps what occupies their greatest attention instead of clothing, food and habitation. It will, of course, be difficult to say this is universal, but one may clearly observe this tendency among the natives of the Caroline Islands, especially of the eastern group of the islands.

In the next pages, I shall consider the subject, following the classification adopted by Dr. J. Deniker.¹

I. ADORNMENT OF THE BODY.

This is the most primitive mode of personal adornment, the body itself being ornamented without the wearing of any foreign objects whatsoever. The East Caroline Islanders have two kinds of such adornment, i. e., body-painting and tattooing.

¹ J. Deniker, "The Races of Man," London, 1900, pp. 173-182.

1. **Body-painting.**—In the East Caroline Islands, particularly in Truk, the natives have a custom of painting the face and body with a certain pigment. This is common to both sexes from thirteen or fourteen years of age to about fifty. The pigment is called *taik*. It is of an orange colour and is made from the root of the turmeric (*Curcuma longa*), the native name of which is *afan*. The natives use this pigment as it is or after diluting it in coconut-oil.

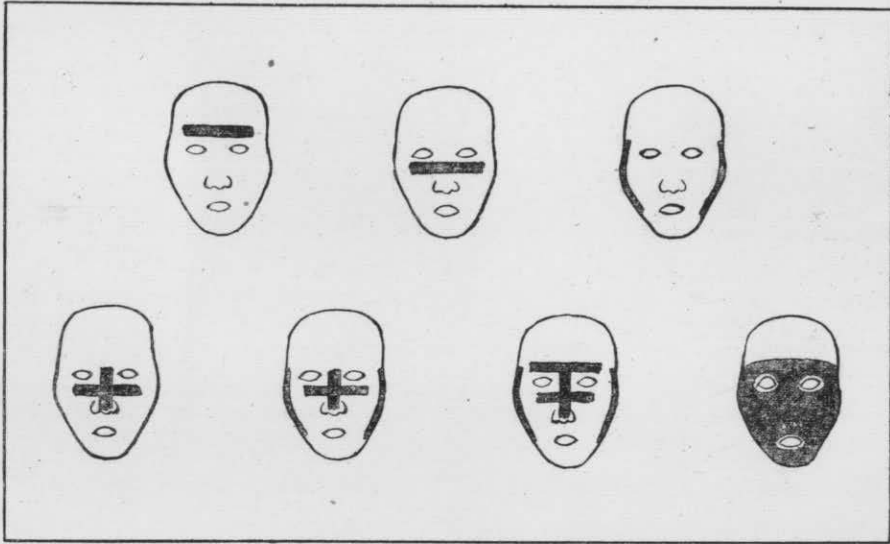


Fig. 1.—Facial painting, Truk

It appears at first sight as if there were no regular patterns in painting the face ; but closer inspection shows that seven different ways can be distinguished, though, there are apparently no differences with regard to sex or age. This face-painting is shown in Fig. 1.

Not only the face but also other parts of the body are painted. In this, however, there seems to be no regular method, colouring matter being applied to different parts of the body, with the exception of the waist. The islanders do this usually on festal occa-

sions. They are now mostly Christians, so it is customary for them to paint themselves particularly beautiful on Sundays.

Besides the inhabitants of Truk, the natives of Ponapé and those of Saipan who came from the Caroline Islands also paint the body. The custom further prevails in the West Caroline Islands. In Ponapé, it is the women, we are informed, who prepare the pigments by mixing coconut-oil or fish-oil.

The painting of the body with various pigments is practised not only in Micronesia, but the custom is also met with among different tribes in the South Sea Islands. Some of the tribes employ the colour obtained from the turmeric, which, as mentioned already, is used by the natives of the East Caroline Islands. In Rotuma, for instance, in the north of the Fiji Islands, if a chief come into the house, the people smear him over the left breast with pigments mixed with coconut-oil. It is also used for smearing the body in dances. Further, when a child is born, the mother is at once washed and colours applied to her breast and abdomen.¹ In a certain part of the New Hebrides, the women paint their entire face, and their infants all over, with bright orange turmeric or red lead.² The Samoans rub scented oil on the body from head to foot, and sometimes mix turmeric with the oil to give their skin a tinge of yellow.³

Besides the preparation from the turmeric, the important pigments used are red (clay), white (burnt shell, clay), black (burnt coconut, ore of manganese), and yellow (clay). For dances or on ceremonial occasions, the face, breast or the whole body is painted with such varieties. Of these, black is not infrequent-

¹ S. J. Gardiner, "The Natives of Rotuma," *Jour. Anthr. Inst.*, XXVII, 1898, pp. 413, 480.

² B. T. Somerville, "Ethnological Notes on New Hebrides," *Jour. Anthr. Inst.*, XXIII, 1894, p. 370.

³ G. Turner, "Samoa a hundred years ago and long before," London, 1884, p. 121.

ly used as a sign of mourning.¹ O. Finsch² writes that black is the colour of sorrow in all the islands of New Guinea and Melanesia; but it does not seem that this is necessarily the case. And according to Van der Sande,³ when the natives on Humboldt Bay, Dutch New Guinea, go hunting, they paint their faces with soot. They have sixteen different designs for this purpose, which proves the existence of settled custom in painting, as in the case of the islanders of Truk. The inhabitants of New Georgia, Solomon Islands, and of British New Guinea, have also definite patterns of painting, as is described by B. T. Somerville⁴ and W. Y. Turner.⁵

The pigment *taik* is greatly prized by the natives. They do not use it for ornamental purposes only. When their relatives or acquaintances die, they bring this colour with them and offer condolences, just as we call to make offerings to the deceased. They apply the colour to the corpse to console the spirit. But, though *taik* is much valued by the islanders, it is not very difficult to make the colour. The root of *afan* is first reduced to powder by braying the same on a small piece of iron plate in which many holes are bored. This powder is mixed with water, and the mixture is filtered through cloth and precipitated. The best *taik*, which

¹ A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," Jour. Anthr. Inst., XIX, 1890, pp. 365, 374. W. Y. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 480. R. W. Williamson, "Some unrecorded customs of the Mekeo People of British New Guinea," Jour. Anthr. Inst., XLIII, 1913, p. 269. H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc.," Jour. Anthr. Inst., VI, 1877, p. 402. W. Macgregor, "Annual Report of British New Guinea for 1890." (Résumé: Jour. Anthr. Inst., XXI, 1892, p. 76). W. Ellis, "Narrative of a Tour through Hawaii," 2nd ed., London, 1827, p. 184. G. Turner, "Samoa," pp. 308, 342.

² O. Finsch, quoted by Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 51, 52.

³ G. A. J. Van der Sande, "Nova Guinea, III. Ethnography and Anthropology," Leyden, 1907, p. 54 and Fig. 25.

⁴ B. T. Somerville, "Ethnographical Notes in New Georgia, Solomon Islands," Jour. Anthr. Inst., XXVI, 1897, p. 365.

⁵ W. Y. Turner, *ibid.*, p. 480.

is called *taik maran* (raw *taik*), contains a large quantity of red matter and is much valued by the islanders, as above stated. But other kinds of *taik* are not so beautiful, namely those in which the yellow colour predominates. Both the *taik* and coconut-oil have a peculiar smell, and the bodies of the natives daubed with these preparations have the same odour.

2. **Tattooing in General.**—There are two different methods of tattooing. One is tattooing by incision (scar-ornament, cicatrization), i.e., by cutting or burning the skin. The other is tattooing by puncture (or simple tattooing), i.e., inserting pigments in punctures to mark the skin with various patterns, which form a permanent ornament for the skin. Both ways of tattooing are found among the natives of the East Caroline Islands. I shall deal with cicatrization first.

A. **Cicatrization.**—The custom of cicatrization prevails in Truk, Ponapé and some other islands. In Ponapé, not only the aborigines, but also the settlers from Mokil and Pingelap who live in Jokaj district, have this custom, though the practice is not so prevalent among them as among the former. Cicatrization is used by both men and women. In women, however, the scarification is much smaller than in men. The former have only a limited number of raised cicatrices about the size of red beans on the top of the upper arms, where they form regular patterns; while the latter have several marks cut not only on the arms but also on the breast, as shown in Fig. 2.

There are two kinds of cicatrices practised by the natives of the East Caroline Islands. The raised cicatrices, about the size of red beans as mentioned above, are marks left on the body by burning, while the short lines are scars made with knives. These are all intended for personal adornment. But we were told that



Fig. 2.—Islanders of Ponapé with scar-ornaments on the body.
(Photo. U. Mori.)

a man and a woman in love make cicatrices on each other as signs of fidelity, so that scarification may be said to signify truth besides serving as ornament.

As regards the neighbourhood of the South Sea Islands now in the hands of Japan, the custom of cicatrization is also met with in New Guinea, Melanesia, part of Polynesia, i.e., Tonga and Hawaii. It is, further, practised among the Natives of Australia and the Negrito tribes of Luzon. The cicatrices are of the two kinds mentioned, i.e., by cutting or burning the skin, usually on the shoulders, the upper arms, the breast and the back. But sometimes cicatrices are made on the face, as in the case of the natives of New Guinea, Solomon Islands, and Hawaii.¹ The Mekeo people in British New

¹ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," p. 50. A. B. Meyer and R. Parkinson, "Album von Papua—Typen II," Dresden, 1900, Pls. 45, 47. W. Ellis, "Hawaii," p. 170.

Guinea burn the skin on the arm with the incandescent tip of a small wooden stick to make a round scar with a diameter of about one centimeter, and in a certain village young girls often have six or seven lines burnt on each arm.¹ Among the natives of the Admiralty Islands circular spots about the size of half a crown are disposed over the upper part of the chest and shoulders.² These cicatrices are very similar to those met with in the Caroline Islands. In the islands, however, one does not observe shapes of snakes, dugongs, sharks, porpoises, frigate birds or leaves, either cut or burnt, such as are found among the natives of New Guinea, Torres Straits, New Georgia (Solomon Is.) and New Hebrides.³

As already noted, the object of cicatrization is chiefly to decorate the body as well as to indicate bravery. But the scarification formerly done by the natives of Hawaii⁴ and that still practised by the women on Astrolabe Bay, German New Guinea,⁵ is made in memory of deceased chiefs and near relatives. Again, the Negritos in Luzon burn the skin for curative purposes, besides for personal adornment.⁶ Among the natives of Mowat in British New Guinea, girls on approaching womanhood have cicatrices made on the chest, to prevent the breasts dropping. Among the same

¹ R. W. Williamson, "Some unrecorded customs of the Mekeo People of British New Guinea," *Jour. Anthr. Inst.*, XLIII, 1913, p. 269.

² H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc.," *Jour. Anthr. Inst.*, VI, 1877, p. 401.

³ G. A. J. Van der Sande, "Nova Guinea, III. Ethnol. and Anthr.," p. 49; Pls. XLVII, XLVIII. O. Finsch, "Samonfahrten. Reisen in Kaiser Wilhelms-Land und Englisch-New Guinea in den Jahren 1884 u. 1885 . . .," Leipzig, 1888, p. 334 and fig. A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," *Jour. Anthr. Inst.*, XIX, 1899, pp. 366, 367; Pl. VII. B. T. Somerville, "Ethnographical Notes in New Georgia, Solomon Islands," *Jour. Anthr. Inst.*, XXVI, 1897, p. 365. G. Turner, "Samoa," p. 310.

⁴ W. Ellis, Hawaii, p. 170.

⁵ O. Finsch, quoted by Van der Sande, "Nova Guinea," III, p. 50.

⁶ W. A. Reed, "Negritos of Zambales," Department of the Interior Ethnological Survey Publications, Vol. II, Part 1, Manila, 1904, pp. 36, 37. D. C. Worcester, "Non-Christian Tribes of Northern Luzon," *Philippine Jour. Science*, I, 1906, p. 807; Pls. XXIII, XXV.

tribe marks are also made on some part of the body of the women, when their brothers have killed their first dugong or turtle.¹ These are the different methods of cicatrization. One of the objects is evidently to show personal bravery, which is very characteristic of uncivilized races.

B. **Tattooing.**—The practice of tattooing is universal among the inhabitants of the different islands. Excepting children, practically all the natives tattoo without any distinction of sex, though the patterns differ as to fineness and size. There are some young men of about thirty years of age who have simple patterns of European origin or their names tattooed on the forearm, which was not, of course, the original custom. But there are others who ornament their skin with particular and complex patterns. In Truk and Jokaj district of Ponapé, the men tattoo on the upper and lower limbs, particularly over a wide surface on the lower limbs. The locality and design of marks, however, are not necessarily uniform. Some tattoo only on the outside of the thigh, while others extend the marks down the knee in several vertical strips. Among the islanders of Jaluit, however, more extreme instances are found. In the island I saw an old man the upper half of whose body was covered all over with tattoo marks. I even met with a chief who had his face pricked with marks. Some of the natives of Jokaj district, Ponapé, who came from Pingelap, have tattoos on the breast. As regards the face-tattooing, I had no opportunity to observe whether it was practised outside the Marshall Islands. The tattooing on the face forms a sort of symbol of rank, for the same is limited to chiefs only. The presence or absence of tattoos is frequently associated with rank among various other tribes.

¹ E. Beardsmore, "The Natives of Mowat, Daudai, New Guinea," *Jour. Anthr. Inst.*, XIX, 1890, p. 460.

For instance, in Yap tattoo marks differ between free men and slaves, the same occurring also in Rotuma, Hawaii and other islands. There is a custom among the natives of New Guinea that tattoos are used particularly by the warrior who has killed an enemy.¹ In Formosa, it was the original custom among the Tayal tribe to permit tattooing only to braves who took scalps.²

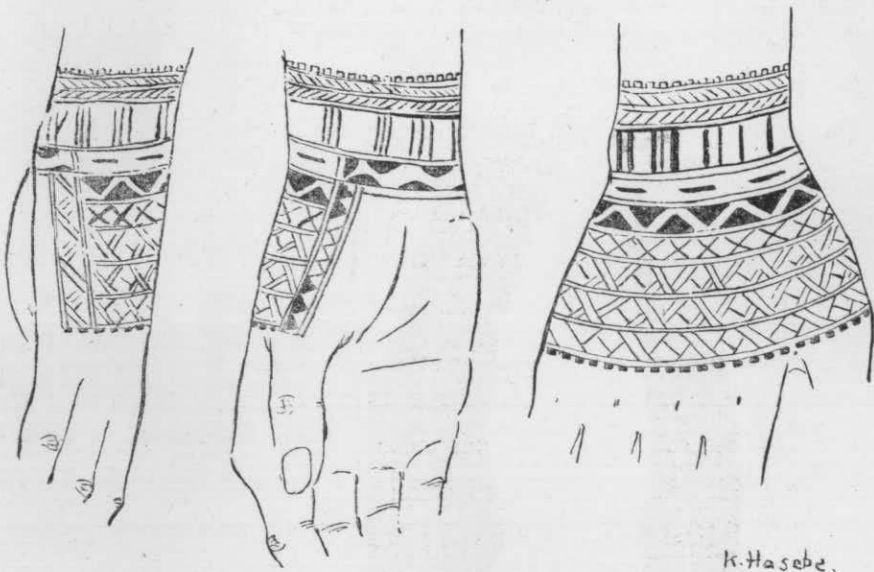


Fig. 3.—Tattoo marks on the right hand of the wife of a chief of Metalanim, Ponapé.

Tattooing is also used by most women, irrespective of age, though there are young women who have only small marks on their upper limbs. Among the women of Ponapé, however, some have the upper and lower limbs covered with marks. On the

¹ C. G. Seligmann, "The Melanesians of British New Guinea," Cambridge, 1910, p. 130; Pl. XIV. A. C. Haddon, "The Decorative Art of British New Guinea," Dublin, 1894, p. 176. R. W. Williamson, "Some unrecorded customs of the Mekeo People of British New Guinea," Jour. Anthr. Inst., XLIII, 1913, p. 269.

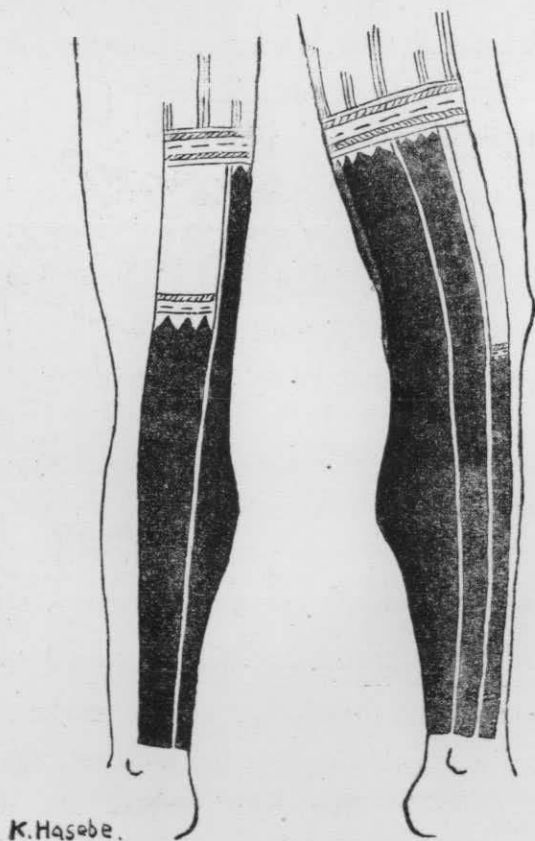
² Y. Kojima, "Report on the Investigations of the Wild Tribes in Formosa," (in Japanese), Vol. I, 1915, p. 102; Vol. III, 1917, pp. 54, 97. Y. Suyama, "Report on the Investigations of the Wild Tribes in Formosa (The Sazak Tribe)," (in Japanese), 1917, Pt. I, p. 73; Pt. II, p. 94.

upper limbs they have geometrical patterns from the upper arm down to the outer surface of the hand; while the tattoos on the lower limbs extend from the thigh down to the lower parts of the legs, the marks including broad vertical strips as in the case of men (Figs. 3 and 4).

According to O. Finsch,¹ the women of Ponapé sometimes tattoo on the abdomen, showing a broad, black girdle, with the

genital organ and its surroundings as the center. I was informed that there is in Truk a custom of tattooing on the vulva, as in the Palau Islands. In Truk and Ponapé, I did not see the complex patterns centring round the genital organs of men, such as can be observed among the natives of Samoa.² I refer the readers to Part II, the West Caroline Islands, which contains detailed accounts on this point.

In Jaluit, the men tattoo extensively. The women also tattoo the shoulders and the breast,



K. Hasebe.

Fig. 4.—Tattoo patterns on the right lower limb of a man in Metalanim, Ponapé.

¹ O. Finsch, "Ueber die Bewohner von Ponapé," *Zeitschr. f. Ethn.*, XII, 1880, pp. 311, 312.

² v. Luschan, "Beitrag zur Kenntniss der Tättowirung in Samoa," *Verhand. Berlin. Gesell. Anthr. Ethn.*, 1896, p. 551 and figs.

besides the upper limbs and the outer surface of the hand. But in Jaluit I saw no women tattooed on the face, though such women are met with in New Guinea, the Admiralty Islands, and New Hebrides; nor did I see in the island tattooing of the entire body, as is sometimes the case with girls or women in Ontong Java and New Guinea.¹ In the East Caroline and Marshall groups, it is usual that the men tattoo more extensively than the women, as in a part of Polynesia. In New Guinea, on the contrary, the women are more tattooed than the men. In some tribes of the island, tattooing is almost limited to the women.

In Truk, the natives use fish bones as needles for tattooing, and lampblack as pigment. But in Ponapé needles obtained from human bone are employed for tattooing the elaborate designs on arms, thighs, and legs.² In Yap, the needles are made of the bone of water fowls, as is described later on. In the Sandwich Islands,³ they use an instrument about a quarter of an inch wide with a number of small fish bones, as in Truk. According to G. Turner,⁴ the instrument for tattooing in Samoa is an oblong piece of human bone (*os ilium*), about an inch and a half broad and two inches long, cut like a small-toothed comb at one end. Times of war and slaughter were harvests for providing tattooers with material. The colour used is candle-nut ashes mixed with water.

¹ C. G. Seligmann, "The Melanesians of British New Guinea," pp. 73-75, 264, 265; Pls. X, XI, XXXVIII. O. Finsch, "Samoafahrten," pp. 277, 278. W. Y. Turner, "The Ethnology of the Motu," *Jour. Anthr. Inst.*, VII, 1878, pp. 480, 481. R. E. Guise, "On the Tribes inhabiting the mouth of the Wanigela River, New Guinea," *Jour. Anthr. Inst.*, XXVIII, 1899, p. 207. R. W. Williamson, "Some unrecorded customs of the Mekeo People of British New Guinea," *Jour. Anthr. Inst.*, XLIII, 1913, p. 269. H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc.," *Jour. Anthr. Inst.*, VI, 1877, p. 401. R. Parkinson, "Zur Ethnographie der Ontong Java und Tasman-Inseln," *Intern. Arch. f. Ethnol.*, X, 1897, Taf. VIII. G. Turner, "Samoa," p. 329.

² F. W. Christian, "The Caroline Islands," p. 130.

³ W. Ellis, "Hawaii," p. 170.

⁴ G. Turner, "Samoa," p. 89.

II. ADORNMENT WITH OBJECTS ATTACHED TO THE BODY.

The custom of adorning the body by partial mutilation and attaching objects to the mutilated parts is universal among uncivilized races. There are not a few forms of this kind of adornment, which is perhaps the most cruel of all personal embellishments. The practice also occurs among the natives of the East Caroline Islands, though they have only two kinds, namely, ear and nose-ornament.

1. **Ear Ornaments.**—These are worn on various parts of the auricle, but most frequently on the lobe. Of the natives on different islands, the Truk islanders have the most complex ear-ornaments. The procedure is as follows:

Natives of either sex have a hole made in the lobe while quite young. They enlarge the hole by the insertion of leaves of the mangrove or *calophyllum* tree and increase the number inserted as the tension of the leaves widens the hole, until it gets sufficiently large. This method of making holes closely resembles the one prevailing among the Bagobo tribe of Davao District, Mindanao.¹ In Truk, there is, of course, no uniformity in the size of holes. One of the men whom I examined had on the right and left ears holes measuring 130 mm. and 121 mm. in long diameter, and this when no ornament was worn in the ears. This is shown in Pl. I, fig. 1. Sometimes the hole in the lobe extends as far as the front of the helix. It is usual that various ornaments are worn in the hole. However, when the natives work, they find their ornaments hanging from the hole very troublesome to them, so they remove the articles, even hanging the distended lobe on

¹ Fay-Cooper Cole, "The Wild Tribes of Davao District, Mindanao," Field Museum of Natural History, Publication 170, Chicago, 1913, p. 59.

the upper margin of the auricle either from the front or from behind so as to prevent it from swinging back and forth (Pl. I, figs. 2 and 3). Sometimes the auricle has small holes made near the helix, in the middle part or a little above (Pls. II and III).

The objects worn as ornaments in the hole are most of them rings made of coconut or shells. The former resemble in shape the rings obtained by cutting a bamboo tube crosswise. First, the natives choose a long coconut, which is cut crosswise into rings. The transverse sections of these rings are made smooth with a knife and are polished respectively. After this, several dozens of them are strung on a stick. Then the outer surface is polished, while the inside is cut off with a sharp tool made of coral.

Thus it costs the islanders a great deal of labour preparing the rings for use, so that they are much prized. The rings, when completed, are from 4 to 9 mm. wide and half as thick, while the diameter is from 21 to 36 mm. They have each a parting, so that they may easily be fixed on the ear. Sometimes simple designs are carved on the outer surface. These rings, when worn on the lobe, appear just like so many rings strung on a thread. The natives must have a large hole in the lobe if they want to wear many of them and take pride in their beauty.

The rings made from shells are obtained by cutting cone-shells crosswise. These shell rings are rather flat. There is no uniformity in their size, but the outer diameter is usually from 40 to 70 mm. In using these shell rings, the islanders append them directly on the coconut rings or by the intermediary of other ornaments, such as threads of glass or shell beads. The holes in the upper region of the auricle are ornamented with coconut rings, to which shell rings are usually attached (Pl. II).

The natives wear more than one kind of these ornaments at

a time, but when the shell rings are large, two or three of them are worn either in the hole of the lobe or in the small holes in the upper portion of the auricle (Pl. III). In any case, when the hole in the lobe is large and many rings of various kinds worn in it, these ornaments will hang down as far as the breast. One of the natives I observed wore as many as seventy-seven rings on one ear weighing 230 grammes. Pl. II shows this. The number worn on one ear does not necessarily agree with that on the other. Sometimes even no rings are worn on the other ear. Some of the Kayan tribe in Borneo are said to wear copper rings, often as heavy as 2 lb. (907 gm.).¹ According to A. C. Hollis,² a boy of the Masai tribe in East Africa wore a stone ear-ring with a diameter of 113 mm. weighing 2 lb. 14 oz. (1304 gm.). There is, however, no ethnological relationship between this and the above case.

The custom of wearing ornaments on the ears does not differ with sex. But the tendency is that the men wear more ornaments than the women, and this may be said not only of ear-rings but of necklaces, and head-ornaments.

The practice of wearing ear-ornaments is not confined to the island of Truk. That it also prevailed in other islands of the Caroline group and in the Marshall Islands may be seen from the number of natives who still have holes in their lobes. But nowhere is the custom more prevalent than in Truk. Formerly, ear-rings made of tortoise-shell, we are told, were in use in Ponapé; but now few people wear ornaments and these few use small metal rings made in European style. We may especially observe

¹ C. Hose and W. McDougall, "The Pagan Tribes of Borneo," London, 1912, Vol. I, pp. 47, 48.

² A. C. Hollis, "Masai Ear-ring of Stone," *Man*, V, 1905, 12.

women in Jaluit wearing such metal rings. We learn, however, from F. J. Moss¹ that large ear-rings, very different from those in use in Truk, were, and still are (?) worn in the Marshall Islands. They are not flat rings, but large rings obtained perhaps by cutting shells crosswise. They are inserted into the holes in both lobes, so that the openings become widely distended. The ornaments worn by a king of the island of Majuro were of this kind.

2. **Nose Ornaments.**—In Kusaie, I saw an old woman, some sixty years of age, who had a small hole in the nasal septum. When I asked what it meant, I was informed that she had formerly had nose-ornaments inserted into the orifice. This is not so extraordinary, since the custom of having ornaments inserted in the opening in the nasal septum occurs also among the Papuans. But as this was the only case I observed in Kusaie, it is difficult to decide from this single instance the existence or non-existence of the practice in the island. Since the custom of piercing a hole in the nasal septum and wearing a flower in it is said to have existed in the West Caroline Islands in former times, the solitary instance observed in Kusaie may not unreasonably be taken as strong evidence of the former existence of a similar custom in the island also.

III. ADORNMENT WITH OBJECTS FIXED TO THE BODY WITHOUT MUTILATING.

The adorning of the body with various ornaments attached but involving no mutilation of the body itself, marks great progress in personal adornment. This custom is almost universal throughout the world. The ornaments are generally fixed around the head or

¹ F. J. Moss, "Through Atolls and Islands in the great South Sea," London, 1899, Plate facing page 127.

parts of the body where there is a depressed surface, above a bony projection or a muscular protuberance, such as the neck, waist, wrists, and ankles. They consist of head-dress, necklaces, belts, armlets and anklets, from which hats and complex clothes may be derived. Description will be given below of the various kinds of this adornment as found among the natives of the East Caroline group. I have, however, included hair-dressing under the ornaments for the head, though dressing the hair in various ways and wearing ornaments on it appears not much different from a partial mutilation of the body.

1. **Hair-dressing and Head Ornaments.**—The hair is now worn short by the men on all the islands, except Truk where some natives wear it long. In this case, they simply let it hang or twist it round the head or roll it on the back of the head (Pl. I, fig. 1; Pl. II; Pl. III, figs. 1 and 2). In binding the hair on the back of the head, they sometimes use a fillet made of coconut fibre (Fig. 5). On the hair thus bound large combs of mangrove wood are most frequently worn (Pl. III).

The combs differ as to shape and size, but they may be classified into two kinds according to style of structure. One is made of several narrow strips of wood put together lengthwise and held fast at the part forming the handle. The other is a long flat piece of wood with several teeth cut lengthwise (Fig. 6 and Pl. XXXIV, figs. 5 and 6). The former, again, may be divided into three varieties. In A, wooden nails are used

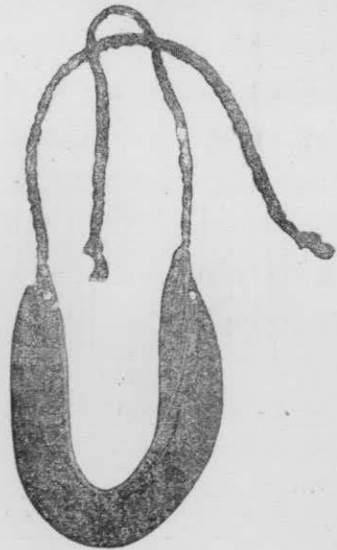


Fig. 5.—Fillet made of coconut fibre, Truk.

for fastening the several strips of wood (Fig. 6, *a*); in *B*, the fibre of hibiscus is employed (Fig. 6, *c* and *d*); while in *C*, the pieces

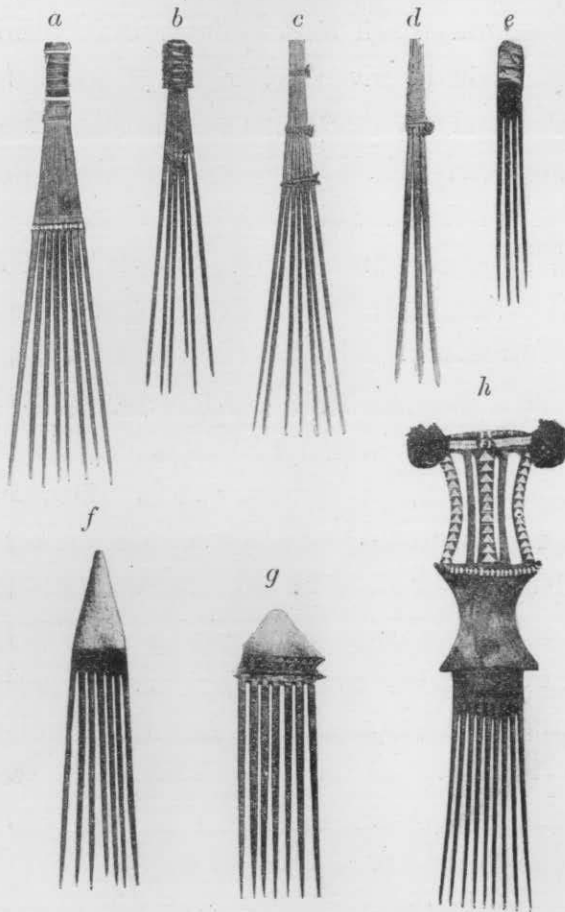


Fig. 6.—Combs from Truk.

are held fast by means of coconut rings (Fig. 6, *b*). These three varieties of combs have teeth spreading outward, so that the whole comb presents a triangular form. But the other kind of comb made by carving has teeth almost parallel to each other. Of the combs we collected, the smallest one was 180 mm. in length and the largest 355 mm. In nearly half the number, $\frac{3}{5}$ of the whole length is almost invariably taken up by the teeth, the rest forming, of course, the handle.

The number of the teeth varied from three to eighteen; however, seven or eight was most common. The largest breadth of combs was from 50 to 70 mm. at the part forming the teeth. And this was some $\frac{2}{3}$ of the length of teeth in many cases. Again, the comb held fast with nails had several coconut rings fastened on the handle for the double purpose of ornament and security. The comb made by carving had simple

geometrical patterns cut on the handle (Fig. 6, *g* and *h*). Whatever the structure may be, such ornaments as shells or beads are sometimes fixed to the combs or worsted of various colours is twisted round for decoration. To make them still prettier, long tail feathers of birds are attached to the handle. It is usual, however, that such combs are provided with a more or less large or long handle. These are used in dances or in feasts (Pl. XXXIV, figs. 5 and 6).

The use of the comb in the South Sea Islands is quite extensive. It is met with in New Guinea, Melanesia, part of Polynesia, the Philippines, etc. In New Guinea, there are two varieties of combs as in the Caroline Islands. One consists of a single piece, while the other is made up of several pieces tied together.¹ The first is usually made of bamboo, so it is somewhat different from the kind used in Truk. Again, the second is not so well made as the one with ornamental lashings of fibre which we found in Yap, nor is there in New Guinea any kind that is held fast by means of nails. And of the combs used in Yap, the one with its handle bound up with fibre closely resembles the variety found in the Fiji Islands.² But the latter has only about ten teeth; the number of teeth is, therefore, much less than that of the kind met with in Yap. See Part. II, The West Caroline Islands.

The native combs above described are not worn by women, the use of these ornaments being limited to men above age. There is no particular part of the head where the comb should be worn, this being apparently left to the fancy of individuals. In other South Sea Islands, the wearers of combs are mostly

¹ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 66, 67.

² F. Winter, "Die Kämme aller Zeiten von der Steinzeit bis zur Gegenwart," Leipzig, 1906, Taf. 67, Fig. 236.

men, though there are occasional exceptions. In Samoa, for instance, long combs made by binding twenty or thirty pieces of the stems of coconut leaflets with a string are worn by women in the hair behind the ear for ornamental purposes.¹ De Clercq and Schmeltz² say that in the territory of Waropen, Dutch New Guinea, sometimes the exchange of combs occurs between lovers. It appears, therefore, that girls also wear combs.

Though the comb is not now used in the islands of the East



Fig. 7.—Native of Saipan. (Photo. U. Mori.)

Caroline group except in Truk, we learn from Christian³ that in Ponapé it was formerly the custom to wear combs made in Yap styles of white mangrove wood. The wearing of combs is still very common in the West Caroline Islands. Combs tied together by strings are common in Yap, while in Palau those fastened with nails are most frequently used. These are, however, different from the variety met

¹ G. Turner, "Samoa," pp. 123, 171.

² F. S. A. de Clercq en J. D. E. Schmeltz, "Ethnographische beschrijving van de Wes'en Noordhust van Nederlandsch Nieuw-Guinea," Leiden, 1893, quoted by Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," p. 68.

³ F. W. Christian, "The Caroline Islands," p. 129.

with in Truk, both in shape and in other respects. For particulars see Part II, The West Caroline Islands.

In all the Islands, most women wear the hair parted in the middle, letting it fall on the back or having it bound up at the back of the head (Pl. IV; Pl. XII, fig. 1; Pl. XIII, fig. 2; Pl. XVII, fig. 1). Some of the women in Kusaie have their hair dressed in a more or less complex fashion, which they have perhaps learned from Europeans (Pl. XV). On the head they sometimes have a simple wreath of flowers (*Guettarda speciosa*; *Caesalpinia pulcherrima*) or leaves (*Polypodium* sp.; *Pteris* sp.) (Pl. XXXIV, figs. 1 and 7; Pl. IV, fig. 2). Some of the men also wear such wreaths, but mostly only when they dance (Figs. 7 and 11).

The wreath serves not only as a head-dress, but is also used as a necklace (Fig. 7). The wreath is an ornament much favoured by the natives of Hawaii also. They wear it on the head or round the neck. Children under eight or nine years of age are said to go without clothing, when they



Fig. 8.—Natives of Kusaie. (Photo. U. Mori.)

wear a wreath.¹ These facts show that they make much of these ornaments.

In Ponapé, both men and women use a head-dress made of cloth, which is not infrequently ornamented with disks of shells or beads. Several specimens collected by the late Dr. Ukichi Taguchi on the island in 1890 are now preserved in the Anthropological Institute of the Tokyo Imperial University.

The hair of the islanders, particularly of young women, is always very lustrous, due to the use of coconut-oil.

The men in Kusaie often wear hats, which are like Panana hats in shape and are braided of leaves of the pandanus or the coconut tree. The women make these hats, some of which are very finely braided (Fig. 8). In Truk and Ponapé, women wear hats with pointed tops in fishing on reefs.

2. **Necklaces.**—There are now only a few natives in Truk who wear necklaces of native pattern. Most of them use imported necklaces made of glass or China beads. The latter are frequently met with among the natives of Ponapé, Kusaie, and Jaluit. The necklace of native pattern is made of dozens of shell disks, which are strung on threads made of coconut fibres. The colour of these disks is yellow tinged with red, and they are from 10 to 15 mm. in diameter. As is shown in Pl. XXXIV, figs. 2 and 3, there are two different ways of stringing the disks on the thread. As the same plate shows, the pendant obtained from tortoise-shell or more or less large sea-shells is attached to the middle part of the thread to enhance the beauty of the necklace. The method of stringing the shells as illustrated in Pl. XXXIV, fig. 3 may also be observed in the Kingsmill Islands.

¹ W. A. Bryan, "Natural History of Hawaii. Being an Account of the Hawaiian People, the Geology . . .," Honolulu, Hawaii, 1915, p. 38.

In these islands, too, ornaments made of tortoise-shell are also attached to the necklace as pendants.¹ The shell disks shown in Fig. 9 were dug out by our garrison on Ponapé from a tomb at Sapatik in Nanmatal, Ponapé. They were in all probability a part of the necklace with a pendant arranged as in Pl. XXXIV, fig. 2 or Pl. XXXIV, fig. 3. Pl. XXXIV, fig. 4 presents the shell beads strung close together on a string. In such cases, the beads are usually small.

Necklaces of the teeth of mammals, probably dogs or pigs, are also worn, though these are rather rare (Pl. II). Of this kind of necklace in use among the Motu tribe of British New Guinea, W. F. Turner² makes the following interesting remark: "A necklace much worn by young women is one made of pigs' or dogs' teeth strung together.

This necklace is much valued, and a young woman will on no account part with it, as it is given by her lover, and is a pledge of his love, as the engagement ring is with us." I had, however, no opportunity to see whether a similar custom occurs in Truk. But as the island is a small one, there are but few mammals on it, and it would be very difficult to obtain teeth of these mammals. Consequently we saw very few natives wearing these necklaces.

The simplest kinds of ornaments worn round the neck are wreaths formed of leaves or flowers. I saw some natives wearing necklaces made of bract scales of pine-apples strung on threads. Specimens of such necklaces obtained in Kusaie are now kept in



Fig. 9—String of shell disks with a pendant found in a tomb at Sapatik, Nanmatal, Ponapé.

¹ R. Partington, "An Album of the Weapons, Tools, of the Natives of the Pacific Islands," Manchester, 1890, Pl. 170.

² W. F. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 478.

the Anthropological Institute of the Tokyo Imperial University.

Of these necklaces, the varieties made of shells or tortoise-shell are most favoured by the natives. As they are much prized, foreigners import ornaments made in imitation of them, and the natives sometimes wear them, but they can, of course, distinguish between genuine and imitation ornaments.

3. **Breast Ornaments.**—The necklace is not necessarily fixed close to the neck. To make the one described above look more beautiful, it is often let down to the breast. In this case, the necklaces hanging down form breast ornaments. Some natives decorate their breasts with ornaments having a disk-shaped pendant of some 110 mm. in diameter made of tortoise-shell, hanging from the neck (Fig. 10). There are very few islanders who wear them, since they are very difficult to obtain.

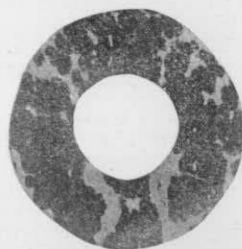


Fig. 10.—Breast-pendant made of tortoise-shell, Truk.

4. **Clothing.**—The manners and customs in the islands have been Europeanized to such an extent that there are scarcely any who do not now wear shirts or trousers. The tendency of Europeanization in clothes is more marked in women than in men. The women, without difference of age, like to wear clothes which are made of white, red, blue or striped cloth and similar in shape to the clothes worn by women in the West. However, we may still observe in the islands natives going with nothing on excepting a loin-cloth. In the island of Saipan, there are not a few women who go half naked (Pl. XXXII). The clothes worn by the islanders of Truk perhaps follow in the order of simplicity. The men and women alike take a rectangular piece of cloth, and making a narrow cut in the middle of the piece, put their heads through the opening and let the cloth fall before and behind the body

(Pl. II; Pl. IV, fig. 2). The cloth is not of any definite length, but it usually reaches to the abdomen. Sometimes the piece is long enough to hang down the legs. It seems that this long piece is used by those who wish to be thought stylish. Besides this, the men wear a loin-cloth, as they do in Japan, while the women cover the waist with cloth of their own weaving or cotton fabric (Pl. IV, fig. 2; Pl. VI, fig. 2). Excepting these kinds of clothing they wear nothing, which may be regarded as covering for the body.

In the island of Truk, the fabric woven of fibres of the banana or hibiscus tree furnishes material for clothing. In using this fabric for the clothes described above two narrow pieces are sewed together. But the use of such material has greatly decreased in recent years. Now most of the islanders wear imported cotton cloth, the colour of which is red, blue, or dark green. There are not a few who wear ready-made clothes bought from Japanese traders.

The women wear a band on their waist-cloth as a sort of decoration. In making this band, hundreds or even thousands of small shell disks or pieces of bark with holes bored through are strung on a string. Several of such strings are, then, laid together and made into a band. This, of course, requires a great deal of labour, and it is one of the most high-priced articles of clothing, so that not every islander can afford to wear these bands for decoration (Pl. XXXII; Pl. XXXIV, figs. 8 and 9). The men also use broad bands strung with coconut rings. Since these bands are worn on the naked body, they are used simply for ornamental purposes, though the bands for women serve the double purpose of ornament and practical use.

We learn from F. J. Moss¹ that customs similar to those

¹ F. J. Moss, "Through Atolls and Islands in the great South Sea," Plate facing page 186.

described above, from the loin-cloth and bands down to ornaments for the ear and neck, are also found in the island of Mokil. But I failed to observe such customs among the settlers at Ponapé whom I studied, for they had already been Europeanized to a large extent. As these same customs are observable in islands hundreds of miles apart, we know from this, that common customs exist in the East Caroline group.

In the island of Ponapé the men wear a covering round the waist on festive occasions or after work. It is made of the split filaments of young coco-tree leaflets, measuring some 53 cm. in length (Fig. 11). This covering looks quite neat, much superior to the coarse one worn by the islanders of the West Caroline group, particularly by the women of Yap. In all the islands these coverings are made by women.

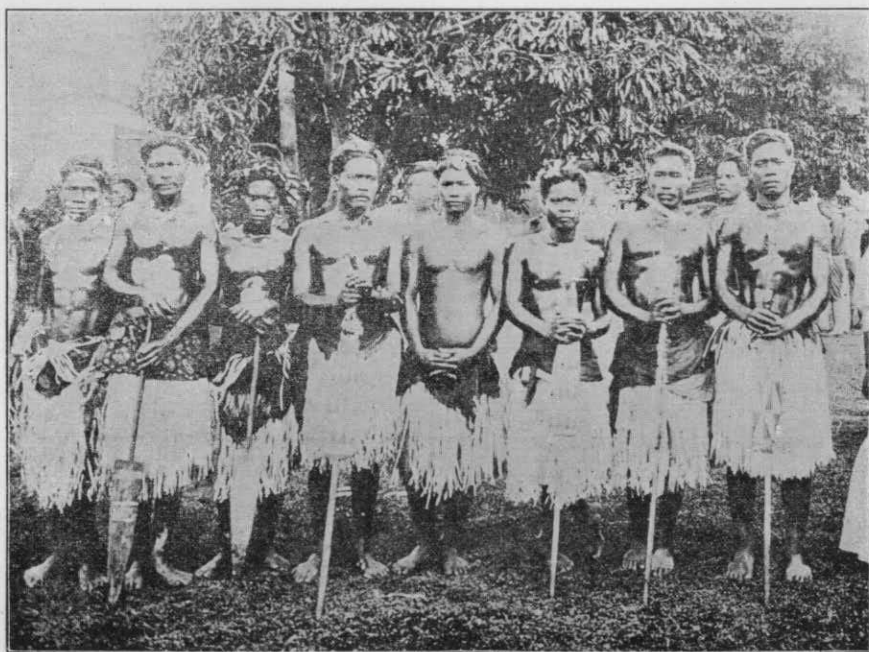


Fig. 11.—Ponapian dancers with dancing-paddles. (Photo. U. Mori.)

The custom of wearing a covering made of the leaves of plants round the waist by men is also found in the Marshall Islands. In Nauru or Pleasant Island, which belongs to the group and is situated south of the Equator, both men and women wear a covering made of the leaves of pandanus. The pattern does not differ with the sex. But the covering used in this island reaches only half down the thighs, and is much shorter than the one worn by the islanders of Majuro.¹

The Marshall Islanders, as is described later on, have the custom of covering the waist with a fine mat plaited from the leaves of pandanus. The men pass a piece of this mat between the thighs and fasten it with a sort of leather belt; while the women take two pieces with which they cover the lower parts of the body before and behind, employing them as a sort of loin-cloth.² Formerly, the women did not cover the upper part of the body but now some of them wear coats imitating the European fashion.

I failed to observe this custom in the islands which I visited. But considering that, in manners and customs, the hidden things, such as the loin-cloth or similar coverings in the case of clothing, and kitchen utensils or the privy in dwellings, do not usually change so rapidly as their external features, it is improbable that the women have cast aside their old custom even to the waist-cloth, even if they have come to wrap themselves in European clothes. Many of the women of Truk, for instance, who take pride in dressing in European style, wear fabric of their own weaving described above, as loin-cloth; so even when these native

¹ P. A. Erdland, "Die Marshall-Insulaner. Leben und Sitte und Religion eines Südseevolkes," Münster i. W., 1914, Taf. 1, 13, 14. F. J. Moss, "Through Atolls and Islands in the great South Sea," p. 136; Pls. facing pages 123 and 136.

² P. A. Erdland, *ibid.*, pp. 23-25; Taf. 5, 6.

women, who have been accustomed to simple clothing, put on European clothes, this is but a fine covering for tatters, so to speak.

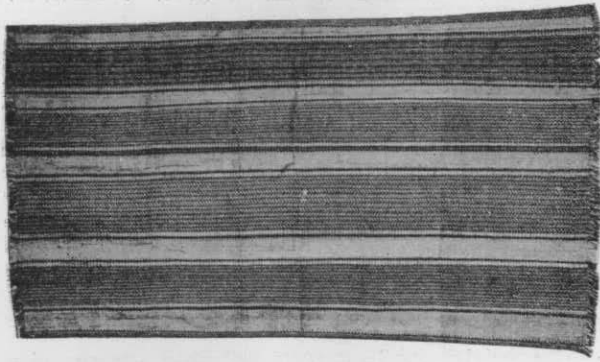


Fig. 12.—Cloth woven from hibiscus fibre, Truk.

The art of weaving is widely known in both the East and West Caroline groups. I have already mentioned the fabrics woven by the women

of Truk. In the islands of Ponapé and Kusaie also, fine fabrics are woven by women. In Truk cloth is made from fibres of the banana or the hibiscus tree. The fabric used as loin-cloth for women is some 60 cm. in breadth, while it is usually some 110 cm. long, the measure required for covering the hips and thighs of women. The cloth has vertical strips woven of the same material which is usually dyed black with the juice of grass (Fig. 12). But

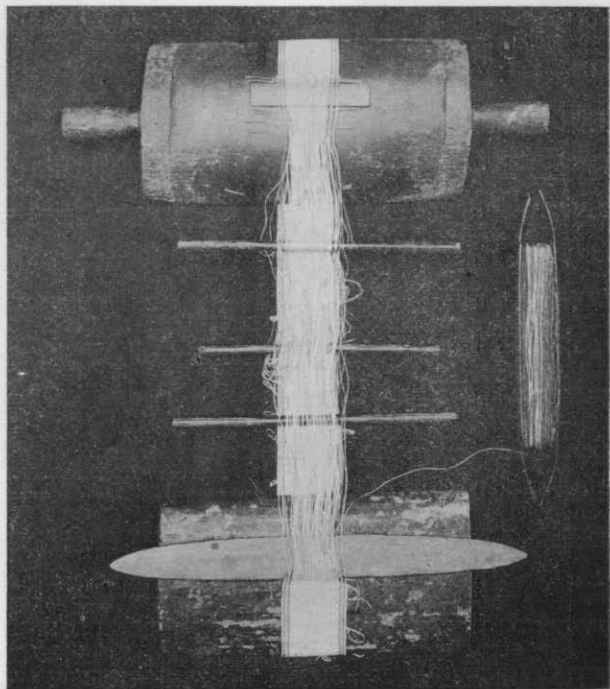


Fig. 13.—Loom, Kusaie.

the fabric used for coats is often plain, and much longer. The islanders sometimes make mosquito nets with several pieces of material woven from fibres of the hibiscus tree.

In Ponapé also, a certain kind of fabric is produced to supply the waist-cloth for women. But in this island the material is obtained from the bark of the ficoid tree which resembles the banyan. This fabric is also used to make the narrow girdle for men. Besides the material from the ficoid tree, the fibre of banana is often employed.¹

The bands woven by the women of Kusaie are of banana fibres. The primitive loom and process of weaving are given in Fig. 13. These bands are about 50 mm. wide and 85 cm. long, having figures woven with threads of various colours, such as red-

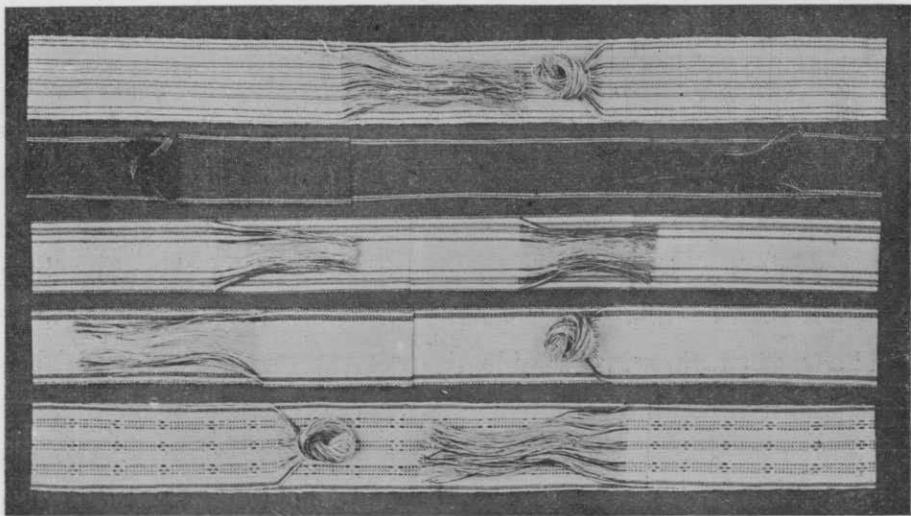


Fig. 14.—Kusaian belts.

brown, yellow, black, rich blue, brown and red (Fig. 14). Of these colours, the rich blue tint is made from the sap of young banana-suckers, the yellow from the root of turmeric, and the black from

¹ F. W. Christian, "The Caroline Islands," pp. 122-124.

burnt candle-nuts, while the red-brown is obtained from the scraped and pounded bark of the mangrove roots.¹ In Hawaii dye-stuffs obtained from leaves, bark and roots of indigenous plants are used for colouring tapas.² Most of the bands were originally worn as ornamental belts, the narrower ones being employed as ribbons for hats, but there are at present scarcely any who use them for these purposes. In recent years, quantities of these bands came to be exported to America and Hawaii, perhaps on account of their quaint originality.

Excepting Micronesia and the Malay Archipelago, there are few islands in the whole South Sea regions where the natives know the art of weaving. In Polynesia they use tapas instead of woven fabrics, while in Melanesia weaving is unknown in the islands with the exception of one or two, such as Santa Cruz (formerly the Banks Islands also) and a part of New Guinea. But then in that part of New Guinea the art is only elemental. The method of weaving recently witnessed by Van der Sande³ in Dutch New Guinea was a very primitive one. "Although until now no weaving industry has been described of New Guinea," he says "still some articles are found,....Nothing is known of any weaving instruments for the manufacture of the cloth; on the other hand it can hardly be imagined that the whole of it can be made by hand. It is rather remarkable that the first real tissues of island make, used for clothing, are met within Papuan Talandjang, the land of the naked Papuans. The only weaving frame, the first mentioned from New Guinea, was met with by the expedition at Tarfia. It is used in the manufacture of brow bands, girdles, armlets, etc., which form the monopoly of this village. In its highly primitive form, it represents the loom in its most primitive

¹ F. W. Christian, "The Caroline Islands," p. 158.

² W. Ellis, "Hawaii," p. 97.

³ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 236, 237; Pl. XXV.

shape, such as was sketched by Buchan, as having served at the first stage of the art of weaving."

Thus the art of weaving is limited to a very few of the South Sea Islands. Even where the art is known it is in most cases in the primitive stage, scarcely capable of producing fabrics fit for clothing. In Micronesia, however, various kinds of fabrics are manufactured for clothing and ornaments. Some of them are woven with quite fine fibres, which shows a more or less high development in weaving. Apart from the skill in the art, the Micronesians resemble the Malay peoples in their knowledge of weaving. And this resemblance may possibly point to the ethnological relationship between them.

5. **Bracelets.**—Though bracelets are worn by both sexes, the custom is now falling into desuetude. It is very rare that ornaments for the wrists are worn, as they are by the West Caroline Islanders. As regards the material for bracelets, the specimens we collected in Truk are all of tortoise-shell. To make a bracelet of this material, tortoise-shell is bent into the shape of a tube, the ends being made to overlap



Fig. 15.—Tortoise-shell bracelet, Truk.

each other, so that the size of the ring may easily be adjusted. The breadth is from 35 to 44 mm. (Fig. 15). Similar varieties of bracelets may be met with in Ponapé. The ornaments for both the right and left wrists do not necessarily agree in size and shape. The varieties worn in the West Caroline Islands are just like the one above described. We are told that bracelets are also made of shells and coconut.

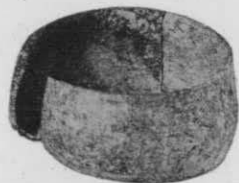


Fig. 16.—Shell ring from a tomb at Panui, Nanmatal, Ponapé.

The shell ring shown in Fig. 16 was discovered by Dr. Hasebe in a tomb at Panui, Nanmatal, Ponapé. It is some 44 mm. broad. Like the bracelet of conus found in New Guinea, it was possibly employed for the same purpose, though it is different from the slender one made of shells worn in the West Caroline Islands. Or it may be that it was an ornament on the ear-lobe, like the ear-ornament which F. J. Moss¹ tells us was worn by a king of the island of Majuro, Marshall Archipelago. It is quite possible that the specimen is a remnant indicating the existence of this custom in Ponapé in the past. The shape and size allow both conjectures.

6. **Finger-rings.**—The islanders have often rings on their fingers. Most of the rings are made of tortoise-shell, and some inlaid with metal, which latter, however, are imported articles or their imitations. They are worn by both sexes, as among civilized races.

The natives do not wear any sort of sandals. Both sexes go bare foot, regardless of age or class, or of how they affect European fashions otherwise.

Chapter II.

Food and Other Articles.

In the tropical zones, the inhabitants live on what edible plants they find, which fact renders life comparatively easy as compared with other regions. We are told that in Ceram Island in the Malay Archipelago a single sago-tree yields enough to feed a man, while the traveller Cook writes that only six bread-fruit trees will

¹ F. J. Moss, "Through Atolls and Islands in the great South Sea," Plate facing page 127.

support a whole family. There are, of course, a number of edible plants in the torrid zones. Limiting ourselves to the islands under Japanese occupation, we may count the coconut, bread-fruit, pineapple, papaya, banana, pandanus, taro, yam, sweet potato, and citrus fruits. The principal articles of food are the bread-fruit, coconut, taro and yam, to which must also be added fish and shell-fish caught in the near seas.

On every island the bread-fruit tree (*Artocarpus incisa*) (Pl. V, fig. 1) and coconut palm (*Cocos nucifera*) are of luxuriant growth, affording important articles of food. But there are not a few islands which are ill-suited to the cultivation of the taro (*Alocasia macrorrhiza*) (Pl. V, fig. 2) and yam (*Dioscorea*) plants, so these vegetables cannot become universal as food.

I. Food.

1. **Cooking and Culinary Utensils.**—The preparation of two or three of the most important articles of food and some of the culinary utensils usually employed among the natives will be noted below.

A. **Cooking.**—The bread-fruit is either roasted or baked. In the former case, fire is first kindled in a hole dug in the ground. Then a number of stones are thrown into the hole; and when these stones get red-hot, the bread-fruit wrapped up in leaves is put among them. The fruit roasted in this way has a light flavour, tasting something like sweet potatoes.

Baking necessitates rather complicated processes. In order to build an earth oven in which the bread-fruit is baked, a hole 1.50 m. in diameter and 30 to 50 cm. in depth is dug in the ground; the bottom is paved with stones, on which branches of the mangrove and other trees are placed as fuel. While this fuel is burning, more stones are thrown into the hole. And when the fire is

burnt out, the stones, which are red-hot, are levelled. Green leaves are laid over the bottom to a depth of 20 cm.; on which the bread-fruit, each cut in eight pieces, is heaped up in a conical shape. It is, in turn, covered with leaves, so that the whole comes to present an appearance suggestive of a thatched roof. Finally, a hole is made on the top of the heap, through which some three quarts of water prepared for the purpose are poured. This causes a tremendous sound, the vapor enveloping everything near. Then the hole is closed and the heap is further covered with new leaves or grass so as to prevent the escape of vapor. After some thirty minutes the leaves are removed and the baked fruit is taken out. The natives sometimes have their bread-fruit baked in common in the same earth oven, in which case they insert leaves of the taro and other plants to make the boundary lines, so to speak, of their respective possessions.

In an earth oven measuring about 1.50 m. in diameter, several hundred pieces of the bread-fruit may be baked at one time, while they could not possibly roast so many by placing the fruit directly on red-hot stones; therefore when they are preparing for feasts, for instance, they find the former method more convenient than the latter. The roasted bread-fruit, however, has the better flavour. This is partly due to the difference in preparation and partly to the circumstance that while only the ripe fruit is roasted the unripe is used for baking.

Before taking the baked fruit home, the natives mash it with a pounder on a wooden board, which has a slight hollow in the middle part, and knead it into flat cakes measuring about 25 cm. in diameter. These are carried home wrapped up in banana leaves (Pl. VI, fig. 2). The cakes thus prepared supply food for several days. But when they eat too many such cakes immediately

after they are made, it causes stomach-ache, so it is usual for them to wait two or three days for the cakes to harden. After several days the cakes turn sour, but they eat them all the same. As to the quantity of food, it is said that two pieces of the bread-fruit a day are enough for one person, though allowance must be made for the difference in the size of the fruit (some people say five, which is perhaps too many). This preparation of bread-fruit is undertaken by men in a shed, a sort of communal kitchen, built in a grove at some distance from the dwellings. We are told that they do this twice a week.

For purposes of baking the islanders have no other device than the earth oven, which they must make use of when they want to prepare not only the bread-fruit but also other articles of food. The processes are pretty much the same throughout the East Caroline and Marshall Islands. A similar way of preparing the bread-fruit also prevails widely in Polynesia and Melanesia.¹

In the extent of its use the coconut surpasses any other fruit in the tropics. Every part of the fruit is valued. The variety used as food is called *kaikai*² coconut by the natives, which name is a combination of English and native words. The Japanese residents in the islands also call the variety by this name. The juice of young coconuts makes an admirable drink, and the albumen, together with the bread-fruit, forms an important article

¹ W. Ellis, "Hawaii," p. 294. G. Turner, "Samoa," p. 111. B. T. Somerville, "Ethnological Notes on New Hebrides," Jour. Anthr. Inst., XXIII, 1894, p. 381. S. J. Gardiner, "The Natives of Rotuma," Jour. Anthr. Inst., XXVII, 1898, p. 422. A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," Jour. Anthr. Inst., XIX, 1890, p. 310. A. C. Hunt, "Ethnographical Notes on the Murray Islands, Torres Straits," Jour. Anthr. Inst., XXVIII, 1899, p. 13. W. Ellis, "Polynesian Researches," 2nd ed., London, 1831, Vol. I, p. 40.

² The word *kaikai* is also used in Torres Straits; and it is said to be an introduced word, being the jargon English for food. See A. C. Haddon, *ibid.*, p. 429. In Hawaii, the natives use *kaikau* (a word of Chinese origin) instead of the native word for eat. See W. Ellis, "Hawaii," p. 392.

of food for the natives. When not yet ripe, the albumen is very soft and pure white in colour. It may be eaten raw, but more frequently it is boiled mixed with rice and other material. To separate the albumen from the shell, the coconut is cut longwise



Fig. 17.—Coconut Scraper, Jaluit.

in four pieces, and the soft substance is scraped, as is shown in Pl. XVII, fig. 2. The scraper, some 85 cm. long and similar in shape throughout the islands, has metal teeth furnished on the head. Girls or women lay this tool on a stock and apply the pieces of coconut to the teeth while holding the instrument fast by the weight of their body. The white substance falls, like sawdust, into a wooden bowl placed beneath as a receptacle. It appears, however, that this method of scraping is a recent invention, since the metal teeth must be imported (Fig. 17). According to Fay-Cooper Cole,¹ a similar device is seen among the Bagabo tribe in Davao District, Mindanao. But here the tool has two legs, so that the stock is perhaps unnecessary. In the Hermit Islands of the Lup Archipelago also, a similar scraper is employed.²

The materials are boiled in an oil can or even in an imported iron pan. But it may be asked what were the utensils employed before the introduction of the vessels above mentioned. In the

¹ Fay-Cooper Cole, "The Wild Tribes of Davao District, Mindanao," p. 78; fig. 25.

² A. Krämer, "Forschungsreise S. M. S. Planet 1906-07, V. Anthropologie und Ethnographie," Berlin, 1909, p. 82.

West Caroline group the natives now have large earthen pots of their own making. It is not certain, however, whether the inhabitants in the East Caroline group know the art of pottery. But since there are many tribes among whom pottery-making is unknown and whose vessels and methods of cooking are as primitive as those now employed among the natives in the Murray Islands in Torres Straits, i.e., clam shells and red-hot stones,¹ it may be supposed that formerly the inhabitants in the East Caroline Islands resorted to such means as mentioned above. The tribes who have no earthen pots naturally depend upon the earth oven already described, as is the case in Polynesia and a part of Melanesia.

The copra, from which oil is obtained and which is exported from the islands, is the albumen of coconuts dried in the sun. The natives also get a colourless, transparent oil from the albumen, which they use for dietary and toilet purposes. In the island of Truk, for instance, the flesh of the nut is cut into small pieces and dried in the sun for a whole day. After this the pieces are wrapped in sheaths of coco-tree leaves and squeezed in the coconut-oil press, which is a simple trifurcated appliance. It is said that in this way they obtain only one pint of oil from ten coconuts. As already described in the paragraphs on personal adornment, the oil is mostly used on the hair or as pigments, though some is eaten with cakes of mashed bread-fruit. Formerly it supplied the material for lighting purposes.

In Jaluit, bread-fruit, pandanus and coconut are often boiled and kneaded into pasty cakes. These cakes last long in spite of the tropical climate. I was told that they have a sweet taste like that of our sweet potato cakes.

¹ A. C. Hunt, "Ethnographical Notes on the Murray Islands, Torres Straits," Jour. Anthr. Inst., XXVIII, 1899, p. 13.

Among other important articles of vegetable food the taro and yam may be mentioned. In most cases, these vegetables are baked in the same manner as the bread-fruit. The raising of the taro requires some care, the women usually attending to its cultivation.

Fish, birds and other game form the supply of animal food, though the first mentioned naturally occupies the most important position. Fish is often eaten raw, but usually it is roasted. The inhabitants of Ponapé, I was told, have a horror of the large species of eel found in the island, which they never venture to eat. They keep pigs, cows, goats, etc.; which they sell to the ships calling at the islands, rarely killing them for their own consumption, except on special occasions, such as ceremonies or feasts. The natives, however, are fond of the flesh of dogs. Coconut crabs or robber crabs are also relished.

B. Culinary Utensils.—Even within the East Caroline Islands some variation in cooking and similar utensils are observed in the different islands, as may be expected. A brief description will be given of some of these utensils.



Fig. 18.—Pounders from Truk (a) and Kusaie (b).

a. Pounders. The pounders, which are shown in Fig. 18, are of such a size and weight as may conveniently be handled in one hand. The points on the top are probably meant for ornament, some of the pounders lacking them entirely. The pounders are usually made of coral, but some made of stone are met with in Kusaie

(Fig. 18, *b*). In point of shape, however, there is not much variation.

Utensils similar to the pounders mentioned above are also found in Polynesia, where they are called poi pounders and are employed for mashing baked taro. There is no uniformity in their size, but it may be said that they are generally of a better make than those found in the Caroline Islands. The mashing utensils which are observed in the Hawaiian and Marquesas Islands resemble most closely the kinds in use in the Caroline Islands.¹ In the Hawaiian Islands, the pestles are made from coral or basalt, as in the Caroline Islands; and as for mashing boards, the islanders have what are called poi-boards, which are made of hard wood and which have a slight hollow in the middle.²

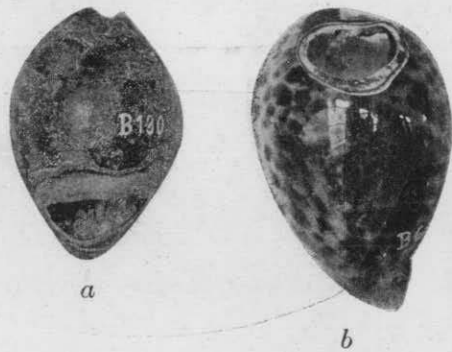


Fig. 19.—Shell scrapers from Ponapé (*a*) and Truk (*b*).

b. Shell Scrapers. Tools obtained from cowry shells are employed in paring the fresh bread-fruit. To make these scrapers, holes are first bored in the dorsal portion of the shell, and then the bored regions are rubbed thin and sharp. These scrapers are found on all the islands. It may be added that in taking the animal out of the shell, sometimes the dorsal portion, sometimes the ventral is injured (Fig. 19).

c. Wooden Knives. The islanders of Truk now employ iron tools of a large size in cutting the taro, bread-fruit, etc., while in Kusaie they make use of wooden knives or swords some 45 cm.

¹ British Museum, "Handbook to the Ethnographical Collections," 1910, p. 147; fig. 129.

² W. A. Bryan, "Natural History of Hawaii," p. 66.



Fig. 20.—Wooden sword, Kusaie.

long. The latter were originally used as a sort of weapon, according to the natives (Fig. 20).

d. *Shell Knives*. Among other culinary utensils edged tools obtained from pearl-shells may be mentioned. These are also very common in the West Caroline Islands.

e. *Wooden Bowls*. When the natives prepare the bread-fruit which has been already baked, they have by their side wooden

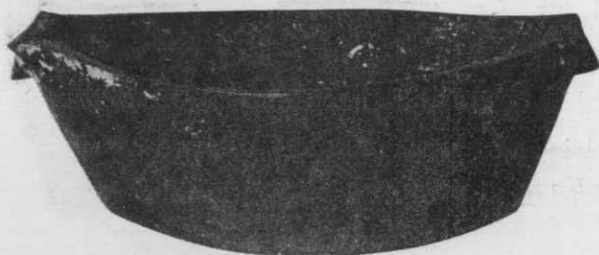


Fig. 21.—Wooden bowl, Truk.

bowls as receptacles (Fig. 21). In this custom, however, there is no absolute agreement. Neither are these vessels or other utensils employed ex-

clusively for the preparation of bread-fruit. They are not infrequently used in dressing the taro. The islanders of Truk have



Fig. 22.—Wooden bowl, Truk.

large bowls, obtained by carving the wood of the bread-fruit tree. One of them which we brought back from the island (Fig. 22)

was found to measure 77 cm. long, 51 cm. wide and 31 cm. deep, but others are even of a larger size. At feasts, balls of mashed bread-fruit are served in these vessels, and each family owns one or more of them, which are regarded as treasures.

2. **Method of Fire-making.**—It is a common observation that there is no tribe of men to whom fire is unknown. There are, however, different ways of making fire, and the difficulty attending primitive ways is so great that the original method of kindling fire naturally begins to disappear with the introduction from civilized people of a more convenient way of attaining the object. The islanders of Micronesia now use imported matches, which they were eager to obtain from us during our cruise, this fact may be taken as indicating the difficulty of fire-making in former times. In Truk, a flame was formerly produced by rubbing together pieces of wood called *umukan* by the natives, this method is similar to that prevailing in some parts of Polynesia.¹

3. **Preservation of Food.**—Uncivilized tribes living on what they find will face starvation much oftener than civilized men on the visitation of calamities. So it is only natural that they should be most anxious about the supply of food. In tropical regions, there are frequent storms or cyclones, which do much damage to edible plants. Some years ago, a terrible cyclone visited Saipan blowing down trees and houses and even causing loss of life. When we visited the island, it had not yet completely recovered from the damage, which showed how furious the storm had been. Apart from such calamities, the people have to provide for a fruitless season. It is, therefore, nothing strange that they store quantities of bread-fruit under the ground in order to provide against hard times.

For burying the bread-fruit, a hole some 1.50 m. in diameter

¹ W. Hough, "The Methods of Fire-making," Smithsonian Report, 1890, p. 400.

and 1.20 m. in depth is first dug in the ground, and then grass, or leaves of the coconut tree and the banana are laid some 1.00 m. thick. On this, pieces of the bread-fruit (one bread-fruit is cut lengthwise into four pieces, which are, in turn, cut crosswise into two each) are heaped up to a height of about 30 cm. above ground. This heap is again covered with banana leaves and coco-tree leaves. In two or three days the materials in the hole sink in bulk, producing a hollow on the surface. Fresh pieces of the bread-fruit are added and then covered again with banana leaves, etc. Finally, the hole is carefully covered with stones (Pl. VI, fig. 3 and Pl. XIII, fig. 1). Bread-fruit stored in this way is said to keep several years. This custom of preserving the bread-fruit under ground is also found in Samoa and other Polynesian regions.¹

The above is a description of the method of food preservation in Truk, but in a part of Ponapé a method somewhat different is met with. Here a quantity of bread-fruit is put in a net and carried into the sea, where it is beaten with a rod, until with the absorption of water the fruit sinks below the surface. Then it is brought back and buried in a hole dug inside the house. In a few days the buried fruit is dug out, kneaded and put back into the hole again. This process is repeated, several times, so this method is not so simple as the one described above.

4. **Transportation of Food.**—Sometimes bread-fruit and coconuts are put into simple baskets and carried on the shoulder by means of a pole. Sometimes the bread-fruit is fastened together with the bark of the hibiscus and tied to both ends of a pole, which pole again rests on the shoulder, as it is the custom in Japan. Fifteen or sixteen is the usual number of the bread-fruit tied to either end of the pole (Pl. VI, fig. 3). The coconut palm

¹ G. Turner, "Samoa," p. 107. W. Ellis, "Polynesian Researches," Vol. I, p. 42.

reaches dozens of feet in height. As it has no branches like the bread-fruit tree it is rather difficult to climb. To supply a foothold cuts are made on the trunk, like steps on a staircase. On all the islands coconut palms are treated in the same way (Pl. XXVIII, fig. 1). It is evident from this that collecting coconuts is the work of men. Also, the transportation and preparation of the bread-fruit are usually done by men. It may be that women carry the taro, bread-fruit, etc., which are already prepared, such as bread-fruit cakes. At least we often saw women going home carrying them on the head (Pl. VI, fig. 2).

II. DRINKS.

Among the articles of food and drink in our newly occupied islands, fresh water is perhaps the most difficult to obtain. Ponapé, however, has small streams of fresh water, so the natives on this island do not suffer much from want of drinking water; but the inhabitants in the Marshall Islands which consist largely of atolls experience much difficulty in getting fresh water. Not only in the Marshall Islands but also in Ponapé rain-water collected from coconut palms or roofs is preserved for drinking purposes. In a part of Jabor, Jaluit, there are lagoons from which, according to A. Agassiz,¹ the natives obtain a large amount of their water supply. He writes: "Immediately back of Jabor are two fresh-water lagoons, or rather brackish lagoons, formed by the throwing up on the lagoon face of low beaches, and thus isolated from the inroads, both of the water of the lagoon and of the sea. They rise and fall with the action of the tides, showing how loose or porous the dam of the narrow land rim is. These sinks supply a large amount of the

¹ A. Agassiz, "The Coral reefs of the Tropical Pacific," *Memoirs of the Museum of Comparative Zoology at Harvard College*, XXVIII, 1903, p. 284.

water used by the natives." He further says that there is one of the prettiest sinks on Enübor, an island to the north of Jabor, to which, however, I had no opportunity to make a personal visit.

On all the islands coconut shells are employed as vessels for preserving water. Besides these, gourds are also used in Ponapé and Jaluit. The former have holes bored around the mouth, so that they may be hung by strings of coconut fibre passed through these holes; while the latter are put in a net of thread, so as to be suspended indoors.

Besides fresh water, the juice of coconuts must be mentioned. The milk obtained from young coconuts has a light, sweet taste, and furnishes a refreshing drink in the tropics, especially in small islands where the supply of fresh water is scanty. In the Manihiki Islands (Polynesia) native medicine men are said to give this juice to those suffering from headache.¹

III. TOBACCO AND LIQUORS.

The natives use tobacco and several kinds of liquors. Both sexes smoke tobacco; and it was rather surprising that boys and girls some seven or eight years of age were very glad to receive tobacco from us and smoke it. Even chewing tobacco is now imported from America. Under German rule drinking was strictly prohibited with the result that the natives are now temperate, though they are naturally fond of liquor. They know the art of making a beverage from the inflorescence of coconuts; but it seems that this custom is rather limited, since the destruction of inflorescences affects the yield of the fruit. They have another native drink called kava or ava.

Kava. Kava drinking is found in different parts of Polynesia

¹ G. Turner, "Samoa," p. 276.

and Melanesia, i.e., New Guinea (Dutch portion excepted), Banks Islands, New Hebrides and Fiji Islands. In Samoa old people believe that a little kava strengthens them and prolongs life.¹ Kava is a Polynesian word. The drink is obtained from the root of a plant called *Piper methysticum*, which grows wild in Ponapé and Kusaie, particularly in the former. In Ponapé it is called *chakau* or *choko*, but *seka* in Kusaie. It is doubtful whether *seka* is cognate with the Japanese *saké* or liquor, though F. W. Christian institutes a comparison between the two words. There are different ways of making the beverage, even in Polynesia. The islanders of Ponapé crush the roots between pieces of stone. In Kusaie, too, the roots are pounded on stone. In connection with kava making there are often ceremonies held, of which Christian gives a minute description.²

In the East Caroline and Marshall Islands I did not see betel-nut chewing which, however, I observed in the West Caroline group. I was told that betel-nut trees are plentiful in Ponapé and Kusaie, while kava making, it is said, is unknown in the West Caroline Islands. This seems to imply that betel-nut chewing and kava drinking are not found together. In the vicinity of the islands under Japanese occupation, the custom of chewing betel-nut is met with in the Malay Archipelago, a part of Melanesia, i.e., Admiralty Islands, New Guinea, and Solomon Islands; while kava making is common in Polynesia and some parts of Melanesia, as above noted. And even in New Guinea where the two customs prevail, the natives, it seems, do not indulge in both betel-nut chewing and kava drinking. "It seems highly probable" observes Christian on this subject "that kava drinking was a logical deve-

¹ G. Turner, "Samoa," p. 114.

² F. W. Christian, "The Caroline Islands," pp. 188, 190.

lopment of betel-nut chewing; the betel-nut kernel itself, even when mixed with the *chunum* or lime, being a somewhat inert substance."¹ If one is a natural development of the other, it is reasonable to suppose that the two do not exist together.

Chapter III.

Dwellings and Household Utensils.

There is no uniformity in skill in the construction of dwellings in the East Caroline and Marshall Islands. The houses of the Truk islanders, like their clothing, are the most primitive. In this chapter, separate treatment will be given to each island.

I. TRUK.

1. **Dwellings.**—The houses are rectangular in the ground-plan, the size being usually 4 by 7 m. The four poles, one at each corner, are mostly trunks of bread-fruit trees driven into the ground. Trunks forming the shape of the letter Y are chosen for this purpose, so as to afford support for cross-beams. The timbers employed, from the ridge-timber to cross-beams, are usually minor trunks of bread-fruit trees. Ropes of coconut fibre are used instead of nails. The roof, of which the ridge-timber and the eaves are parallel and of the same length, is thatched with leaves of the ivory-nut tree (*Coelococcus carolinensis*), the caves hanging down to about 90 cm. above ground. The sides are also covered with leaves of the same tree. The entrance is provided

¹ F. W. Christian, "The Caroline Islands," p. 189.

at the corner in most cases, regardless of the direction it faces. It is often 60 cm. in width and 90 cm. in height; but as it is sometimes smaller, the dwellers are unable to go in and out except by creeping. There are no windows and moreover, the roof is so low that without stooping they cannot go about the house except in the middle part of it. The inside is dark and gloomy. Some houses are in no particular need of an entrance, because they can be entered from all sides. In any case, the houses have no raised floor. The ground is simply covered with pandanus or coco-tree leaves and then mats are laid, on which the family sleep. It is terribly dirty inside the house, since they do not mind keeping dogs and pigs in the same dwelling (Pl. VII).

The house consists of only one room, in which sundry things are done, from simple cooking to sleeping. In most cases, however, a special section in the room is set apart for couples. To provide such a section at one end of the room, a number of stems of the hibiscus

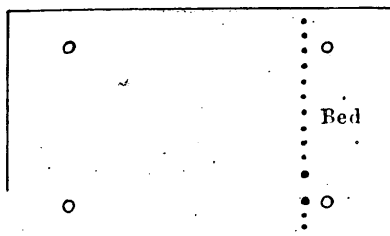


Fig. 23.—Ground-plan of a dwelling in Truk.

stripped of the bark are driven into the ground leaving an interval of 5 to 10 cm. between them. The space thus enclosed is from about 6 to 8 square metres. An opening is also left to serve as an entrance (Fig. 23).

Though this barrier of hibiscus stems is so simple, it is perhaps necessary for the sake of decency, for the Truk islanders are said to be particularly loose in morals. It serves at least, to ward off intruders. The one room house provided with such a barrier may be regarded as the beginning of houses with more than one room. There are often three such divisions in a house, which means at

least three couples living together. It is usual in Truk, as evidenced by this fact, that two or three families live together in a house, the inmates often numbering more than ten.

Mosquito-nets. Only couples use mosquito-nets, though it is said that these are not intended primarily for keeping off gnats. Some of the islanders now employ imported nets with comparatively large meshes like those found in Japan, but nets of hibiscus cloth, of which they make their clothing, are used in most cases. These nets present the appearance of large sacks hung upside-down. It is stated that this comes from the requirements of decency, since the natives sleep with no clothing on. According to Christian,¹ however, a cloth woven from the bark of ficoid trees allied to the banyan was formerly in use in Ponapé, so the original object of such nets was possibly to keep off gnats. In Samoa, too, the inhabitants use tapa, of which their clothes are made, as a protection against mosquitoes, besides employing it as a curtain. The size of the latter is 5 ft. high, 8 ft. long, and 5 ft. wide.² The custom of lying naked also exists among the Igorot tribe in Luzon. "All Igorot men, women, and children," says A. E. Jenks, "sleep without breech-cloth, shirt or jacket. If a woman owns a blanket she uses it as a covering when the nights are cold."³

Lights. In Truk we find foreign-made lamps, and petroleum is the oil used. Formerly, we were told, coconut shells and a certain oil obtained from the nuts were employed, coconut fibres supplying the wicks. The same custom is found in Polynesia.⁴ In Palau the islanders use earthen lamps. For particulars the readers are referred to the section for the West Caroline Islands.

¹ F. W. Christian, "The Caroline Islands," p. 128.

² G. Turner, "Samoa," p. 155.

³ A. E. Jenks, "The Bontoc Igorot," Department of the Interior Ethnological Survey Publication, Vol. I, Manila, 1905, p. 113.

⁴ J. Deniker, "The Races of Man," p. 169.

Utensils are either hung from rafters or placed on two horizontal poles or boards supported by beams and cross-beams.

2. **Kitchen-sheds.**—The preparation of small quantities of food, the cooking, for instance, of two or three bread-fruit, is, of course, done inside the house; but large quantities are prepared in a separate shed built for communal use. This kitchen-shed resembles the ordinary house, except that the former has no walls and is of much ruder structure than the latter. In Truk such kitchen-sheds are built, in most cases, at some distance from the dwellings, not making part of the house, as ordinary kitchens do.

In Truk, the houses are scattered here and there in a coconut grove or a thick wood of bread-fruit trees, not forming a regular village as in other islands.

3. **Canoe Houses.**—Regarding the primitive architecture in Truk, the building known as the canoe-house is worth describing. This is a house built on a large scale, often on a creek wooded with mangrove trees. As the name indicates, it shelters under its roof two or three large canoes of communal ownership. It serves also as a sort of meeting-place (called *ut* by the natives), for the young men who live together in this building. It covers as many as 80 square metres. It has a high roof with naturally large and strong timbers, presenting a great contrast to an ordinary dwelling. From this it would appear that the islanders of Truk are not necessarily backward in the art of building, but it must be noted that the canoe-house in the above island, which lacks carvings or ornaments on the timbers, compares unfavourably with the club-houses in the West Caroline Islands which possess a peculiar grandeur of their own (Pl. VIII, fig. 2; Pl. XXIII, fig. 1; Pl. XXIX).

As will be described in the next section, there are canoe-houses also in Yap and Palau. In these islands, however, they are in-

tended exclusively as shelter for canoes, there being large separate buildings provided as meeting-places for young men. Therefore, canoe-houses in the case of Yap and Palau are different from those in Truk, where they are intended for a double purpose as above noted. In former days, however, families took shelter in these buildings when danger threatened. We were told that there are also houses on hill tops, which are used as meeting-places. Not only Truk but Ponapé possesses such communal buildings where the natives hold frequent meetings. It is not likely, however, that in Ponapé they are houses for young men, though this is the case in the West Caroline group.

II. PONAPE.

The dwellings of the natives in Jokaj, Ponapé, who are settlers from Mokil and Pingelap, are extremely primitive in structure, though these are furnished with floors, which is not the case with the houses in Truk. The floors, raised from 75 to 90 cm. above ground, are made up of dozens of trunks of trees. On these floors mats are laid. The roofs are thatched with leaves of coco-nut trees or ivory-nut trees. It is dusky inside, since the caves hang very low. The houses consist of only one room, 5 by 3 m. in size. The dwellings of settlers from Pingelap are built more or less in a cluster and along a road; they form a regular village, as travellers can see even from the other side of the lagoon (Pl. XIV).

The settlers from the two islands mentioned above employ brooms made of leafstalks of coco-nut tree some 50 cm. long. Such brooms are also said to be in use among the other inhabitants.

III. KUSAIE.

In Kusaie some houses are built directly on the ground, others on pieces of stone piled up. In either case the dwellings have the floor raised sometimes over 60 cm. above ground. The roof is thatched with coco-tree leaves, as in other islands. The walls consist either of ordinary boards or of thin pieces some 30 cm. long and 6 cm. broad and held fast with cords. Some houses are provided with shutters made of the same material, and even with verandas. In comparison with the dwellings already described, these houses, most of which are of box-like shape, present a great improvement, showing evident traces of European influence. Almost every house has its kitchen, which is a separate shed built close by. Probably this kitchen-shed still preserves its native style without undergoing modification, due to outside influence. As compared with the dwellings, the sheds are, of course, more roughly built and have no flooring. But as regards size they are in some instances much larger than the dwellings (Pl. XV, fig. 2; Pl. XVI, fig. 1).

In Lele we were told that there were seventeen native houses with a population of 220. This averages thirteen persons per house. But it is highly doubtful whether each house can accommodate this number, considering the size of the dwelling, which is generally small. Neither did we observe so many living together in one house. The houses, however, form a village, since they are found in a connected series. The custom of building houses on a sort of stone platform as observed in Kusaie is also met with in Ponapé in dwellings of the purely native style. Among the West Caroline Islands Yap has also the same custom.

IV. JALUIT.

The dwellings in Jaluit are also extremely primitive, the structure being more or less identical with that of the houses in Truk. The roofs are covered with pandanus or coco-tree leaves, and the walls also with the same material. When the natives fasten the walls with cords of coconut fibre they use needles obtained from the jaw-bone of porpoise, so that the cords may be easily passed through the leaves (Fig. 24, *b*). The size of the houses is usually about 4 by 6 m., but some of the smaller ones are scarcely 2 by 2 m. The roofs of such houses are necessarily low, though not to the extent that the dwellers are unable to walk upright. The entrance, which is in most cases provided in the middle of the wall, has often a height of 1.20 m. The house consists of only one room, the preparation of food being usually done outside the dwelling.

It seems that the buildings in Jaluit have lost much of the native element on account of Western influence. Now wooden boards form part of the wall in some cases, and even windows are made, thus the native custom is undergoing a change in architecture as in clothing. So we find houses with floors of wooden boards. It is more usual in Jaluit, however, that the ground inside the building is first covered with gravel-like pieces of coral from the coral reefs, then mats are laid, on which the dwellers sleep. In some cases there is no matting covering the ground (Pl. XIX, fig. 2).

Matting. There are two or three kinds of mats,

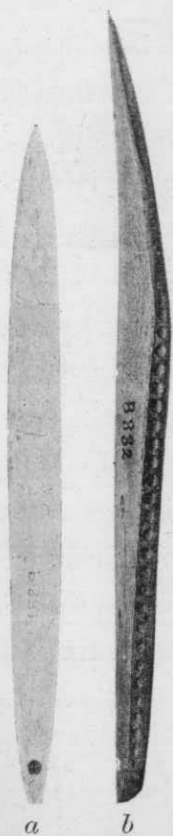


Fig. 24.—Matting-needle (*a*) and thatching-needle (*b*), Jaluit.

of which the most beautiful is the one braided of pandanus leaves. The mats have various patterns of coloured materials braided in them. Sometimes red worsted is used. The size of the mat shown in Pl. XXXIV, fig. 10, is 73 cm. square, but there are, of course, various sizes. In making mats bone needles with eyes are used for facilitating the passage of threads or strings (Fig. 24, *a*). These mats are also found in Kusaie, though it is probable that they are imported from the Marshall Islands. As stated in the first section, they form the material for clothing (loin-cloth for both men and women) in the same islands. According to Christian,¹ needles obtained from bone or shells are also employed in Ponapé in braiding mats and thatching the roof. These needles were also formerly used in making mat-sails, but he does not give any information about the shape, etc. Both in Jaluit and Ponapé mats are made by women.

In Jaluit, if we walk about the village in the evening, we see people putting out their heads from the side of the house which faces the road and talking intimately with those lying close to the wall on the ground outside. This naturally strikes us as an extraordinary sight, but it is certainly not much different to holding a conversation through an open window.

Jabor in Jaluit has one of the best harbours in the Marshall Islands, and the native houses are built together forming a village, unlike the custom prevailing in the other islands. Half of these houses stand facing the lagoon.

¹ F. W. Christian, "The Caroline Islands," p. 132.

Chapter IV.

Navigation and Fishing.

I. NAVIGATION.

Skill in the art of navigation is of extreme importance to dwellers on the small islands scattered over the ocean. For crossing the sea they possess no other means than canoes or rafts, the contrivance or construction of which naturally claims their closest attention. Now the islanders of the Caroline and the Marshall group, particularly the latter, are skilful in the building and management of canoes. Not only so, but they also are skilful in the art of making their own charts, by which they know the position of each of the small islands.

1. **Canoes.**—The canoes built by the islanders differ, of course, in size, according to requirement. The types employed in fishing along the coast are rather small; while the “war canoes” or those intended for distant waters are solidly built and of considerable size, capable of carrying dozens of persons. The shape of the canoes is more or less different in the different islands, though the general plan of construction is identical. In the East Caroline Islands, particularly in Truk, the part forming the bottom consists of a hollowed trunk of the bread-fruit tree, while the sides are built of boards which are fastened in place with cords of coconut fibre. Special precaution is taken to prevent leaking. The general form of the canoe is extremely long, and it is sharp at both ends which rise several feet forming the projecting prow and stern. Both the prow and the stern are of the same shape and are, in the larger canoes, very frequently fitted with carved ornaments on the top (Pl. VIII, fig. 2). The sides of the

canoe are painted red, black or in some other colour. Two thwart-poles project horizontally from one side and are fixed to a ship-shaped outrigger of light wood, which is sharp at both ends and fitted parallel to the length of the canoe. The larger type of outrigger measures about one-third of the whole length of the boat. Thwart-poles are of various length, from several to more than ten feet, according to the size of the canoe. These poles are fitted into a pair of V-shaped wooden props on the outrigger and are held fast by means of coconut cords. The whole appliance is to prevent the canoe from upsetting. In sailing the outrigger is always placed to windward, while in rowing it is usually

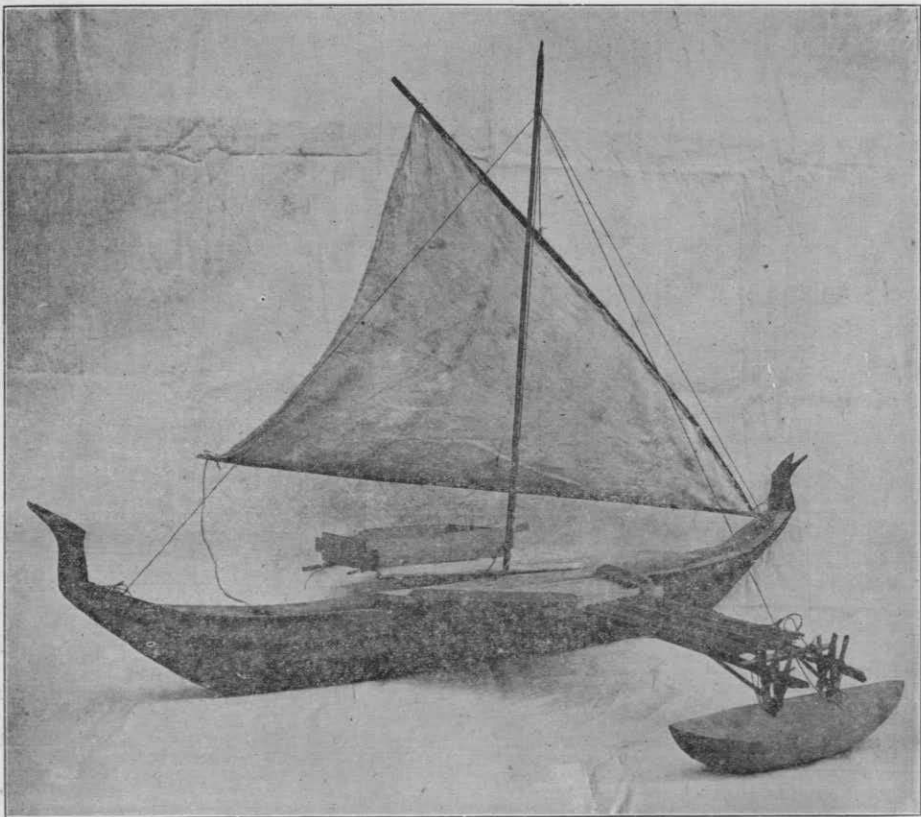


FIG. 25.—Model of canoe, Ponapé.

put to leeward. But in the sailing type of canoe, the outrigger is also to windward even though the paddle may be used on account of the calm. This is general throughout Micronesia, and we find the same manner of building in our Bonin Islands. In Torres Straits and Mindanao outriggers are often fitted to both sides. In a more or less large sailing type of canoe, a sort of platform which consists of several pieces of boards placed on two thwart-poles is provided, sometimes on one side and sometimes on both, in order to carry goods.

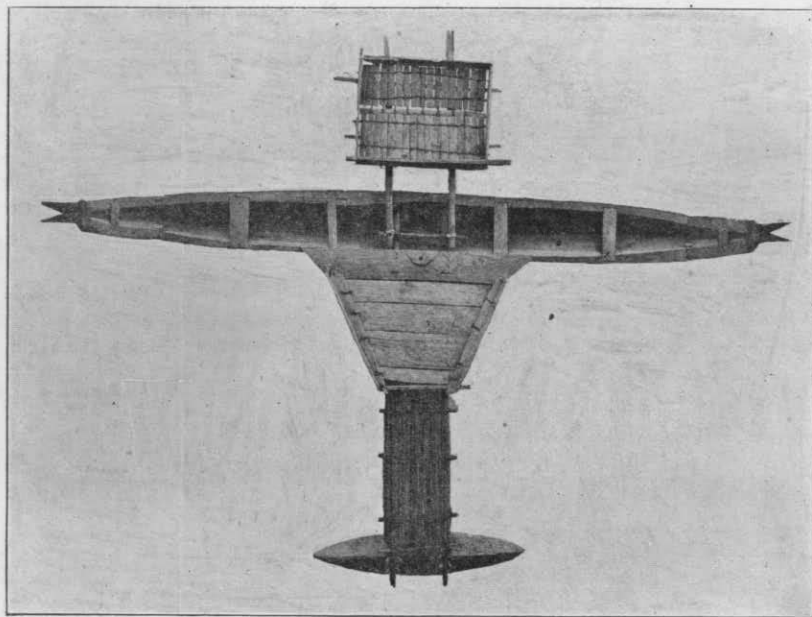


Fig. 26.—The same model as seen from above.

The rowing types of canoes are propelled by paddles with rounded blades, while others are driven by sails. In the latter case, a triangular sail is hoisted on the mast erected in the middle of the boat and made secure by means of coconut ropes fastened at the top of it. The sail is now made of white cotton fabric, though a rough sort of matting was formerly used for the purpose.

This triangular sail is extended by poles thrust along the edges of its sides and is manipulated by means of a rope tied to one of its corners. When sails cannot be used owing to lack of wind, paddles are, of course, employed even in the sailing type of canoe (Figs. 25 and 26).

The natives of the Marshall Islands, who are said to be good navigators sailing far out into the sea, are naturally skilful in the art of building canoes. The ships of the Marshall Islanders, unlike those of Truk, lack sharp projections at both ends. In the general plan of construction there is no difference, since their canoes are also simply trunks of the bread-fruit tree hollowed out, supplemented with boards forming the upper part of the sides. In the Marshall Islands, however, the length of the outrigger is practically the same as that of the canoe itself, the number of thwart-poles being usually four or six, while the mast is comparatively high with a large mat-sail (Pl. XIX, fig. 1). Readers are referred to Dr. A. Krämer,¹ who gives a detailed description of ships in the Marshall Islands.

Sharp tools resembling chisels obtained from sea-shells, mentioned in another section of this paper, were formerly used in building canoes and this, of course, at the cost of a considerable amount of time and labour. Even at present, with the use of iron implements, the construction of a canoe is no easy work for the islanders, often requiring more than twelve months (Pl. XVI, fig. 2).

Prow Ornaments. As already stated, carved ornaments are affixed to the prow and stern of canoes. These ornaments are 38 cm. in length and 54 cm. in the widest point, and of the shape shown in Fig. 27, and are coloured white, black, red, etc. The

¹ A. Krämer, "Der Haus- und Bootbau auf den Marshallinseln," Archiv f. Anthr. N. F. III, 1905, pp. 229-309.

vertical groove in the middle is painted red ; while the other parts are either white or black, more particularly the part in relief is painted black and the part cut in, white. This can be distinguished in photographs. The ornament is flat-shaped, with absolutely the same figures on both sides. It is fixed to the prow and stern by means of ropes passed through a hole made in its lower part. The prow and stern, which project several feet, are rendered still more remarkable by the addition of such ornaments (Pl. VIII, fig. 2).

It may here be asked what is represented by the carved figures. It seems to me that they indicate two birds facing each other with their bills close together, the long part extending right and left, probably showing their tails. The birds represented are probably a kind allied to the Japanese wagtail.



Fig. 27.—Prow ornament, Truk.

The writer was unable to determine this question while in the islands. He was informed that the natives could tell by the ornaments where the canoes come from. It is likely that among different islands in Truk there exist some variations in the pattern of the figures, but not sufficient to regard the figures as the symbol of a particular island or community. These particular figures, of course, serve to indicate the island to which a canoe belongs, there must, however, be some reason deciding the selection of these figures. The figures of birds are, in my opinion, intended, at least partly, as a sort of charm, originally adopted from association with particular birds ; for it is natural for the islanders to desire to sail safely and swiftly over the sea, as the birds fly over the islands dotted on the ocean. This, however,

does not preclude the idea of ornament. J. S. Kubary¹ thinks that the carved figures represent two swallows. He says: "Die Bugverzierung ist von der auf Taf. IX Fig. 6 abgebildeten Form und stellt zwei Seeschwalben vor. Die Eingeborenen achten auf das Vorhandensein dieses Stückes am Buge sehr und wird solches vor dem jedesmaligen Herablassen des Kanoes ins Wasser befestigt." Thus, the carved ornaments act as charm against shipwreck, etc.

A custom similar to the one above described is also found in British New Guinea. Among the natives of Murua in the southeastern part of British New Guinea, carved ornaments fixed to canoes are, according to C. G. Seligmann,² of the figure of a reef heron, cockatoo, cock, fish or shell. In connection with the superstition of the natives about the figures, he mentions the following interesting story: "Captain Barton told me that, when at Misima in the Luisiade Archipelago, he met with three or four Murua canoes bearing *munkuris* carvings. He tried to buy one of these and offered a large price for it, but the crew of the canoe, although obviously anxious to sell the carving, said that they could not do this as there was none who could carve another that might serve as substitute, and without the *munkuris* (canoe ornament) they might experience all sorts of difficulties during their return voyage to Murua." With regard to the object of these ornaments, the same writer states: "In conclusion, I may point out that although the reef heron and the cockatoo are both totem birds, there is no evidence that *makarakea* (tern) is a totem, and It would appear, therefore, that at the present day the magical efficacy of these carvings is not attributed directly to the influence as totems

¹ J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," Leiden, 1889-1895, p. 53.

² C. G. Seligmann, "A Type of Canoe Ornament with Magical Significance from South-eastern British New Guinea," *Man*, IX, 1909, 16 and Pl. C.

of the birds represented upon them and perhaps the predominance of the reef heron is to be explained by the ease with which this bird skims over the crest of the waves." It is evident, as the above quotation shows, that the carvings are a sort of charm.

In Rubiana (New Georgia), one of the Solomon Islands, the canoe charm, according to H. Balfour,¹ represents a frigate bird and its head not infrequently assumes the form of a human head. "I give here (Fig. 25)," he says "a sketch of one of the wooden 'gods,' which are nearly always affixed to the stems of the sea-going Solomon Islands canoes, as charms against bad weather. The carving represents a grotesque head and the arms of a human figure, and it will be at once noticed that, seen in profile, it exhibits this unnatural prognathism in a marked degree. Now in constant association with these human-form designs, and especially so on the decorated canoes of these islands, we find representations, more or less conventionalized, of the frigate bird which is held sacred by the natives, and which is the subject for ornament most commonly met with throughout the group." Concerning these human form designs, B. T. Somerville² also observes: "On the top of the prows of the war canoes there is usually a carved figure, the commonest being a '*Késoko*'..... Low down on the prow above the water line the head and shoulders of a '*debble-debbleum*' (called *Totoishu*) is suspended; it is so placed as to dip in the water in front of the canoe. The function of this *Totoishu* is to keep off the *Késoko*, or water fiends, which might otherwise cause the winds and waves to upset the canoe, so that they might fall on and devour its crew." This writer further observes that canoes of a smaller size are often decorated with carvings

¹ H. Balfour, "The Evolution of Decorative Art," London, 1893, pp. 63, 69.

² B. T. Somerville, "Ethnographical Notes in New Georgia, Solomon Islands," Jour. Anthr. Inst., XXVI, 1897, p. 371 and Fig. on p. 372.

representing cockatoos. It is increasingly evident from these quotations that the prow ornaments are intended as charms for ensuring the safety of a voyage, etc. Further, it is of extreme interest to see that even the human-like representations on the prow may be traced in their development back to the figures of birds.

The custom of ornamenting the prow with carved figures of birds is, of course, found in many other islands. A model of the canoe of the Moro tribe in Mindanao, which is preserved in the Anthropological Institute of the Tokyo Imperial University, has a blue-painted carving of a bird affixed to the prow. According to A. C. Haddon,¹ the natives of Teste, a small island situated south-east of New Guinea (Teste with the neighbouring islands form the Massim District), adorn the prow with wooden carvings representing in all probability the frigate bird. Again, O. Finch² writes that similar ornaments of birds are found in Trabriand, another island of the Massim District. Further, this custom may be met with not only in British New Guinea but also in the Dutch portion of the island. According to Van der Sande³ and K. Th. Preuss,⁴ the natives on the northern coast of Dutch New Guinea ornament the prows of their canoes with bird-figures and other representations. In his recent paper, C. G. Seligmann⁵ describes the bird-figure prow ornaments from Humboldt Bay, Dutch New Guinea; he compares them with similar ornaments from British New Guinea, pointing out their mutual relationship. We find also the

¹ A. C. Haddon, "The Decorative Art of British New Guinea," 1894, p. 197; Pl. XII, fig. 185.

² O. Finch, "Ethnologischer Atlas. Typen aus der Steinzeit Neu-Guineas," Leipzig, 1888, p. 27; Taf. VII, fig. 6.

³ G. A. J. Van der Sande, "Nova Guinea, III. Ethn. and Anthr.," p. 208; Pls. XXII, XXIII.

⁴ K. Th. Preuss, "Künstlerische Darstellungen aus dem Deutsch-Holländischen Grenzgebiet in Neu-Guinea," Intern. Arch. f. Ethn., XII, 1899, p. 169; Taf. V.

⁵ C. G. Seligmann, "Canoe Prow Ornaments from Netherlands New Guinea," *Man*, XVII, 1917, 30 and Pl. C.

proW ornaments in New Guinea illustrated in Partington's Album.¹ The custom is also met with in the New Hebrides. We learn from B. T. Somerville² that in Malekula (Mallicollo?), an island of the New Hebrides, larger types of canoes always have coloured carvings on the prow representing the head and breast of sea-birds. The meaning of these ornaments in the different islands or localities is not expressly stated in every instance, yet it is sufficiently evident, as the writings of Seligmann, Balfour and Somerville show, that they are all of them intended as a charm to avert evils or disasters on the sea.

We now turn from the consideration of canoes in the South Sea Islands to ships of civilized peoples. Of those constructed in Japan, the historic *Atake Maru*, for instance, had a dragon-head figure on the prow, while the *Kujaku Maru* built by the feudal lord of Kishu bore the figure of a pea-cock. Here, of course, these figures are ornamental in their primary intention, yet it is most probable that they are a development, whether direct or indirect, from the "dragon-head and *i*-head"³ ships of the Chinese. The *i* or *yih* is an aquatic bird like the heron, and the figure of this bird has most frequently been chosen as the ornament for prows. But there is scarcely any doubt that it was originally meant for a charm, as in the South Sea Islands. The figure-head of modern vessels of Western type may be derived from the canoe charm, a sort of guardian angel of the primitive canoe to which it is affixed; though in modern vessels it takes the form of a statue or bust of a person or object which is related

¹ J. E. Partington, "An Album of the Weapons, Tools,... of the Natives of the Pacific Islands," Pls. 264, 286.

² B. T. Somerville, "Ethnological Notes on New Hebrides," Jour. Anth. Inst., XXIII, 1894, p. 376.

³ 龍頭鷺首

to the vessel's name at the head of the vessel, over the cutwater and immediately under the bowsprit, or even the form of a fiddle-head or scroll-head, bearing only slight resemblance to their prototype.

Canoe Balers. Balers, which are pieces of the bread-fruit tree hollowed out like canoes, are employed for throwing water out of the canoe. We obtained one of these balers at Jokaj, Ponapé.¹ It was the shape of one half of an egg cut lengthwise, so to speak. It measured 31 cm. in length, 17 cm. in its greatest breadth, and 8.5 cm. in depth. The handle is of a size which can be conveniently held by one hand. When a baler gets cracked, the method of "repair" is much the same as among us, for it is mended by threads passed through two holes, one made on either side of the fissure. The shape of the balers is very simple, usually with no ornamental carvings. However, in New Guinea and New Zealand some are found with carvings on handle or other parts. The natives of New Zealand are more or less skilful in carving. A baler mentioned by H. St. George Gray¹ had the "tongue of defiance" carved, showing much improvement in the general make-up.

2. **Charts.**—The inhabitants, living as they do on islands scattered over the ocean, naturally acquire the art of managing canoes sailing even to distant waters, either to obtain food or for trade. It happens, however, that they are frequently prevented from returning home on account of the waves, winds or currents. For instance, six men from Uleai, an island of the West Caroline group, drifted to the eastern coast of Formosa some years ago.²

¹ H. St. George Gray, "A Maori Canoe Baler," *Man*, VI, 1906, 5.

² Y. Ino, "Notes on the Natives of the Caroline Islands," (in Japanese) *Jour. Anthr. Soc. Tokyo*, XXIII, 1908, p. 131. "A Boat from the Caroline Islands at Mayo Bay" shown in Pl. LXII of Fay-Cooper Cole's "The Wild Tribes of Davao District, Mindanao" closely resembles in the shape of the prow that of Fig. 25 in this paper. It seems probable that a canoe has been photographed which drifted from the Caroline Islands. But he does not give any information about it.

Such instances may be infinitely multiplied, accounting for the presence of men even on otherwise uninhabited islands. Granting their skill in navigation, winds and waves will always be dreaded by the islanders who naturally try to overcome them, at least partially. And the inhabitants of the Marshall group are quite advanced in this respect. They make charts for themselves, by the aid of which they know the position of small islands and in which even the direction of swells are indicated, all for the safety of their navigation. The making of such charts must, indeed, be regarded as showing much progress.

However, the charts just mentioned are simply lattice-frames made up of leafstalks of coconut palm(?), which are cut smooth, each 10 mm. broad and 5 mm. thick. Different parts of the lattice-frame are tied fast with pieces of the bark of trees, and shells are attached here and there to represent the atolls. The curved stems indicate swells, while most of the straight ones serve as

supports for the whole frame. The charts are of different sizes; some are 1.00 by 0.50 m., while others are 1.50 m. in length.

Even in the West there are not many museums and similar institutions which possess these charts, and there are only a few publications dealing with the subject. The

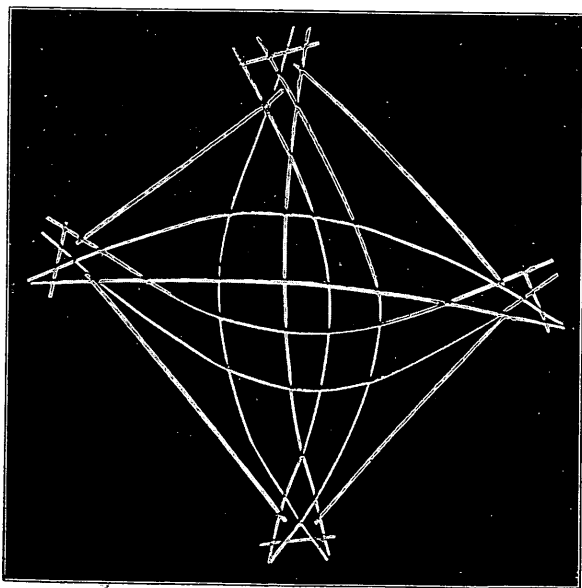


Fig. 28.—Chart from Jaluit.

studies of Kapitän Winkler¹ published in Berlin in 1898 contain the most detailed descriptions, which have since been quoted or amplified by A. Schück. Now, according to Kapitän Winkler, the Marshall Islanders have three distinct kinds of charts, namely (1) the chart for general instruction, (2) charts showing the whole group of islands, and (3) charts showing only a few of the islands. The first is intended to give a general idea of swells from different directions or the intersecting points of such swells, while the others are designed for showing chiefly the relative position of each island and the direction of the swells. Fig. 28 shows the chart in the possession of Prof. N. Yamasaki of the Tokyo Imperial University. It belongs to the first class, several stems indicating the course of swells.

II. FISHING.

There are, of course, various methods of fishing. For instance, women or girls in Truk, while standing in groups on reefs lying near the shore, catch small fish, each holding two triangular nets in her hands (Pl. IX). Beside catching large fish in calm lagoons from a canoe, the men sometimes also fish on reefs, where they employ a harpoon with several points on its head. These are the methods most commonly met with, not only in Truk but also in other islands, though, of course, the natives have other ways of fishing. It is stated of the islanders of Ponapé, who are good fishermen, that "one skilled in this art is always assured of a goodly alliance by marriage, to which his resourcefulness as a

¹ Kapitän Winkler, "Marine-Rundschau," Berlin, 1898, Heft X. English translation: Winkler, "On Sea Charts formerly used in the Marshall Islands, with Notices on the Navigation of these islanders in general," Ann. Rep. Smiths. Inst. for 1899, Washington, 1901, pp. 487-508. It is said that this translation is not very polished. See also A. T. Joyce, "Note on the Native Chart from the Marshall Islands in the British Museum," *Man*, VIII, 1908, 81.

good-provider entitles him.”¹ It will thus be seen how important is the art of fishing to the welfare of the islanders.

Pearl-shells are the material used for making fishing-hooks. The stem of a hook consisting of this material has two or three notches cut on the lateral sides of its lower part. To these notches a needle-like piece is fixed, which is obtained from the same material. This piece is slightly curved inward but it does not exactly form a barb. In order to attract fish, a tuft of tree fibre or a piece of cotton cloth, from 5 to 7 cm. in length, is put on the hook and the effect is heightened by the lustre of the shell, of which it is made as above stated (Fig. 29, *a*). Sometimes needle-like pieces are of tortoise-shell (Fig. 29, *b*). In any case, the hooks are not baited, and the lines are let into the sea, while the canoe is moving.

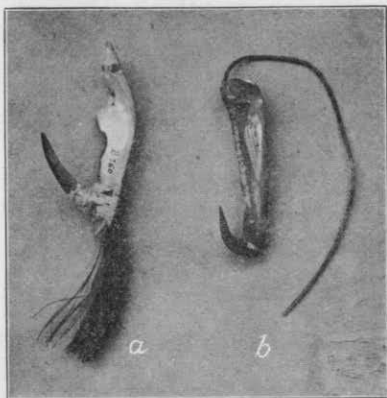


Fig. 29.—Fishing-hooks Ponapé.

Partington's Album, Pl. 177, shows the barbed hook used in Kusaie, where we did not succeed in collecting such specimens. We were told on that island that stems of hooks had formerly been in use as a medium of exchange and that they came to be called "Kusaie money." These hooks acquired the value of money, probably on account of the scarcity of pearl-shells which form, as described above, the material for hooks. In Yap, for instance, white pearl-shells are used as money, simply, because such shells must be obtained from other islands.

These hooks are also found in other islands. Those met with

¹ F. W. Christian, "The Caroline Islands," p. 126.

in the Solomon Islands¹ are very much like the ones mentioned above, both in shape and material; the only difference being the degree in the curving of the needle-like pieces. The Polynesians also possess similar hooks, though theirs, it appears, are provided with barbs. In the Caroline group itself, those found in Yap² have sometimes barbs on the inner and the outer side of the apical part of the hook made of tortoise-shell.

Chapter V.

Impléments and Weapons.

I. IMPLEMENTS.

Nowadays iron implements are imported from abroad and the natives can get almost any edge-tools they want. The inhabitants naturally have passed through the usual stages of human development, in which they made various kinds of tools of stone and similar materials. Since it is easier to make their implements of shells than of stone, the islanders chiefly employed the former material not only in Truk and Ponapé, where basalt is found, but also in other islands of the Caroline group, which are coral-islands and where it is extremely difficult to obtain stone.

As mentioned elsewhere, pieces of shell are still employed as culinary utensils, though the natives no longer use axes or chisels made of this material. One must now visit the famous ruins in

¹ B. T. Somerville, "Ethnographical Notes in New Georgia, Solomon Islands," *Jour. Anthr. Inst.*, XXVI, 1897, p. 401.

² J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," *Taf. XVII*, Fig. 3.

Kusaie or Nanmatal to obtain such implements. The central shaft of the giant clam was used for making edge-tools, and what are to be called axes are found most frequently. The majority of these shell-axes are one-edged, unlike those of stone found in Japan which are commonly double-edged. Even in the case of axes with two edges, only one edge is sharp, the other being so blunt that it cannot be properly called an edge at all. Besides, they are generally convex on both sides, like those of the stone axes in Japan, but some are convex on one side and flat on the other. The shell-axes

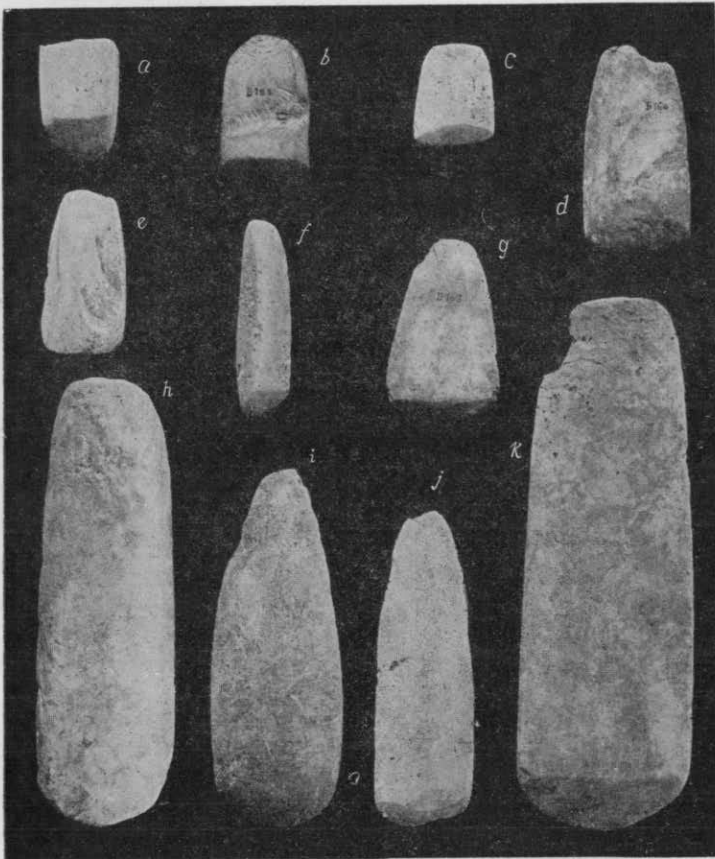


Fig 30.—Shell-axes from the Caroline Islands. *a* and *k* Malem, Kusaie. *b*. Tol, Truk. *c* and *h*. Lele, Kusaie. *d* and *g*. Pingelap. *e*. Palau. *f*. Peliur, Kusaie. *i*. Panui, Nanmatal, Ponapé. *j*. Nantauas, Naumatal, Ponapé.

of the latter kind are quite sharp and resemble gouges, the cross-section of them presenting the appearance of a semi-circle. Such axes of stone or shell are also found in Palau, and they seem to have been used as chisels in building canoes (Fig. 30, *h* and *k*).

They vary in size. But of some dozen axes collected by us and of those collected and presented by Dr. Hasebe, the most common size is 10 cm. in length. The one obtained by Dr. Hasebe at Malem in Kusaie (Fig. 30, *k*) was the largest, with a length of 28.5 cm. and an edge-breadth of 9.2 cm. Stone axes of this size are seldom found in Japan. Shell-axes well polished are so white and bright that one can hardly distinguish them from stone axes. It seems evident that they were fitted with wooden handles consisting of forked branches of trees, as can be seen from the iron axes the natives now employ. It is also clear from other evidence that in fixing wooden handles to the axes the sharp side of the edge was usually put outward, though it must have been the reverse with the case of those shell-gouges which were used in the building of canoes.

Shell-axes were used together with others made of stone in New Guinea and other islands. According to S. J. Gardiner,¹ stone, or shell implements some 3 inches long and made of clam are used by the natives of Rotuma north of the Fiji Islands in preparing the pandanus leaves for mats, just as shell-knives are used by the islanders of Palau in making coverings for the waist. The name of shell-axes or stone axes would suggest that they are used in cutting trees or strong ropes, but some of them are used only in such light work as has just been mentioned. The small-sized shell-axe shown in Fig. 30, *c*, may have served a

¹ S. J. Gardiner, "The Natives of Rotuma," Jour. Anthr. Inst., XXVII, 1898, pp. 419, 460; Pl. XXVIII.

similar purpose. Though the chief implements are now those made of iron, shell-adzes have not entirely gone out of use, as already stated, probably because the latter implements are preferable for the kinds of work not requiring particularly sharp instruments, but freedom from rust.

II. WEAPONS.

1. **Spears.**—Of all the weapons spears and clubs are certainly the most simple ones. The natives of Truk use wooden spears, which have no heads of steel or bone but are sharpened at one end. The shafts are made of a variety of mangrove and are 2·90 m. long. In war the natives are said to have attacked the enemy with spears, two in each hand. Previous to fighting, each side vilified the other, and their animosity is said to have culminated in a deadly charge. Spears were formerly used in other islands also.

2. **Clubs.**—The Pingelap settlers in Ponapé use clubs made of hard wood, from 1·20 to 1·50 m. long. The head, some 67 cm. long and some 7·5 cm. wide, is like that of a halberd, and has six notches on either edge (Fig. 31, *b* and *c*). The natives of Truk employ the same clubs called *chamoyu*, which means “that which breaks the forehead.” Similar clubs are used by the natives of Samoa. In Truk there is a simple kind of club which consists of a sharpened shaft measuring 80 cm. in length (Fig. 31, *a*).

3. **Slings.**—The natives of Truk and Ponapé practise stone-throwing by means of slings. The

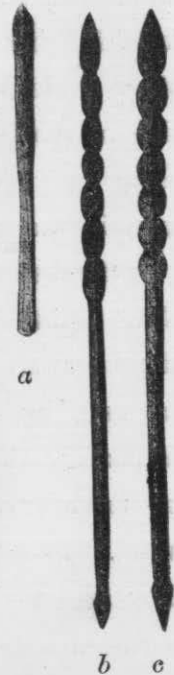


Fig. 31.—Clubs from Truk (*a*) and Ponapé (*b* and *c*).

missiles are not stones taken at random, but prepared stones of the size and shape of a hen's egg, though slightly pointed at both ends (Fig. 32). Their slings are made of the bark of the hibiscus tree. Skilful natives throw such missiles to a considerable distance.

The practice of stone-throwing is in evidence in Yap, of the West Caroline group.¹ It also prevails in various islands of



Fig 32.—Sling-stones,
Truk.

Melanesia and Polynesia, for example in New Britain, New Hebrides, New Caledonia, Fiji, Marquesas, and Tahiti. The stone missiles used in New Caledonia are of a pointed oval shape like those in Truk, but the slings employed in the former are far more simple than those in the latter, they consist of a simple cord which doubles in the middle for receiving missiles.² The sling was formerly used by the natives of Hawaii too. With regard to this fact, W. Ellis says: "The slings were made of human hair, plaited, or the elastic fibres of the coconut husk; the stones they employed were about the size of a hen's egg, generally ponderous pieces of compact lava, from the bed of a stream or the sea-beach, where they had been worn smooth by the action of the water."³ In a fight at a distance the slings proved quite destructive, so to the natives of the Caroline Islands who use no bows the slings may be important weapons.

Archery is unknown to the natives of Polynesia and the Malay Archipelago, but there are not a few natives in Melanesia who are acquainted with the art of shooting. In the Philippines too, the Negritos are familiar with archery and shoot with bow and

¹ The instrument in Palau which is called the sling by Captain Wilson is used for discharging darts, not stones, as missiles (See G. Keate, "An Account of the Pelew Islands," p. 314).

² F. Ratzel, "The History of Mankind," London, 1896-1898, Vol. I, p. 235.

³ W. Ellis, Hawaii, p. 141.

arrows. F. W. Christian says that in Ponapé bow and arrows are said to have been used by the *Chokalai* or dwarf aborigines.¹ There are nothing but traditions testifying to the existence of such a race, but the characteristics of its physique as told by the traditions induce us to associate the *Chokalai* with the Negritos. It is true that the use of bows and arrows cannot be an important datum in the identification of races, nevertheless it will throw some light on the matter, in view of the recent discovery of a diminutive race like the Negritos in the mountaineous region of New Guinea. It need not surprise us that the Negritos once inhabited the Caroline Islands, outside of New Guinea and the Philippines where they are now found, since in ancient times they may have been distributed over a larger area.

Chapter VI.

Decorative Patterns.

The decorative patterns employed by the natives of the East Caroline and Marshall Islands appear on the dancing-paddles² (Fig. 33) of Ponapé, looms and fabrics (Fig. 14) of Kusaie, lover's wands (Fig. 37), textiles (Fig. 12), sometimes coconut ear-rings and combs (Fig. 6, *g*, *h*) of Truk, fans (Fig. 34, *b*) and mats (Pl. XXXIV, fig. 10) in the Marshall Islands, as well as in the tattoos

¹ F. W. Christian, "The Caroline Islands," pp. 111, 137.

² The dancing-wands used by the natives of New Britain, which are carved or painted (?), closely resemble the dancing-paddles of Ponapé. The only difference is that the former are smaller in size than the latter, with shorter handles. They are probably of the same origin. See J. E. Partington, "An Album of the Weapons, Tools, .. of the Natives of the Pacific Islands," Pl. 276.

(Figs. 3 and 4) on the natives of those islands. They either consist of parallel incised lines or form geometrical patterns. Coils or designs derived from animals or plants are never met with. Tattoos now done are not necessarily in accordance with the native pattern, though we find marks which follow the conventional design on the bodies of old persons.

The decorative patterns in those islands invariably consist of triangles, squares, lozenges and St. Andrew's crosses, all of which are generally used in a series. Not infrequently checkers are also found, but there are no designs having concentric circles. In wooden carvings, the figures are generally painted, in order to render them more prominent. In the dancing-paddle and the loom, lime is applied to the engraved parts while the parts in relief are either left as they are or are painted black, but with no attempt at producing the effects of light

and shade. Mats made by the

natives of the Marshall Islands have bright patterns of red, brown, black, and other colours. They are perhaps their best artistic production.

In the West Caroline group, the decorative patterns employed are also geometric as in the case of the East Caroline Islands. But



Fig. 33.—Dancing-paddle, Ponapé.

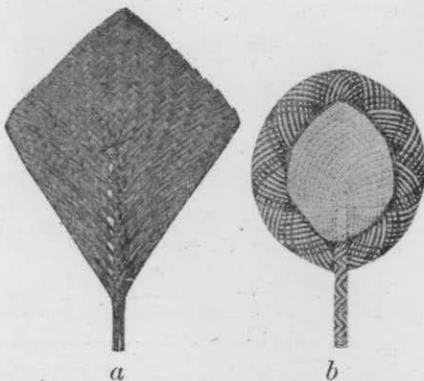


Fig. 34.—Fans from Truk (a) and Jaluit (b).

in the former islands not only concentric patterns but designs representing human figures or those of birds are found. In most



Fig. 33.—Baskets from Kusaie.

cases, however, these human or bird figures are transformed into geometric patterns. This is something not met with in the East Caroline group. Among

the natives of Polynesia and Melanesia conventionalized representations of animal forms are used in ornamentation.

Chapter VII.

Castration.

One of the most extraordinary customs in the East Caroline Islands is castration which is practised in Ponapé, where boys have their testicles removed when sixteen or seventeen years of age. I inspected a native, aged twenty-five, who was castrated. He had his right testicle removed, and a scar, some 20 mm. long, was left on his scrotum. His remaining testicle appeared somewhat larger than the ordinary size. It is said that only the right testicle is here removed in castration.

Circumcision as practised by the Jews is the most well-known of all practices injuring the genital organs. The same practice prevails extensively in various parts of the world, such as Africa, Australia, Fiji, New Guinea, New Caledonia, New Hebrides, and other South Sea Islands. Besides, artificial hypospadias is

practised among the natives of Australia and the New Hebrides; while among the Malays of the Malay Peninsula, of Sarawak (Borneo) and Ceylon, the penis is injured and prepared for the purpose of winning the favour of the female, as well as for displaying courage.¹

These operations are performed on the penis, but the custom in Ponapé is castration, as above noted. It is well-known that eunuchs in China were castrated. The custom of castration also prevails, according to E. Ruelle,² among the Mossi tribe west of Dahomey in West Africa. The chieftain of the tribe performs the operation of castration upon boys to make them safe guardians of his harem. Maurice Delafosse says that among the Galla tribe in East Africa boys between ten and fifteen years of age are castrated. These castrated boys or eunuchs are employed in the Mohammedan harems. A savage practice to remove the testicles by crushing them between two flat stones is met with among the Sidama tribe inhabiting the south-west of Abyssinia. Among the Zindjero tribe living east of the Sidama, all males except those of the chieftain's family have one of their testicles removed.³

Various theories are propounded to explain circumcision, a custom which has such an old history and which prevails in different parts of the world. The hygienic theory may not easily be dismissed, but it is hard to explain the purpose of castration practised by some particular tribes, which constitutes one of their racial characteristics. It may be argued that the custom in Ponapé is intended as a restraint on the increase of population, but it must be remembered that the natives on the island have only

¹ "Untrodden Fields of Anthropology." By A. French Army-Surgeon. Paris, 1898, Vol. II, pp. 363, 365.

² E. Ruelle, "Notes anthr. ethnog. et soci. sur quelques populations noires du 2^e Territoire militaire de l'Afrique occidentale française," *L'Anthropologie*, XV, 1904, pp. 678, 679.

³ Maurice Delafosse, "Les Hamites de l'Afrique orientale. D'après les travaux les plus récents," *L'Anthropologie*, V, 1894, pp. 169, 170.

their right testicle removed. As long as the left testicle remains, the generative power may not be destroyed and there are still chances of reproduction.

Why does this savage practice exist? I put this question to a native, but failed to get any satisfactory information. Judging, however, from similar customs prevailing among various savage tribes, I am rather inclined to believe that the removal of one testicle as practised in Ponapé is not so much for the purpose of preventing pregnancy as for displaying courage on the part of the male who undergoes the operation. It is likely that the practice comes from the same motive as head-hunting among the Malay tribes, namely the display of courage so characteristic of uncivilized tribes. Such practice may even be a condition for the acquisition of a certain social standing, so boys may naturally consider it an honour to go through the operation.

The idea seems preposterous, but it is a fact that in some uncivilized races, boys, when they come of age, must go through the initiation ceremony or must display courage before they are granted the rights enjoyed by men, and that such ceremonies usually consist of operations, among others, of mutilating portions of the body.

Among the natives of Australia, for instance, the initiation ceremony is widely practised, and there are even many varieties of it. According to A. W. Howitt,¹ the important feature of the ceremony among some tribes is the breaking of one or two of the incisors. In other tribes, however, B. Spencer and F. J. Gillen² say that circumcision and sub-incision form the chief feature of the

¹ A. W. Howitt, "The Native Tribes of South-east Australia," London, 1901, Chapter IX.

² B. Spencer and F. J. Gillen, "The Native Tribes of Central Australia," London, 1899, Chapter VII. The same authors, "The Northern Tribes of Central Australia," London, 1904, Chapter XI.

ceremony. The former is performed in the same manner as is common among other races, while the latter consists in cutting open the urethra with a sharp stone implement. Boys must undergo this cruel operation at the age of puberty, and girls also must go through the corresponding operation. These operations entitle them to marriage and other rights.

As regards, however, the purpose of this horrible practice, the natives themselves are quite in the dark. The "terrible rite" as mentioned in "The Australian Race" of Edward M. Curr,¹ published some thirty years ago, is an operation coming under the head of sub-incision. According to this author, it is practised for the purpose of diminishing the procreative power, but the recent researches of Spencer and Gillen show that it forms one of the chief features of the initiation ceremony, as already noted in this paper. It seems sufficiently certain that the practice is neither for the prevention of the increase of population nor for the regulation of food supply, though its positive meaning is unknown. This view becomes stronger, when one considers that among some tribes infanticide prevails and also the belief, noted by Spencer, Gillen and Roth, that the birth of a child is the direct result of the entrance of the ancestral spirit into the mother through her navel, the spirit being imagined as a minute substance the size of a small grain of sand. In other words, they have no idea of the association between procreation and sexual intercourse.² At any rate, savages may destroy part of their genital organs to display the courage necessary in grown-up men, but not to prevent pregnancy as supposed by civilized peoples. It is thus probable that

¹ E. M. Curr, "The Australian Race," Melbourne & London, 1886-1887, Vol. I, p. 74.

² B. Spencer and F. J. Gillen, "The Native Tribes of Central Australia," Chapter VII. and "The Northern Tribes of Central Australia," Chapter XI. W. E. Roth, "Superstition, Magic, and Medicine," North Queensland Ethnography: Bulletin No. 5, Brisbane, 1903, pp. 22, 23.

the removal of one testicle has nothing to do with the question of population, but that it is a mark of honour from long usage, indicating bravery or the full attainment of a man's status.

It may be argued that while the Australian aborigines are the most uncivilized in the world, the natives of Ponapé stand on a higher plane of civilization, it is therefore not right to compare the customs of the latter to those of the former. So far as I know, the initiation ceremony does not exist in Ponapé. Nor do I mean to imply in the least that the customs of the native tribes in Australia and those of the natives of Ponapé are of one and the same origin. The custom of injuring the genital organs among the Australians is adduced simply as an instance that this has nothing to do with the suggested prevention of pregnancy. But we should not be surprised to find that the said customs in Ponapé and Australia are of the same origin.

Among the customs of the various races which mutilate parts of the body for ornamental purposes, or as a symbol distinguishing a certain class, there are some whose meaning it is impossible to ascertain. It may be remarked that not every custom of a tribe or a nation agrees with the general level of their civilization. For instance, women in Europe use the corset to compress the waist. They fully realize that the corset is harmful to health, but that does not make them give up the practice. It is difficult, therefore, to infer or deny from the general level of civilization the existence of a particular custom in a particular region, especially in view of the fact that uncivilized tribes are possessed of strange customs. So it is small wonder, if the natives of Ponapé have customs resembling those of the Australian aborigines.

When I had written so far, I obtained A. Cabeza Pereiro's

work.¹ Under the caption of "Castration," he writes that there is a custom in Ponapé for boys to undergo castration at sixteen and up to twenty years of age. Those who will not be castrated are despised by the girls as cowards, so the boys, almost without exception, undergo the operation willingly. When they recover from the operation and regain their health, they tell their friends both male and female, about it by way of boasting of their courage. The operators, who are old men, are limited to a few in number and the operation is done in secret with the assistance of their friends. If close attention is not paid to the operation itself or the care after it, those operated on are said to be attacked by fever, and some even die.

Chapter VIII.

Miscellany.

1. **Cold Bath.**—The natives of Truk and Panapé bathe in small streams or pools. In Truk I saw two women with children bathing in a muddy stream, which ran across a road and which was only several inches deep. They squatted or nearly squatted in the stream, splashing water on their bodies. They did not use towels or anything of the kind. The natives, young and old, bathe with their waist-cloth on, but only for a short time. They never wipe their bodies, when they are out of the water. Some change their waist-cloth for a dry one, but others go home with the wet cloth on. The natives in Samoa also bathe without taking off their waist-cloth.²

¹ A. Cabeza Pereiro, "La Isla de Ponapé. Geographia, Etnographia, Historia," Manila, 1895, pp. 130-132.

² G. Turner, "Samoa," p. 121.

In a village of Truk I was surprised to see a woman bathing a child in a muddy pool, and letting it drink from the muddy water, apparently with indifference. The islanders do not hesitate to take a bath by the roadside, and in muddy water as above noted, probably because they have few streams (Pl. X, fig. 1).

2. **Manners.**—It would appear that a long sojourn is necessary for a study of native manners, but constant attention even on a limited journey will enable one to discover important racial characteristics. As mentioned elsewhere, foreign elements have been introduced into the attire and ornaments of the islanders superseding native customs in some respects. Manners, on the contrary, do not and cannot undergo a rapid change, this is the reason why the study of manners occupies so important a place in ethnographical researches. I failed, however, to observe any points particularly remarkable in their manners during our cruise.

The women in Truk and Jaluit sit somewhat like the Japanese, however, not on their heels, but rather with their haunches directly on the floor or ground, just like the natives of Tonga. In these islands I failed to observe women sitting cross-legged, though this is the custom in Samoa. But the men generally squat.

In Jaluit, women are seen crouching by the roadside, but women of Truk were seldom observed in this position. However, in both islands, women were seen sitting to take a rest. In sleeping, the natives lie on their sides or backs with their knees somewhat bent like the Japanese.

3. **Fortune-telling.**—When visiting Truk, you will find bits of plaiting made of leaves lying on the ground near the houses of the natives. These are lots employed in fortune-telling. There are two kinds of them in use. One consists of a palm leaf split into pieces, some 8 mm. wide and from 12 to 13 cm. long, and tied

irregularly into knots. By counting the number of knots, the natives tell their fortune, especially regarding their love-affairs. The other kind of lots are simply long pieces of coco-tree leaves, some 14 cm. in length, which are folded several times. The na-

tives tell their fortune from these by counting the number of folds or creases (Fig. 36). The same custom is in

evidence in Yap and the Marshall Islands.

4. **Lover's Wand.**—The Micronesians, like other uncivilized races, are extremely loose in morals. They enter the sexual life at the age of twelve or thirteen, so, of course, the natives of Truk alone should not be blamed for their wanton customs. However, the latter have a peculiar custom, and a tool, too, which they call *falei* and which may be named the lover's wand from the purpose for which it is used.

The lover's wand (Fig. 37) is a carved stick, which is some 1.50 m. long and is used for proving or detecting personal identity in visiting women by night.

Any man who wants to use the wand carries it with him and displays it before

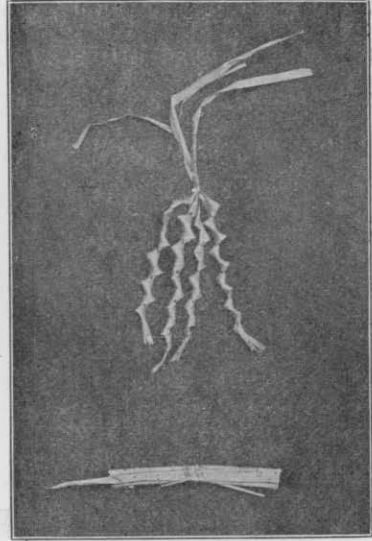


Fig. 36.—Lots used in fortune-telling, Truk.



Fig. 37.—Lover's wand, Truk.

women. He can depend, in most cases, on the love of any woman who cares to inspect his wand, by touching its carvings. Of course, different men have different designs carved on their wands.

Night comes and the man visits the woman and awakens her by means of his wand. She can identify him by feeling the carvings on the wand, and either receives or rejects her lover.

Adultery is not rare among the natives, some of whom venture to break into the bedrooms of married couples with their wands in hand. Though the natives are said to be sound sleepers, it sometimes happens that the intruders are killed by the husbands.

Now the lover's wands above described are going out of use and are replaced by edge-tools with carved handles. Every native has a large knife or cutting instrument imported from abroad; and when its handle is carved, it is said to serve the same purpose as the lover's wand. Thus, we find, that while the old tool is disappearing, the custom itself is retained, a fact which goes far to explain many of the peculiarities observed in Truk. A similar custom is said to prevail in Ponapé, where the natives use only plain sticks, with which they visit women in their bedrooms for erotic purposes.

The existence of a custom such as that above described will probably account for the partitions, dividing, in the case of the houses of Truk, the "bedrooms" of married couples from other sections, as already noted under the head of dwellings.

PART II.

The West Caroline Islands.

Chapter I.

Clothing and Personal Adornment.

The West Caroline Archipelago comprises Palau, Yap and other smaller islands. In customs and other respects there are some noticeable differences between the natives of the two islands or groups of islands; but on the whole they may be classified under one head. In the following pages their customs will be described in the order as adopted in Part I.

I. ADORNMENT OF THE BODY.

1. **Body-painting.**—The natives of the West Caroline Archipelago, like those of the East Caroline group, have a custom of painting the body with a yellow or orange pigment obtained from the turmeric (*Curcuma longa*), but in the archipelago under consideration the painting is not done so conspicuously as, for instance, in Truk. In Yap the pigment is called *reng*, which means "yellow." Although the chief object of painting the body with this pigment is personal adornment, there is also a secondary significance in the practice as a preventive against taking cold on account of sudden changes of weather or against the attack of mosquitoes. As mentioned elsewhere, the *reng* or *taik* has a strong, offensive smell, which probably is effective in warding off noxious insects.

The women in Palau smear their bodies with the same material dissolved in coconut-oil, consequently their skin appears remarkably glossy though not striking in colour. This custom seems to have existed for a long time; for we find Captain Henry Wilson¹ writing some one hundred and thirty years ago that he saw the custom in Palau. Besides being used as a toilet article, the *reng* is also employed in dyeing petticoats, or in painting the corpse as in Truk.

2. **Teeth-blackening.**—The custom of teeth-blackening seems to prevail among the natives of Yap and Palau, though the writer had no opportunity to observe natives blackening their teeth. The islanders of Yap apply for this purpose a sort of paste between the teeth and lips, which they obtain by mixing earth containing sal ammoniac with the juice extracted from the leaves of a certain plant. This custom is especially observed among the Yap women, as they have a difficulty in keeping their teeth white. This is to say, the natives of Yap chew betel-nut, which makes their teeth dark red. As this looks anything but well, the women are said to prefer blackening their teeth, discoloured by betel-nut chewing.² It would appear, however, that if this was the correct explanation of teeth-blackening in Yap, the practice must be common to both sexes, which is not the case. Why is the custom almost limited to women only in the island? It may perhaps be more reasonable to suppose that as among other tribes teeth-blackening in Yap is simply for the adornment of the body,

¹ G. Keate, "An Account of the Pelew Islands, situated in the Western part of the Pacific Ocean. Composed from the Journals and Communications of Captain Henry Wilson, and . . .," 2nd ed., London, 1788, p. 300. This is perhaps the oldest book on Palau, and the only authority on the old customs in the islands. When it first appeared, the book was translated into various languages.

² P. Salesius, "Die Karolinen-Insel Jap," Berlin, p. 52.

having little to do with betel-nut chewing, and is also perhaps an indication of a girl attaining her puberty.

Captain Wilson, who is above quoted, writes that the natives of Palau, both male and female, dye their teeth black when they grow up. On his return voyage, he brought with him the second son of Aybathul, "king" of Palau, who blackened his teeth on board the ship. Of this we read the following description. "At Saint Helena, Lee Boo (son of Aybathul) appeared much delighted at finding some groundsel, and chewing it, rubbed his teeth with it. Captain Wilson telling him it was not good to eat, he gave him to understand that they had it at Pelew, and used it, with four other herbs, bruised together, and mixed with a little chinam (lime) into a paste, which was applied to the teeth every morning, in order to dye them black;....At night, he said the paste was taken away, and they were permitted to eat a little. The same process was repeated the day following, and five days were necessary to complete the operation."¹

According to C. G. Seligmann, the natives of Tubetube, an island south-east of British New Guinea, practise teeth-blackening as a personal adornment and also as a means to attract the attention of the other sex. The process is described as follows: "The *tari* (a black bituminous semi-fossilised wood) is prepared for use as follows: a number of the leaves of the *badira* tree are chopped fine and roasted, after which they are mixed with a few fragments of *tari* and a little water and the whole reduced to a paste. To blacken the teeth some of the mass is spread on a piece of dried leaf, which has been cut to fit the outer surface of the front teeth. The paste is placed in position between the lips and teeth at night and is not removed till next morning, when its wearer

¹ G. Keate, "The Pelew Islands," pp. 319, 320.

scrapes the paste from his teeth, which have now become a dark brown black.”¹

3. **Tattooing in General.**—As noted in Part I, cicatrization and tattooing proper come under this head, the latter being most frequently met with in the West Caroline Islands.

A. **Cicatrization.**—This is not so widely practised in the West Caroline Islands as in Ponapé, so far as my observation goes. But in Palau I saw natives of middle age, both male and female, with cicatrices. On the top of their upper arms the women had bits of parallel oblique lines, dots about the size of red beans, or raised cuts with the pattern ✕. The patterns on both arms were not necessarily the same. It is said that this custom did not originally exist in Palau, but was introduced into the islands by the settlers from Ponapé, though this cannot be accepted without reservation.

B. **Tattooing.**—The custom of tattooing prevails in Yap and Palau as in the East Caroline Islands, but the practice is falling into desuetude, especially in Yap where, if at all, only the four limbs are tattooed. Though an old man whom I saw in Yap had tattoo marks all over his body with the exception of the face, such instances are very rare and the practice will in all probability disappear from the island before long. W. H. Furness gives an instance like the native just mentioned, in a plate of his book entitled “The Islands of Stone Money.” Here the body, except the face, forearms and hands, are all covered with thick horizontal or longitudinal lines. The tattooing on this scale is also practised among the men of Sonsol, an island lying south-west of Palau.² The natives of Ponapé and Jaluit tattoo less extensively; neither do the inhabitants

¹ C. G. Seligmann, “The Melanesians of British New Guinea,” p. 492.

² J. S. Kubary, “Ethnographische Beiträge zur Kenntnis des Karolinen Archipels,” p. 89; Taf. XI.

in other South Sea Islands now under Japanese control have their bodies tattooed so profusely as is the fashion in Yap and Sonsol. However, the custom of tattooing over a large surface of the body is found in Ongtong Java, one of the Solomon Islands, where one may see big patterns of fish tattooed.¹ It is said that in Yap the practice is allowed to free men exclusively, to slaves it is prohibited. From this it will be seen that tattooing means not only personal adornment, but also serves as a symbol of class distinction. Besides the prohibition of tattooing, the restrictions on slaves extend to other adornments of the body, as well as to details of everyday life.

Tattooing is also in vogue among women, but the regions tattooed are restricted as compared with men. They are tattooed mostly on the inner and outer surfaces of the lower limbs and on the back of the hands from the wrist to the finger-tips. The patterns favoured by women in Yap are rather simple, such as a shark design, the fish lying side by side, and are quite different from, and by far neater, than those of the natives of the East Carolines, especially of the women of Ponapé. Why is the pattern of sharks favoured? On this question Furness writes: "The *Ngol* or representations of sharks, some say, are to protect the wearers from attacks from these fish while swimming in the lagoon, but others maintain that these patterns are chosen solely because the shark is the king of fish, and fish are such important items of the food supply of the island."² If the protection of the body is the object of tattooing, as represented by the former of these two opinions, it may be regarded as a sort of charm.

¹ R. Parkinson, "Zur Ethnographie der Ongtong Java und Tasman Inseln," Intern. Archiv f. Ethnog., X, 1897, Taf. IX.

² W. H. Furness, "The Island of Stone Money," p. 160.

The pattern of sharks lying side by side is found not only in Yap but also in the Solomon Islands. According to R. Parkinson¹ and C. M. Woodford,² the women in Ongtong Java (otherwise called Lord Howe's Group, where the natives are of the Polynesian race with a mixture of Melanesian blood), one of the Solomon Islands, tattoo this pattern on the breast and arms. Again, Woodford³ states that in another of the islands, Sikaiana (otherwise called Stewart's Island), the same pattern is found on the upper and lower limbs. The same author further remarks that the pattern of sharks on the chest and thighs is met with among the natives, both male and female, of Rennell Island, another of the Solomon group (Polynesian race).⁴ The meaning of these patterns, however, is not definitely known. Though this comes under cicatrization, according to B. T. Somerville,⁵ the natives of New Georgia, also one of the Solomon Islands, cut a pattern of porpoises on their thighs and that of frigate birds on their shoulders. He observes on this custom: "I have thought it may have some reference to the desire to have the porpoise's strength and endurance in the legs for swimming, and that of the frigate birds for the arms." If this custom in New Georgia comes from such a superstition, it resembles in origin the practice in Yap, but it should be carefully noted that the patterns of animal forms employed have often connections with totems. Take, for instance, the natives of Torres Straits described by Haddon.⁶ The inhabitants, who do not tattoo, employ

¹ R. Parkinson, "Zur Ethnographie der Ongtong Java und Tasman Inseln," *Intern. Archiv f. Ethnog.*, X, 1897, p. 140; Taf. VIII.

² C. M. Woodford, "Note on Tatu-patterns employed in Lord Howe's Island," *Man*, I, 1901, 31.

³ C. M. Woodford, "Some account of Sikaiana or Stewart's Island in the British Solomon Islands Protectorate," *Man*, VI, 1906, 103.

⁴ C. M. Woodford, "Notes on Rennell Island," *Man*, VII, 1907, 24.

⁵ B. T. Somerville, "Ethnographical Notes in New Georgia, Solomon Islands," *Jour. Anthr. Inst.*, XXVI, 1897, p. 365.

⁶ A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," *Jour. Anthr. Inst.*, XIX, 1890, pp. 366-368, 392, 393; Pl. VII.

the totems of their respective clans as patterns in cicatrization. The totems here are snakes, dugong, sharks, string-rays, etc., the patterns of which are cicatrized on the shoulders in the case of men, and on the waists in the case of women. In some instances, it does not seem that they are entirely ornamental. At any rate, it is difficult to assign a settled meaning to this custom.

The origin of the tattooing in Yap is mentioned by Furness who bases his account on a native's story, as follows: "The fashion was introduced from the island Mukamuk,¹ lying about seventy miles to the northward of Uap. Men from this island once long ago drifted down to Uap and taught both the men and women how to tattoo. In those early days only the warriors were allowed to ornament their legs with the pattern known as 'Thilibetrak,' but since serious battles have ceased between the people of neighbouring districts, the restriction has been ignored"² From the ethnographical point of view, Mukamuk has important relations with Yap, whose natives are said to visit Mukamuk to have themselves tattooed. Besides, waist-cloths of banana fibre used by the islanders of Yap are imported from the island. In short, the natives of Yap adopt to a large extent the custom of Mukamuk.



Fig. 38.—Tattooing needle, Yap.

The needles employed in tattooing are made of the bones of water fowls or fish, and the pigment used is furnished by the soot obtained by burning coconut-oil. The needle we brought back with us seems to have been made of a bone of the water fowl. It is

¹ Mokomok or Arrowroot Island.

² W. H. Furness, "The Island of Stone Money," p. 159.

some 17 mm. long and has four points, of which the two in the middle are somewhat longer than the others. A handle some 10 cm. in length is set at right angle to the needle, through a hole made in the latter. According to R. Parkinson,¹ the natives of Ongtong Java, one of the Solomon Islands, also obtain their needles with two to four points from bones of water fowls.

According to Captain Wilson in former times the natives of Palau were also tattooed on their bodies from the middle of the thigh to the ankles.² At present, however, this custom seems falling into desuetude in the island, for in many cases the men tattoo only their names in Roman letters or flags and fish, on their forearms. In Palau where women have more extensive and elaborate patterns than men, the former still practise tattooing more or less profusely, enabling us to trace the custom in use in former times. In Palau women are tattooed, though sparingly, on the four limbs, during girlhood. As they grow up, however, the backs of their hands and forearms are tattooed, while tattoo marks in dark dots or zigzags on the inner and outer surfaces of the lower limbs begin to increase. But the designs often lack in symmetry, the patterns right and left not always showing agreement. A. C. Haddon, while describing the tattooing among the Motu tribe of British New Guinea, says in part: "The tattooer, who is a woman, draws the details without previously having sketched in the whole design; this produces great variation, and often, an asymmetrical design."³ To this circumstance is due perhaps the lack of symmetry above referred to. When girls grow up, they have their genitals and the adjacent regions tattooed in a triangular

¹ R. Parkinson, "Zur Ethnographie der Ongtong Java und Tasman Inseln," Intern. Archiv f. Ethnog., X, 1897, p. 140.

² G. Kente, "The Pelew Islands," p. 27.

³ A. C. Haddon, "The Decorative Art of British New Guinea," p. 178.

design. Before they undergo the operation they have the pubes removed—a fact which accounts for the lack of the pubic hair on native women. We are told that a similar custom also prevails



Fig. 39.—Lower part of female figure carved on the gable of the young men's club-house, Koror, Palau.

among the women of Yap. The manner of tattooing among the women of Palau may be seen from a female figure with open legs sculptured on the gable of a club-house for young men in the islands (Fig. 39 and Pl. XXXI, fig. 2).

With regard to the tattooing around the genitals among women in Palau, N. von Miklucho-Maclay writes as follows: "Die Mons Veneris wird erst nach dem Auftreten der Menstruation vorgenommen. Auch die vorderen äusseren Teile der grossen Schamlippen erscheinen tattuiert. Das Tattuiere dieser Teile ist auch der Grund, weshalb die Haare an den Genitalien bei Frauen ausgerupft werden. Die Tattuirung des Mons Veneris, obwohl sehr schmerzhaft, wird, wie man mir sagte, an einem Nachmittage vollendet."¹ As this quotation shows, Miklucho-Maclay thinks that the tattooing on girls is undertaken after the first appearance of menstruation. So far as I know, however, girls, though they already had reached

¹ N. von Miklucho-Maclay, "Anthropologische Notizen, gesammelt auf einer Reise in West Mikronesien und Nord-Melanesien in Jahre 1876," Verh. d. Berlin. Gesell. f. Anthr., 1878, p. 107; Taf. XI.

puberty, had no such tattooings. This may imply that the old custom is disappearing; but considering the presence of girls about the age of eighteen or so, who are tattooed on their genitals, it may be supposed that the operation takes place, as a rule, long after the first appearance of menstruation.

We are told, as mentioned elsewhere, that the tattooing around the genitals is also practised among the native women of Truk, though I had no opportunity to ascertain the fact. However, a picture of the female organ drawn for the writer by a native of Toloas, an islet belonging to Truk, had a triangle drawn around the genitals and the space enclosed by the triangle was painted black, suggesting tattooings there among the women of Palau. This custom prevails in Ponapé also. According to Otto Finsch,¹ who gives a detailed description of it, the patterns employed among the natives of Ponapé consist of parallel lines and are far more complicated than those found in Palau. The patterns encircle the body like a girdle, a pentagon tattooed on the abdomen, the genitals included, forming its centre.

According to J. S. Kubary, a similar practice is in evidence among the women of Sonsol, one of the West Caroline Islands, who tattoo a thick line above the mons veneris.² This fact is also mentioned by the same author, who further says that the women of Nukuoro, an island to the south-west of Ponapé, have a triangle and parallel lines tattooed on the mons veneris.³

Beyond the Caroline groups, a similar custom may be noticed among the natives of British New Guinea. It is found, according

¹ O. Finsch, "Ueber die Bewohner von Ponapé," *Zeitschr. für Ethn.*, XII, 1880, pp. 311, 312; Figs. 7 and 8.

² J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," p. 90; Taf. XI.

³ J. S. Kubary, quoted by H. Ploss and Max Bartels, "Das Weib in der Natur- und Völkerkunde," Leipzig, 1913, Bd. I, p. 307.

to C. G. Seligmann, among the Koita tribe. He says: "At the age of six or seven, the region around the vulva and upwards over the lower abdomen as far as the navel is tattooed; this region is known in tattooing as *kiudori* (vulva top). Next follows the region *kiubadi* (vulva trunk or base), that is the upper part of the front, and inner surface of the thighs."¹ According to Otto Finsch, this custom prevails also among the Motu tribe, where the girls are tattooed at the age of puberty. "It appears," he says, "that the tattooing of the vulva occurs last of all, when the girl has arrived at a marriageable age, which is about 15 to 17 years of age."² In Rigo District, the tattooing on the vulva is a necessary qualification for a wife. In connection with this custom A. C. English observes that "one pattern is tatued on either side of the vulva, and until this design is tatued on the girl she is of no value as a wife."³ From R. Parkinson's paper⁴ it appears that the women of Ongtong Java, one of the Solomon Islands, have a custom of tattooing the vulva and the adjacent regions. It is not expressly mentioned by him, but a plate inserted shows it unmistakably. As already noted, the natives of the island, both male and female, have the body covered with extensive tattoo marks.

Women are more profusely tattooed than men in Palau, a fact also to be noticed among the natives of New Guinea. The inhabitants of the two islands agree in having the vulva or its adjacent regions tattooed.

In Palau the operation on women is invariably done by women,

¹ C. G. Seligmann, "The Melanesians of British New Guinea," p. 74; Pl. X.

² O. Finsch, quoted by A. C. Haddon, "The Decorative Art of British New Guinea," p. 175.

³ A. C. English, "Annual Report of British New Guinea, 1894," quoted by A. C. Haddon, "Tatuing at Hula, British New Guinea," *Man*, V, 1905, 53.

⁴ R. Parkinson, "Zur Ethnographie der Ongtong Java und Tasman Inseln," *Intern. f. Ethnog.*, X, 1897, Taf. VIII.

and the fee for tattooing on both arms is said to be worth several shillings. Likewise, the operators in Ongtong Java are women whose business is said to be hereditary.¹ In British New Guinea too, there are old women skilled in the art.²

4. **Nose-deforming.**—N. von Miklucho-Maclay writes that among the natives of Yap a custom prevails of deforming their noses. To quote this writer, "an Neugeborenen wird während der ersten Monate das Zerquetschen der Nase vorgenommen, was mit einer über dem Feuer gewärmten Hand von der Mutter oder von irgend einem anderen Weibe gemacht wird."³ Inquiring of the natives about it, I found that they knew nothing about the custom. Probably the custom is a local one, or it may have since disappeared, for Miklucho-Maclay visited Yap some forty years ago. Again, he says (p. 107 and Pl. XI) that the islanders of Palau have longitudinal wrinkles produced on their noses, though the custom of nose-deforming does not exist among them. At any rate, the practice of deforming the nose is met with among the natives of Tahiti.

5. **Beard-plucking.**—According to Captain Wilson, "they in general plucked out their beard by the root; a very few only, who had strong thick beards, cherished them and let them grow."⁴ As may be seen from our plates, however, the men in Palau above 45 years of age wear beards, and, for instance, Aybathul, "king" of the islands, has a beautiful grey beard (Pl. XXV).

¹ R. Parkinson, "Zur Ethnographie der Ongtong Java und Tasman Inseln," Intern. f. Ethnol., X, 1897, p. 140.

² C. G. Seligmann, "The Melanesians of British New Guinea," p. 265. A. C. Haddon, "The Decorative Art of British New Guinea," p. 178. W. Y. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 481. A. C. English, "Annual Report of British New Guinea, 1894," quoted by Haddon, "Tatuing at Hula, British New Guinea," Man, V, 1905, 53.

³ N. von Miklucho-Maclay, "Anthr. Notizen, gesammelt auf einer Reise in West-Mikronesien und Nord-Melanesien in Jahre 1876," Verh. d. Berlin. Gesell. f. Anthr., 1878, p. 105.

⁴ G. Keate, "The Pelew Islands," p. 27.

II. ADORNMENT WITH OBJECTS ATTACHED TO THE BODY.

In the West Caroline Islands, as in the East Caroline group, the adornment of the body by partial mutilation and with objects attached consists of two kinds, namely the ear and nose ornaments.

1. **Ear Ornaments.**—The natives of Yap and Palau wear ear-ornaments, though in these islands we find no such large holes bored in their ear-lobes as are often met with among the Truk Islanders. In Yap the natives of both sexes have small holes pierced in their ear-lobes while quite young. In these holes the men wear strings of beads, to which pendants made of sea-shell or tortoise-shell are attached. The pendants consisting of pink-coloured shells, and triangular in shape, are the most highly valued. Only well-to-do natives, it is said, can purchase them on account of the price, for shells of that colour are rarely found in Yap. We failed to bring back a few of these ornaments with us; however, the late Dr. U. Taguchi and others collected such specimens during their voyage to the South Seas in 1890, these are now preserved in the Anthropological Institute of the Imperial University of Tokyo. The women in Yap are fond of inserting flowers or leaves in the holes bored in their ear-lobes, a custom affected by some of the males too. The natives of Palau also wear flowers or leaves as ear-ornaments; but so far as my observation goes, none of the inhabitants of the islands wear large shell-rings.

The custom of wearing flowers in the ears prevails also in New Guinea, where the Motu tribe are said to insert fragrant or glossy leaves in the holes pierced in their ears.¹

According to Captain Wilson, women of good position in Palau used as ear-ornaments pieces of tortoise-shell, some 13 cm. long

¹ W. Y. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 478.

and inlaid with sea-shells; while men, who had their left ears bored, adorned it with jewels.¹ It is not certain whether this may still be met with in Palau; but it may be said that on the whole among the natives of the West Caroline group the custom of adorning the ears is not so prevalent.

2. **Nose Ornaments.**—We learn from Captain Wilson that about the time of his visit to Palau the islanders, both men and women, had the nasal septum pierced. "The cartilage between the nostrils was also bored, in both sexes, through which they frequently put a little sprig or blossom of some plant or shrub that accidentally caught their fancy. Perhaps it is owing to the desire of having the scent of flowers, without the inconvenience of holding them."² Miklucho-Maclay also mentions the natives of Palau having their noses pierced.³ We had no opportunity to ascertain whether this custom still survives in the islands; but supposing the practice has the object indicated in the above quotation, it may rather be regarded a matter of the sense of odour, though it undoubtedly serves the purpose of ornamentation as well.

In Yap, the septum of the nose is bored, in both sexes, by means of needles from orange trees. But here the material inserted is a short piece of the leafstalk of the coconut tree, which is not at all fragrant. In answer to our inquiries as to the object of the practice, the natives declare that, unless they have their noses pierced, they cannot enter paradise when they die. The connection between the piercing of the nose and the ascension of the soul seems to defy any attempt at explanation; nevertheless the

¹ G. Keate, "The Pelew Islands," pp. 313, 319; Pl. III.

² G. Keate, *ibid.*, p. 319 and footnote.

³ N. von Miklucho-Maclay, "Anthr. Notizen, gesammelt auf einer Reise in West-Mikronesien und Nord-Melanesien im Jahre 1876," *Verh. d. Berlin. Gesell. f. Anthr.*, 1878, p. 107.

same superstition is found in New Guinea, where among the Motu tribe, says J. Chalmers, "any one dying with unpierced nose goes in the other state to Tageani, a bad place, where there is little food and no betel-nuts. Children are well grown, about six years old, before the nose is pierced, and any dying before that age will have his nose pierced after death by his parents. All pierced noses go to Raka, the place of plenty."¹

Van der Sande, too, observes a similar custom existing among the natives on Geelvink Bay, Dutch New Guinea. He says: "Missionaries in Geelvink Bay heard that Papuans whose nose and ears are not pierced, cannot enter into their heaven. Therefore, sometimes, always in early youth, the septum of the children is pierced."² Though the origin or meaning of this custom is difficult to ascertain, yet the prevalence of the same superstition among those tribes may possibly be taken as indicating their racial connections.

III. ADORNMENT WITH OBJECTS FIXED TO THE BODY WITHOUT MUTILATING.

In the following pages, I shall deal with the head-dress, necklace and other ornaments which are attached to the body without involving the mutilation of the body itself.

1. **Hair-dressing and Head Ornaments.**—Men of Yap and Palau, unlike the inhabitants of the East Carolines who often wear their hair short, let it grow long, though some take the trouble to bind it on the back of the head in a most simple fashion. In this connection, it should be noted that some of the islanders of Yap and Palau have frizzy hair unlike the natives of the East Carolines,

¹ J. Chalmers, "Pioneering in New Guinea," London, 1887, p. 168.

² G. A. J. Van der Sande, "Nova Guinea. III. Ethnog. and Anthr.," p. 75.

so it is easy to distinguish them from the inhabitants of Truk and Ponapé, etc. (Pls. XX, XXV).

Women in Yap and Palau dress their hair by rolling it up as in the East Caroline Islands. In Yap they part their hair in the middle and gather it up on the lower part of the back of the head; while in Palau they bind their hair, which is grown long, on the upper part of the occiput without dividing it (Pls. XXI, XXVI).

In the West Caroline group, the men wear a large comb as in Truk. The combs used in the former show a more or less large difference in their shape and make, as compared with those employed in Truk. There is even a difference in this respect between the articles found in Palau and Yap, both of the West Caroline group. The comb used by the men in Yap consists of more than ten strips of aerial roots (?), cut slender and flat, of a variety of the mangrove. These strips are drawn together in two or three places at the part forming the handle; and this by means of wooden nails (Fig. 40, *e* and *f*), or by lashings of coconut or other fibres (Fig. 40, *a-d*), which is for the double purpose of ornament and practical use. In Yap the comb bound by lashings is most common. The strips are thickest at the part drawn together and thinner toward the upper end. The teeth spread outward, so that the whole thing resembles the shape of a fan. On the structure of the comb W. H. Furness says: "It is made merely of fifteen or twenty narrow strips of bamboo, about eight inches long, sharpened at one end, with shorter, slightly wedge-shaped pieces inserted between each strip four or five inches from the sharpened ends, whereby the teeth of the comb are kept apart; the upper ends are now bound together with ornamental lashings of coconut fibre."¹ But of the eleven combs we collected in Yap, none is

¹ W. H. Furness, "The Island of Stone Money," p. 57.

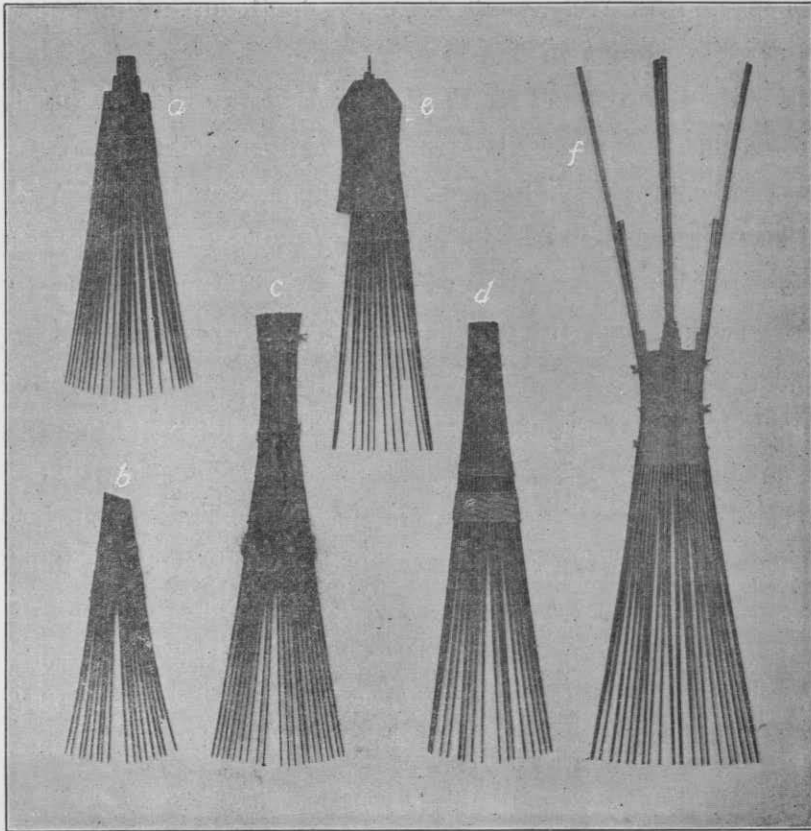


Fig. 40.—Combs from Yap.

made of bamboo nor is any of them made in such a fashion as described by Furness. The same may be said of the combs found in Palau and Truk.

The combs we brought back with us from Yap were from 155 to 330 mm. in length, but some of them which have a long handle for ornamentation were even 405 mm. in length. The greatest breadth of combs measured from 64 to 80 mm. and the number of teeth varied from 16 to 22, but those with 16 or 20 teeth were most frequent. While the combs found in Truk have only seven or eight teeth, those employed among the natives of Yap have more than double the number and yet the size of the

combs is comparatively small, since the teeth are set more closely. Moreover, the combs in Yap appear quite nice and flexible compared with those found in Truk, which is probably owing to the difference in the materials used. Sometimes the natives have ornamental combs with feathers attached to the handle.

Class system is strictly enforced in Yap, where even the wearing of ornaments is not permitted to everybody. There are consequently restrictions on the use of combs, free men alone are entitled to wear them, slaves being forbidden to use them or other ornaments under pains of heavy punishment. The size of the comb differs, it is said, according to the social standing of the wearer; so that it will be seen that combs are worn in Yap not only for practical use and ornament but also as a mark of class distinction, which as has already been stated is often the case with tattooing.

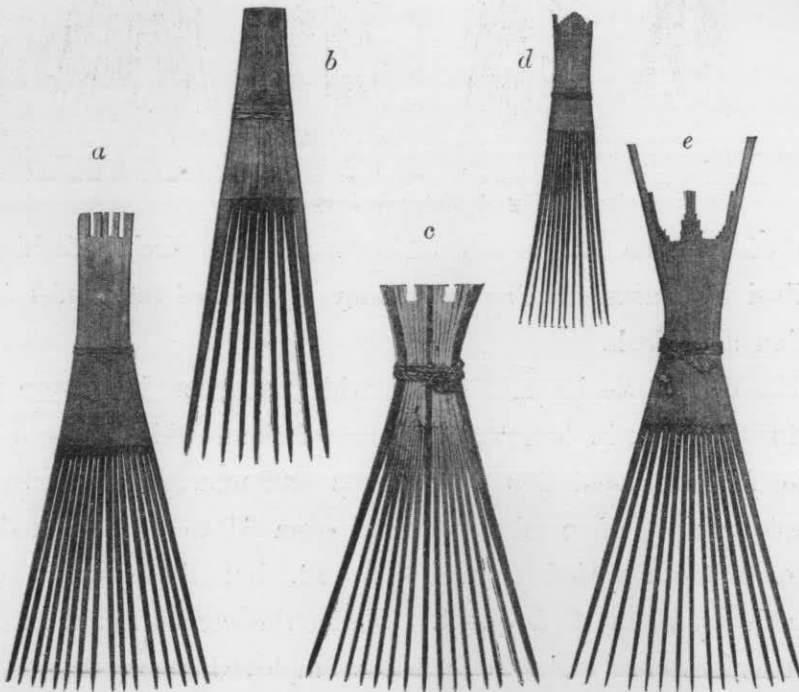


Fig. 41.—Combs from Palau.

Formerly combs of tortoise-shell¹ were in use in Palau, but they have now almost disappeared, being replaced by wooden ones. The comb, which is made of more than ten wooden sprigs held together by wooden nails, more or less closely resembles the kind (First class, A) used in Truk. The former, however, in comparison with the latter, is of a larger size and stronger make, with thicker teeth which are also more in number. The lashings on the handle are also thicker, and the whole comb compares but poorly in appearance with those of Truk and Yap. It differs greatly from the combs in Truk in that the end of its handle sometimes expands outward (Fig. 41).

The combs we collected in Palau varied from 190 to 330 mm. in length; while the greatest breadth of combs was from 54 to 138 mm., the number of the teeth being 9 in one, 12 in a second, 15 in a third and 16 in a fourth. As in Truk, the wearers of combs here are also grown-up men.

The comb of the Palau Islanders, which is of the Yap type, is called "lausekamm" by Kubary,² but this is for practical use only and not for ornamentation. According to Van der Sande, some tribes of Dutch New Guinea wear a small round stick made of palm wood in the hair, for scratching. On Masi-Masi such sticks made of the nerve of a sago leaf are said to be used in killing vermin.³ The "lausekamm" in Palau is employed for much the same purpose.

The use of the comb in the South Sea Islands and the comparison of those in Yap and the Fiji Islands, have already been given in Part I.

¹ J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," p. 192; Taf. XXIII, fig. 16.

² J. S. Kubary, *ibid.*, p. 195; Taf. XXIV, fig. 1.

³ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 65, 66; Pl. VII.

Some natives of Yap wear a hat made of pandanus leaves like the inhabitants of the East Carolines.

2. **Necklaces.**—Among the natives of Yap necklaces are usually made of disc-like rings obtained from coconut shell, which are strung together with white shell rings of the same shape. Necklaces made of shells of light pink are much prized, as are ear-pendants of the same material and colour. During our voyage we were unable to secure any specimens of such necklaces. W. H. Furness writes as follows: "In each shell of superior quality there is of the pink or red portion only enough to make one good bead about an inch and a half long by half an inch wide and an eighth of an inch thick; such a bead is usually strung in the middle of the necklace among others graded off from it in size, on both sides, merging into oblong pieces about half an inch long, of the same breadth and thickness as the bead in the centre; then finally follow discs about one sixteenth of an inch thick."¹

The women in Yap wear a cord made of the inner bark of the hibiscus tree, dyed black and one metre in length. It is knotted in the middle portion and at the ends. Then it is split into two and hung on the neck with the ends falling on the breast and the back (Pl. XXI). According to Furness, "this cord must be always worn by a woman, young or old, when she is away from her home; to be seen in the open air without it would be as immodest and disgraceful as to appear without any clothes at all."² A girl is said to wear it at the first appearance of menstruation, so there is no doubt that it is not only for ornamentation but also for showing that the wearer has attained a marriageable age. The cord, simple as it is, is always worn by women,

¹ W. H. Furness, "The Island of Stone Money," p. 63; Pl. facing p. 64.

² W. H. Furness, *ibid.*, pp. 123, 124.

who are never seen without it in public. After such a custom is once established, even simple cords as those above mentioned, growing in volume, become transformed into wrapper-like coats as worn by the natives of Truk, finally developing into a perfect garment.

We failed to see men of Palau wearing the necklace. Neither does it appear that they wore it when Captain Wilson visited the islands, for he mentions nothing about the custom. There is, however, a custom among the women of wearing simple necklaces which consist of a single piece of native money or sometimes two or three small ones strung on a cord. As will be mentioned under the heading of money, the natives of Palau have money which is called *audouth* by them. The pieces of various value are not uniform in size and material. However, the necklace of *audouth* mentioned above is worn almost exclusively by the women of chiefs or other rich families. It is remarkable that among uncivilized peoples who take delight in complicate and gorgeous ornaments, the women of Palau constitute in respect of their necklace an exception by their simplicity. For particulars the reader is referred to the section on money (Pl. XXVI).

3. **Loin-cloth and Petticoat.**—The natives of the West Caroline group wear no clothes, except the loin-cloth for men and rough petticoats for women. The loin-cloth for the men of Palau consists of a long, narrow piece of cotton fabric, and resembles the one worn by the Japanese, one end of the piece hanging on the buttocks (Pl. XXV). In Yap, the men wear round the waist a piece of so called banana cloth imported from Mukamuk, north of Yap. Besides this, long pieces of the inner bark of the hibiscus are also worn by men above age. The girdle, which is often dyed red, has one end usually on the right side of the abdomen,

while the other end is passed through between the thighs and hangs in front (Pl. XX, fig. 2). The banana cloth mentioned above is some 1.35 m. long and 34 cm. broad, and has on both sides or ends longitudinal black stripes or other patterns woven with hibiscus fibres. As for the waist-cloth, the islanders now generally wear a piece of imported cotton or woollen cloth, which is fast superseding the banana cloth.

The women of Palau and Yap wear petticoats, but the materials used and the make are different according to the two islands. In Palau, the petticoat for both young and old women consists of two pieces, which reach to the knees and the upper parts of which are tied round the waist below the navel, by means of a belt with two cords, with coconut or tortoise-shell rings strung on them, or by means of cotton strings (Pl. XXVI and Fig. 42). Captain Wilson tells that he was given a belt with a string of many beads obtained from a coarse sort of cornelian.¹ These belts, he says, are worn by women of good position; but whether this is still the case or not, we had no opportunity of ascertaining—we saw no women wearing such strings. A bag



Fig. 42.—Girdle with strings of coconut rings, worn by women, Palau.

plaited of pandanus leaves or coco-tree leaves is inserted under the front piece of the petticoat. It is 20 cm. wide, 23 cm. deep, and is used for carrying tobacco and other things (Fig. 43). The bag

¹ G. Keate, "The Pelew Islands," p. 318; Pl. VI, fig. 1.

serves the purpose of a portable pocket, for the lack of proper garments renders it difficult to carry things (Pl. XXVI, fig. 2).



Fig. 43.—Bag carried by women, Palau.

The petticoats are made of stems of the *Eleocharis plantaginea* which are torn into thread-like pieces with a knife obtained from a pearl-shell (Fig. 44). To these pieces the inner bark of the hibiscus, forming tassels, is added for ornamentation. They are dyed red, black, yellow, blue or otherwise. The front and back pieces of petticoats are the same in form; but the upper part of the latter piece has two knots made of the hibiscus fibre, one at each corner, for the support of the belt holding the petticoat. The front and back pieces are each 35 cm. wide, but not broad enough to cover the lateral sides of the thighs. The specimen¹ brought back by Captain Wilson was made of fibres of coconut husk, a material not in common use now. We are not sure whether the use of this material is still found among the natives of Palau.

In Palau, girls over sixteen or seventeen years of age wear a belt plaited of pandanus leaves and red or black woollen yarns or cotton cord, while a black necklace is worn by the women of Yap, as already stated (Pl. XXVI). The two things may have one and the same meaning.

The petticoats above described are made by women, and it seems that there are some who make their living by it. In Koror, we saw a woman engaged in this work indoors, while a number of half-finished petticoats were being dried in the sun.



Fig. 44.—Shell knife, Palau.

¹ G. Keate, "The Pelew Islands," p. 318; Pl. V, fig. 4.

The petticoats worn by the women of Yap are different from those found in Palau; since the former consist of one piece broad enough to wholly cover the waist, whereas the latter are made of two different pieces. The petticoats in Yap usually reach to the calves of the wearer. They consist of young leaves of coconut palm torn to pieces, with the inner bark of the hibiscus dyed red or yellow added on the outer surface. The petticoats render the waist to appear swollen; but they are certainly convenient to a child at the wearer's breast, for it can rest its feet on their upper ends. It is easy to distinguish girls from boys in Yap, since the former also wear petticoats (Pl. XXI).

The custom of wearing petticoats prevails also in the East Caroline group and the Marshall Islands, but it is generally limited to men, as already mentioned in Part I. In Melanesia, however, the custom is found almost exclusively among women. The petticoats of two pieces just described are used in British New Guinea and elsewhere. Those worn by the women in the Admiralty Islands closely resemble the petticoats in Palau. According to H. N. Moseley, "the women (in the Admiralty Islands) wear two bunches of a grass, or perhaps prepared from pandanus leaves, which are fastened by a belt round the waist, and hang one in front, the other behind, the hinder being the longest."¹ In Tanna, one of the New Hebrides, girls wear petticoats consisting of two pieces; but as they grow up they use large petticoats such as those worn by their elders.² This is the difference according to the age of the wearer, but among some tribes there are also other differences in the form of the petticoats, from various considerations,

¹ H. N. Moseley, "On the Inhabitants of the Admiralty Island," *Jour. Anthr. Inst.*, VI, 1877, p. 399.

² Wm. Gray, "Some notes on the Tannese," *Intern. Archiv f. Ethnog.*, VIII, 1894, p. 229.

just as those observed among civilized peoples. The Mekeo tribe in British New Guinea is a case in point.¹

4. **Rain Caps.**—The natives of Palau use a rain-cap which is made of two pieces of the bark of betel-nut palms (?) stitched together on two edges. It is 68 cm. long and 33 cm. broad. It is only large enough to cover the head and shoulders. This rain-cap is also used as a sort of basket, more by women than by men (Pl. XXX, fig. 1).

We are told that this kind of rain-cap is also used by the islanders of Yap. A similar rain-cap is met with in Matty Island off the northern coast of German New Guinea.² Here the natives, it is said, employ it as shelter from the sun as well as from rain. Besides, a recent exploration in the interior of Dutch New Guinea shows that a similar custom is also found among the natives of Pësëgëm.³

5. **Bracelets.**—In the West Caroline group, the custom of wearing bracelets still prevails extensively among both sexes. There are roughly three kinds of bracelets, that is: one made of shell, another of coconut shell, and the third of tortoise-shell. In Palau, shell bracelets are chiefly worn, though tortoise-shell ones are also

¹ Among the Mekeo people of British New Guinea, there are four forms of petticoats, namely: (1) A plain uncoloured petticoat, made out of wild grass, and worn for working in the gardens, fishing, etc. (2) A petticoat made out of either sago leaves or the fibre of certain forms of banana, or a broad-leaved plant. This is used in ordinary daily life; its material is usually stained black. (3) An ornamental petticoat, made out of sago leaves, and coloured red and yellow in perpendicular bands. This petticoat, which is longer and more thickly made than the others, is worn over the second at dances. (4) A petticoat worn as mourning. This garment, especially the form worn by a widow, is very short, and, instead of passing all round the waist, it only hangs in front and behind, leaving the hips and thighs bare on both sides. It is stained black. See R. W. Williamson, "Some unrecorded customs of the Mekeo People of British New Guinea," *Jour. Anthr. Inst.*, XLIII, 1913, p. 268.

² A. B. Meyer and R. Parkinson, "Album von Papua-Typen II," p. 15; Taf. 52.

³ J. W. van Nouhuys, "Der Bergstamm Pësëgëm im Innern von Niederländisch-Neu-Guinea," *Nova Guinea—1907 et 1909*, Vol. VII. *Ethnographie*, 1913, pp. 14, 27; Fig. 9 and Taf. I, fig. 13.

found. In Yap, bracelets made of various materials are used; it seems, however, that the men prefer those of tortoise-shell. Both in Palau and Yap, bracelets are worn on the left forearm, most of the natives wearing several (Pl. XX; Pl. XXI, fig. 1). They are invariably worn on the left arm, not on the right, probably for convenience' sake. This may also be observed in Dutch New Guinea and elsewhere.¹

The shell bracelets used by the natives are well polished rings obtained by cutting crosswise a certain part of the *Trochus niloticus*, showing fine workmanship (Fig. 45). Bracelets made of a certain shell are employed in New Guinea and other Melanesian regions also. They are much prized among the natives of these islands, sometimes so much so that they pass as currency or are even used in buying a wife.² There are two different forms of bracelets obtained from coconut shell. One is a ring like that formed by cutting a bamboo tube crosswise, and has parallel lines carved on the surface as ornament (Fig. 46). The other consists of a slice as if obtained from the section of a ball, and has no ornament. The inner diameter of both measured from 52 to 53 mm. The tortoise-shell bracelet is of the same make and form as that worn in Truk.



Fig. 45.—Shell bracelet, Yap.

The natives of Tanna, one of the New Hebrides, wear bracelets of coconut shell, from two to six in number, above their elbow,

¹ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," p. 103.

² W. Y. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 479. A. C. Haddon, "The Ethnography of the Western Tribes of Torres Straits," Jour. Anthr. Inst., XIX, 1890, p. 339. H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc." Jour. Anthr. Inst., VI, 1877, p. 470. B. T. Somerville, "Ethnog. Notes in New Georgia, Solomon Islands," Jour. Anthr. Inst., XXVI, 1897, p. 364.

and they often have a spear-thrower or sling hanging from these bracelets.¹

As already noted, nearly all the bracelets found in Palau are of shell rings. There are, however, some natives who wear a series of flat rings of tortoise shell, which are strung on threads through three holes in each of them, the bracelet thus made being cylindrical in



Fig. 46.—Bracelet made of coconut shell, Yap.

form. Some of these bracelets are said to consist of no less than sixty-four rings totalling 17 cm. in length.² Both, shell bracelets and tortoise-shell ones, are worn by women only.

Though the men of Palau do not usually wear bracelets, some of them have armlets, which are made of the atlas of the dugong (*Halicore dugong*). These armlets, which are called the "Order of the Bone"³ by Captain Wilson, serve as a symbol of rank, for they are worn by chiefs and other men of influence. There may, of course, be more beautiful materials, but the bone of the dugong became valuable, probably because it is difficult to secure it. It may be supposed that, at first, the "Order of the Bone" was conferred on a brave man who caught a dugong. In putting on the armlet, sometimes the hands or fingers are hurt (Pl. XXV).

Captain Wilson, who was the recipient of a warm reception at the hands of the natives while he was in Palau, was nominated a chief of the first rank on his departure. As a testimony of the nomination, the Captain was granted the "Order of the Bone,"

¹ G. Turner, "Samoa," p. 311.

² J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," p. 184 Taf. XXII, fig. 14.

³ We find an account of the armlet of the dugong at page 217 of Ratzel's "The History of Mankind," Vol. I, with the explanation "Semper calls it the Order of the Bone." This appellation, however, was already used by Captain Wilson, 130 years ago (cf. G. Keate, "The Pelew Islands," p. 296).

which the king put on his left arm in person with solemn ceremonies and with the following words: "The Bone should be rubbed bright every day, and preserved as a testimony of the rank he held amongst them; this mark of dignity must, on every occasion, be defended valiantly, nor suffered to be torn from his arm but with the loss of life."¹ It may be seen from this quotation how much the bone is honoured among the natives. It may well be called the "Order of the Bone," since the power rests with the king to give or deprive of it.² Of this bracelet Kubary³ also gives a detailed account, which may be consulted with advantage. According to Schmeltz, some tribes of Dutch New Guinea wear a wooden bracelet carved in the shape of a neck vertebra of the dugong. He thinks that the object of such bracelets was to prevent abrasion by the bow-strings.⁴ Whatever the object may be, the custom seems to indicate that in Dutch New Guinea, too, the natives once wore the real bone of the dugong.

There are a very small number of natives, both men and women, who wear bracelets on the right arm instead of the left, and this probably because they are left-handed or are suffering from some disease of the arm.

6. **Finger-rings.**—Some natives in the West Caroline group wear rings on their fingers, like the inhabitants of the East Carolines. There are two kinds of rings, one made of tortoise-shell the other of coconut shell. Though the former is, of course, the better of the two, it is rather common, being found in other islands too. The latter, however, seems to be widely worn in Yap.

¹ G. Keate, "The Pelew Islands," pp. 234-236.

² K. Semper, "Die Palau-Inseln in Stillen Ocean," Leipzig, 1873, p. 114.

³ J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," pp. 175-184.

⁴ J. D. E. Schmeltz, quoted by Van der Sande, "Nova Guinea, III. Ethnogr. and Anthr.," p. 103.

7. **Anklets.**—The anklet is not so common as the bracelet. In Yap, we sometimes find men with pieces of cloth or cords of coconut fibre wound round their ankles, as if they had had wounds dressed. An anklet of this kind, which certainly makes no great ornament, may yet be regarded as a sort of ornament for the leg (Pl. XX, fig. 2). Among the Motu tribe of New Guinea a custom of winding the knees or ankles with cords or pieces of bark is met with.¹ This is only an instance, the practice prevailing among other tribes too.

The natives, young and old, men and women, and from kings downward, wear no sort of footgear. This is true of the inhabitants of the East and West Carolines, and of the Marshall Islands, with the exception of the Chamorro tribe who wear sandals made of hides.

Chapter II.

Food and Other Articles.

I. FOOD AND DRINK.

The bread-fruit tree does not thrive in Yap and Palau, so far as my observation goes, so well as in the East Carolines. The taro, not bread-fruit, seems to be the staple food of the natives. Of course, Truk and other islands yield the taro, but in the West Caroline group we find the vegetable grown over a large area. It is the women, we are told, who attend to its cultivation. There are also the coconut, sweet potato, yam and bread-fruit which

¹ W. Y. Turner, "The Ethnology of the Motu," Jour. Anthr. Inst., VII, 1878, p. 480.

constitute important articles of food, together with fish, shell-fish and birds. It may be that doves are plentiful in Palau, for Captain Wilson tells us that he was frequently entertained with dishes prepared from these birds.

In Yap, we find a plant which is called *voi* (*Inocarpus edulis*) by the natives. It grows to a big tree with hard wood fit for building boats. It bears edible fruit of the shape of kidney. On one occasion I happened to see native women cooking this fruit, I took a piece and ate it, it had a slight taste but was by no means delicious. Though the fruit of the *voi* may not form the principal food of the natives, it furnishes good material to the native fare. The *voi* is found not only in Yap, but in other islands where it is called by different names. It grows, for instance, in Ponapé and the Mariana group, which are among the islands now under Japanese occupation. The plant is also found in the Philippine Archipelago as well as in islands south of the equator, such as Tonga, Samoa and Tahiti. During our voyage among the South Sea Islands, we saw the *voi* in luxuriant growth at Suva in the Fiji Islands. Here the plant is called the *ivy*, and its fruit the Fijian chestnut, which is eaten by the natives.

In the West Caroline Islands, especially in Palau, it is not difficult to obtain drinking water, for springs are found in the islands. The natives, however, use rain water also. The method of catching rain water is simple, yet ingenious. They fix a piece of tin plate or something like it to the trunk, say, of a betel-nut tree, in a slanting manner, so that the water flowing down the tree may be conducted into a receptacle placed under it. In this way they get comparatively pure rain water. In Mikura-jima, one of the seven islands of Izu, rain water is caught in a similar manner. Among the islanders of Palau, a bamboo tube some five

or six inches in calibre is employed, not only as a pail for carrying water from a spring, but sometimes for storing water.¹

1. **Cooking and Culinary Utensils.**—In regard to the preparation of food and some of the cooking utensils employed among the natives of Yap and Palau, a brief description will be given below.

A. **Cooking.**—As described elsewhere, the inhabitants of the West Carolines make earthen pots for their own use. In the preparation of food, therefore, they can not only roast or bake, but also boil their food. For example, the taro is either roasted, baked or boiled. The natives eat them after peeling them, or mashing them with a pestle, as they do with the bread-fruit in the East Caroline Islands.

The boiled *voi* fruit is eaten as it is or after being grated into small particles. In preparing the fruit, it is also baked. Before baking it is usually wrapped in a piece of the bark of the betel-nut tree and coconut juice poured on it. The *voi* fruit cooked in this way becomes a sort of cake. In this connection, Christian says "a sucking-pig or fowl stuffed with this fruit and baked in the earth-oven is a dish not to be despised."²

The natives eat fish and shell-fish raw or after boiling them in salt water. But since in tropical regions these begin to decay in a few hours, they must have methods of preserving them. According to Captain Wilson, "the fish being well cleaned, washed, and scaled, two flat sticks are placed lengthways of the fish, to support and keep it straight, much in the same manner as meat is laid in a cradle spit; around it are bound some broad leaves. They then make a kind of stage or trivet, placed about two feet from the ground, upon which the fish is laid, and a slow fire

¹ G. Keate, "The Pelew Islands," p. 312.

² F. W. Christian, "The Caroline Islands," p. 333.

made underneath, over which it remains for several hours, till it becomes smoke-dried, and then it is fit for eating without any further dressing, and would keep a couple of days, though certainly not so well-flavoured as when eaten fresh.”¹

Besides, the natives of Palau get a syrup, which is called *marasis* by the natives, by boiling down the coconut juice. The syrup thus obtained is diluted with water and drunk, or used in the preparation of various kinds of food.

In Palau, an entire fish, roasted or otherwise, is served on a wooden plate and the participants in a meal eat it in common, using neither forks nor chop-sticks. The writer, however, observed the principal articles of food, such as the taro, served separately to each of the men and women. Generally they take three meals a day. In Yap, each member of even the same family has his or her own pot; they never share a fish as the islanders of Palau do.

B. **Culinary Utensils.**—Of the culinary utensils used in the West Caroline Islands, the pestle, the shell tool and some other kinds resemble more or less closely the ones employed in Truk and other islands of the East Carolines. But the West Caroline group has a far greater variety of utensils, in comparison with



Truk, for instance, of the eastern group. In Palau, different kinds of utensils are used in the preparation of different kinds of food. This distinction is observed even in small shell implements, for in Palau we find two different shell utensils employed in the preparation of the taro. For cutting boiled or baked taro, instruments

Fig. 47.—Shell tools used for cutting raw taro (a) and boiled taro (b), Palau.

¹ G. Keate, "The Pelew Islands," pp. 190, 191.

differing from natural shells in no respect except in the part forming the edge are used (Fig. 47, *b*); while for cutting the raw taro, pieces of shell are employed as instruments (Fig. 47, *a*).

The various kinds and forms of culinary utensils will be described below.

a. *Earthen Pots.* One of the remarkable differences between the West Carolines (Yap and Palau) and the East Caroline group in point of culinary utensils, nay, of customs, is that the former have earthenware. In the West Carolines, they make earthen pots for their own use; in Palau, even earthen lamps are found. It is not certain when the art of manufacturing earthenware was introduced into the islands, but we learn from Captain Wilson, whom we have quoted so frequently, that the natives used such ware as early as 130 years ago. The earthen pots used in Yap and Palau closely resemble each other in shape, forming a half globe, being ochraceous in colour and having no ornaments. One obtained by us in Yap is 33 cm. in diameter and 13 cm. in depth, with a wall from 8 to 12 mm. thick (Fig. 48).



Fig. 48.—Earthen pot from Yap.

It is said that the pot-makers in Yap are slave women. Another which we secured in Palau is 41 cm. in diameter and 16 cm. in depth, the wall being 8 to 10 mm. thick (Fig. 49). The latter pottery is dark both inside and outside, showing that it had been long in service. These earthen pots are used in boiling water and food, and are handled very carefully by the natives. It may here be noted that the pots just described resemble in form the pots used on Murua Island, lying

east of British New Guinea, as receptacles for the bones of the dead.¹

Earthen vessels are neither manufactured or used in the East Caroline group, nor are they preserved or found there as relics, so



Fig. 49.—Pottery from Palau.

far as my observation in the islands goes. However, after making a comparative study of the native words representing "wooden bowl" and "earthen vessel" in the Micronesian group, Christian notices a coincidence and re-

marks as follows : " the occurrence of this common word over so wide an area, points unmistakably to the gradual substitution of wooden for earthen vessels in Micronesia, owing to the industry of pottery-making falling into abeyance in certain spots where no suitable clay or kaolin was available."² In spite of his conclusion, we have never heard or seen it stated that pottery was unearthed from the ruins in Kusaie or from the ruins at Nanmatal in Ponapé, though a number of shell axes and of what are believed to be shell ornaments have been dug out. On the contrary, pieces of earthen vessels can easily be collected in the fields in Palau. This may be due, in part, to the fact that these vessels are now in use in Palau ; but in the East Caroline Islands, potsherds are not found, which is one of the reasons why we doubt that earthen vessels have ever been used in those islands. It is not yet known what ethnological relations the builders of the ruins in Kusaie and Ponapé have with the present dwellers of the islands, neither is it known what age they belonged to ; but the

¹ C. G. Seligmann, "The Malanesians of British New Guinea" p. 732; Pl. LXXVIII.

² F. W. Christian, "The Caroline Islands," p. 129.

existence of earthenware in the East Carolines cannot be demonstrated to-day, either ethnographically or archæologically. Moreover, there are many tribes who do not know the art of pottery-making. It is unknown to the Polynesians except to a few tribes. Among the Melanesians, the knowledge is limited to some tribes of New Guinea, and to the natives of the Admiralty Islands, New Caledonia, New Hebrides and Fiji.¹ Even among the tribes of the same stock, some are acquainted with the art and some are not. Therefore, it will not be surprising if the art is unknown to the dwellers of the East Carolines. Besides, in some cases, the presence of clay has no necessary connection with the knowledge of pottery-making, for, as W. A. Bryan says, "though clay was known to the Hawaiian people they made no use of it and knew nothing whatever of the potter's art."²

Among uncivilized peoples, one word often covers many things; it may be that they possess only one term to express the names of different vessels. It is, therefore, difficult to decide by philological study alone whether earthen vessels were in use or not. This will be seen from the instance furnished by the tribe inhabiting Kiwai Island at the mouth of the Fly River in British New Guinea, about whom William Macgregor writes: "they possess no knowledge of pottery and have no pots; they employ as bucket, basin, bowl, and plate a large slipper shell,.... Its name is 'wadere,' and the consequence is that the Kiwai native has no other name than 'wadere' for all our pots and pans and different

¹ H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc." *Jour. Anthr. Inst.*, VI, 1877, p. 403. G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," p. 10; Pl. II. C. G. Seligmann, "The Melanesians of British New Guinea," pp. 45, 114, 732; Pl. LXXVIII. B. T. Somerville, "Ethnological Notes on New Hebrides," *Jour. Anthr. Inst.*, XXIII, 1894, p. 378. G. Turner, "Samoa," p. 241. W. Y. Turner, "The Ethnology of the Motu," *Jour. Anthr. Inst.*, VII, 1878, pp. 439, 490.

² W. A. Bryan, "Natural History of Hawaii," p. 59.

kinds of dishes.”¹

Be that as it may, it seems sufficiently evident that the potter's art is and was unknown to the natives of the East Caroline group; while it is known to the dwellers of the West Carolines, who now manufacture and use earthen vessels. This is an important point, constituting one of the differences between the natives of the West and the East Carolines.

b. *Wooden Food-bowls*.—Food-bowls in Palau are all carved from wood and painted, both inside and outside, with vegetable juice. There are various kinds of them, as already mentioned, which may be classified according to their forms. The difference

in form, it may roughly be stated, is due to the different uses to which they are put. For instance, the plate-

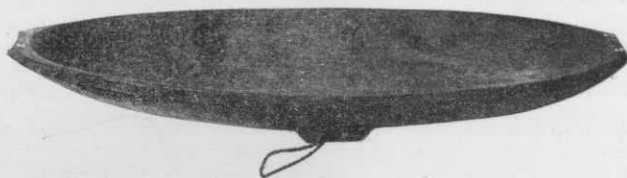


Fig. 50.—Wooden vessel, Palau.

like vessels (Fig. 50) are for serving or preparing fish, while those like Fig. 51 are for storing liquids. As to the outline of the upper rim, there are many variations within the same class, showing the care of the natives in point of design. For instance, of the same plate-like vessels (Fig. 50) just mentioned, some are oblong, some elliptical, and some poly-



Fig. 51.—Wooden food bowl, Palau.

¹ W. Macgregor, "Annual Report of British New Guinea for 1890," Resumé: Jour. Anthr. Inst., XXI, 1892, p. 75.

gonal, etc., presenting a marked contrast to the other classes.

The bottom of plate-like vessels is usually flat, but that of the other types of vessels is either grooved or flat with a groove around,

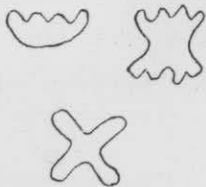


Fig. 52.—Pieces of shell used in inlaying the upper fringe of wooden food-bowls, Palau.

so the bottom is clearly demarkated from the other parts of the vessel. The bottom edge always has holes (not so deep as to penetrate the bottom) or a protuberance for the convenience of attaching a cord by which the vessel may be hung. These food-bowls are generally inlaid with pieces of shell as shown in Fig. 52, on the upper or outer surface of

their upper rim. Sometimes they have a pair of handles at both ends, partly for ornamentation.

There are various sizes of food-bowls. In our collections, the plate-like vessel, which is shown in Fig. 50, was 54 cm. long and 30 cm. at the widest point, while that of Fig. 53 was 27 cm. in diameter. Of the type as is shown in Fig. 54, the smallest one was 22 cm. both in length and breadth, the largest one being 33 by 35.5 cm. The bowl, which is shown in

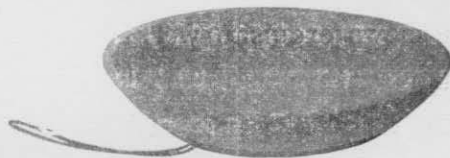


Fig. 53.—Wooden food-bowl, Palau.



Fig. 54.—Wooden food-bowl, Palau.

Fig. 51 was 43 cm. long, 27 cm. wide, and 16 cm. deep. About these food-bowls Kubary¹ gives a full description.

Of these wooden food-

¹ J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," p. 202; Taf. XXIV-XXVII.

bowls, some closely resemble those in use among the islanders of Truk. For instance, the vessel last mentioned bears a striking resemblance to that kind of ware, which is used in Truk (Fig. 21) and of which a description was given in an earlier chapter dealing with the food of the natives of the East Carolines. Indeed, the only point of difference between the two is that the latter is of smaller depth, with scarcely any ornament.

The most artistic of these bowls is perhaps a wooden, egg-shaped vessel, some 20 cm. long, with a close-fitting lid. It is beautifully inlaid with shell, and is used probably for holding beverages. A similar vessel, though larger in size, was given Captain Wilson by the native king. It was used for holding syrup, being furnished with a close-fitting lid. This vessel, which is modelled after a bird and has a head and a tail, is 3 feet long and 1 foot 9 inches high, capable of holding as much as 9 gallons. It shows exquisite workmanship, with bird figures and other objects inlaid with shell. The king was said to have been very proud of the vessel, because it had no equal in Palau.¹ It is now in the British Museum.

In Yap, it seems that there are also some kinds of wooden

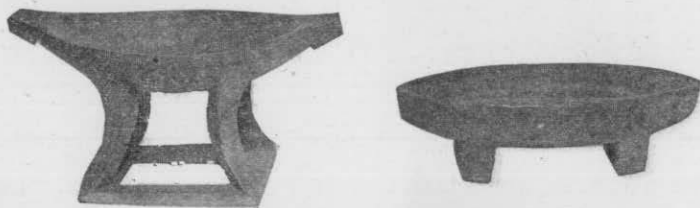


Fig. 55.—Wooden vessels for food, Yap.

food-bowls, though we failed to bring back many of them from the island. The vessels from Yap which are shown in Fig. 55

¹ G. Keate, "The Pelew Island," pp. 101, 313; Pl. I.

have all of them legs, lacking in ornament and colour. It, however, requires some skill to carve out the legs. It may be that the *zen* and the cup with a stand, which are now in use in Japan, have the same origin as such food-bowls in Yap.

c. *Taro-tables*.—There are many more kinds of culinary utensils and food-bowls in Palau than those mentioned above, but of those not found in the East Caroline group the taro-table of large size is perhaps the most striking example. We brought back a specimen of such a table, which is carved from a hard piece of wood and stands on eight legs. It is inlaid with potsherds and painted a dark red colour, like other vessels, though the colours used are different. The taro-table does not show any particular workmanship, but it is certainly a laborious piece of work, carved, as it is,

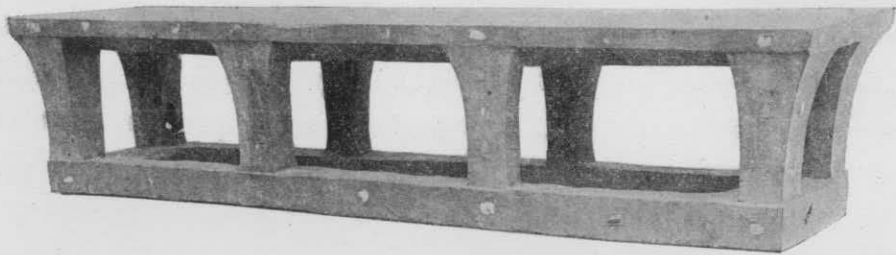


Fig. 56.—Taro-table from Palau.

out of a single log of wood. It is 1.58 m. long, 38 cm. wide and 33 cm. high. There are, however, many sizes larger or smaller than the one mentioned above. Cooked taro is placed on this table when guests are to be entertained. It forms a necessary household piece of furniture for chiefs and other influential natives (Fig. 56).

d. *Tortoise-shell Utensils*.—Another point worth noticing about the utensils for food in Palau is that there are plates and spoons of tortoise-shell in the islands. The plate we obtained is some 18 cm. long, about 10 cm. at the widest point, and 1.5 cm. deep, being el-

liptical in shape. It is skilfully made and has a string attached to the bottom by which it may be hung (Fig. 57). As for the spoons



Fig. 57.—Plates of tortoise-shell, Palau.

of the same material, they are of various sizes and forms, all, however, with a well-formed oval bowl.

Some of the spoons have a string of beads attached to the handle for ornament. Those plates and spoons are said to be used when people eat fish or taro on special occasions.

e. *Natural Objects as Utensils.*—Among natural objects used as culinary utensils, shells of a certain kind serve as spoons, well-polished cups and water-bottles obtained from the coconut shell may also be mentioned. We need not, here, say anything about the coconut or coconut tree, since concerning the different uses to which it is put, a description has already been given in Part I. The water-bottle in Palau, however, has some peculiar features. Its lid, which is made of the tridacna, is flat on one side and convex on the other, being elliptic in shape and 8 cm. in longer and 6.5 cm. in shorter diameter, while it has two holes for passing a cord through them (Fig. 58). This shell lid, however, is now out of fashion and remains rather as a relic of the past, being superseded by the wooden lid. The writer is not sure whether the same is also found in the East Caroline group, for he failed to see even the wooden lid used.



Fig. 58.—Shell lid for water-bottle, Palau.

f. *Racks.*—As mentioned here and there, practically all the wooden or tortoise-shell utensils for food in Palau have cords or strings attached for the convenience of hanging them. In the East

Caroline Islands, some kinds of vessels such as the water-bottle of coconut shell which cannot stand, are hung by means of strings; while in Palau almost all vessels for the table are hung on wooden pegs. For this purpose, each house has a rack consisting of two wooden bars with wooden pegs on them. The rack is also painted like the taro-table.

2. **Method of Fire-making.**—In Yap and Palau, as in the East Caroline Islands, the natives use imported matches. It is needless to say, however, that in former times they had their own method of kindling fire. According to a tradition in Yap, the god of thunder once came down to the island and taught a

woman how to make fire and to make pottery. This method of fire-making of divine origin is the twirling method. The wood employed for this purpose is that of a tree called *arr*, which has more or less the same smell as the elder tree. As already noted, in fire-making the natives of Truk use the wood of an aromatic tree which they call *umukan*. The *arr* may be of the same species as the *umukan* or be closely allied to it. But the islanders of Truk and Yap kindle fire in different ways, for the twirling method is unknown to the former. Flint is also used. In Palau, they formerly produced fire from bamboo and wood by the twirling method.

In Yap, the natives have bamboo vessels with wooden lids, in which they keep tinder safe from moisture. It is 19 to 32 cm. long and 2.5 cm. in diameter (Fig. 59). Some, however, have bamboo lids instead of wooden ones.



Fig. 59.—Bamboo vessel for tinder, Yap.

II. TOBACCO, BETEL-NUT, etc.

Like the natives of the East Caroline group, the islanders of Yap and Palau smoke tobacco. In Yap the habit seems common to both men and women, who are glad to give their goods in exchange for tobacco rather than for money. They cut and roll tobacco in the leaves of plants before they smoke. They put their tobacco, flint, and matches in a small bag plaited of pandanus or coco-tree leaves and this again into a basket made of the same material; but as noted in an earlier chapter, the women of Palau carry the bag under their petticoats (Figs. 60 and 61).

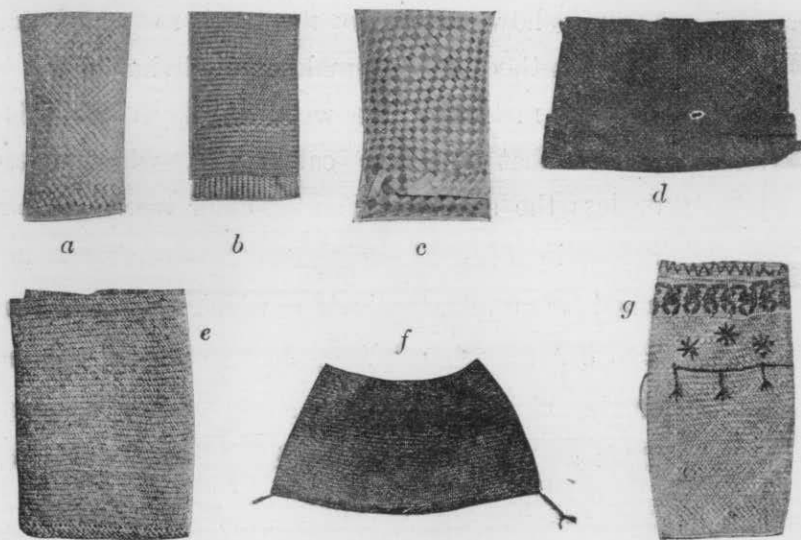


Fig. 60.—Bags for tobacco or betel-nut, Yap (a-e) and Palau (f, g).

The bag shown in Fig. 60, *b* is made of material dyed red, green or brown, resembling the tobacco pouch in shape. It is intended, probably, as an ornamental article and not for everyday use. In such bags and baskets the natives put not only tobacco, but betel-nuts and also lime which they need in chewing betel-nut.

Betel-nut Chewing. In Yap and Palau, betel-nut chewing is

spractised by both sexes more extensively than smoking. This habit seems to have prevailed in Palau when Captain Wilson visited it, for he writes: "The beetle-nut they had in abundance, and made great use of it, though only when green; contrary to the practice of the people of India, who never use it but when dry."¹

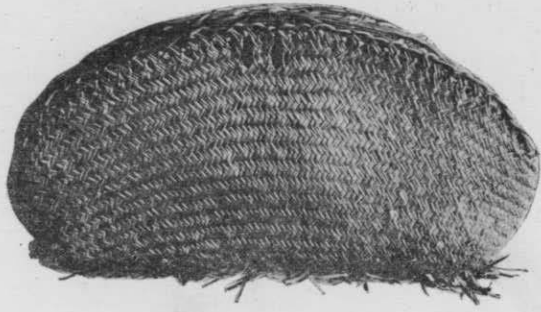


Fig. 61.—Basket from Yap.

Before chewing the betel-nut (fruit of *Areca cathecu*) they cut it lengthwise in two and roll one part in a leaf of the betel-pepper sprinkled over with lime. Soon after they have begun to chew it, you will observe them spitting reddish brown saliva with their mouth dyed the same colour. It is a sort of stimulant, which they seem unable to abstain from, for they are always seen chewing it, whether at home or abroad, whether talking, walking or resting. In the club-house for chiefs of Palau, there are small holes bored on the floor, one before each seat, through which they spit. The teeth of habitual chewers gradually turn black in colour, while the lips become dark red.

The old men and women are unable to chew the nut as it is, so they pound it in a mortar before using it. According to Fay-Cooper Cole,² a small mortar and pestle are employed by aged members of the Bagobo tribe of Davao District, Mindanao, in pounding betel-nuts.

The lime above referred to is obtained by burning fragments

¹ G. Keate, "The Pelew Islands," p. 299.

² Fay-Cooper Cole, "The Wild Tribes of Davao District, Mindanao," p. 70; Pl. XVII, b.

from coral reefs. The vessel in which it is kept is either a bamboo tube some 25 cm. long and 5 cm. in calibre, or it is one made of coconut shell. The bamboo tube has both ends, or one

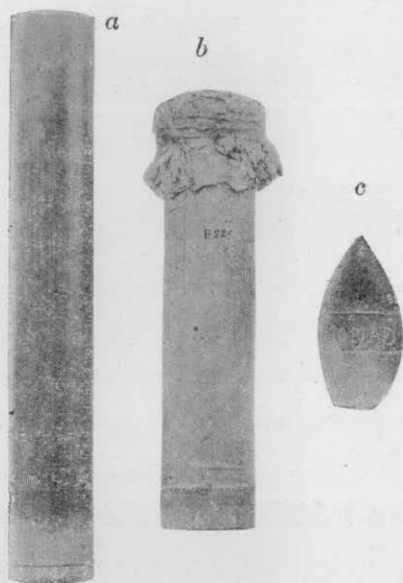


Fig. 62.—Bamboo cylinders and coconut vessel for lime, Palau.

end when there is a knot at the other end, closed and a small hole bored at one end so as to sprinkle out the lime contained within (Fig. 62, *a* and *b*).

Usually the coconut vessel has also a small hole made on top for the same purpose, while it has a larger hole at the bottom for putting lime in. Of course, the hole is stopped with a wooden plug when lime is in the vessel (Fig. 62, *c*). The vessel is some-

times carved, though not so skil-

fully as those found in New Guinea or in the Malay Archipelago. In the West Carolines, we failed to see wooden or tortoise-shell spatulas for handling lime so finely designed as those met with among the natives of New Guinea, though there are simple ones made of tortoise-shell in Palau.

Some betel-nuts, fresh betel-pepper leaves for rolling pieces of the nut in, knives, tobacco, etc., are all carried in a basket which is plaited of leaves and of which mention has already been made (Fig. 61). Indeed, "no man stirred abroad without his basket of beetle-nut"¹ (Pls. XX, XXV).

The betel-pepper is a plant allied to the *Piper methysticum*

¹ G. Keate, "The Pelew Islands," p. 311.

which is used in making the intoxicating liquor *kava* mentioned in Part I. As the natives can scarcely do without betel-pepper leaves, they are careful in the cultivation of the plant, providing trellises of twigs or pieces of bamboo.

In Yap, the writer saw women chewing coconut husk, in exactly the same manner as when chewing the betel-nut. The husk may or may not have the same efficacy as the betel-nut itself. He brought back specimens of husks prepared for chewing.

The lime, betel-nut and betel-pepper leaf are generally used together, but sometimes either of the last two may be omitted or substituted by a different material. For example, the natives of Rennel Island,¹ one of the Solomon Islands, and of Humboldt Bay, Dutch New Guinea,² lack the betel-pepper leaf, for which in the latter a substitute is found in the siri fruit or sometimes in the stem of the *Piper siriboa* (*Chariva siriboa*). The betel-pepper leaf is not used in Rennel Island, probably because the plant is not found in the island. The natives, however, of Kiwai Island lying at the mouth of the Fly River in British New Guinea³ are not addicted to betel-nut chewing, though the nut, lime and betel-pepper can be found there.

In the neighbourhood of those South Sea Islands now in the hands of Japan, the habit of betel-nut chewing prevails among tribes of the Malay stock as well as natives in certain parts of Melanesia, i.e., the Admiralty Islands, New Guinea and Solomon Islands. Probably the islanders of the West Carolines acquired the habit from some of those tribes. After comparing the native words

¹ C. M. Woodford, "Notes on Rennell Island," *Man*, VII, 1907, 24.

² G. A. J. Van der Sande, "Nova Guinea, III. Ethnography and Anthropology," pp. 19, 20.

³ W. Macgregor, "Annual Report of British New Guinea for 1890," *Resumé: Jour. Anthr. Inst.*, XXI, 1892, p. 76.

for "lime," "areca nut" and "betel-leaves," in Yap with the corresponding words in the Admiralty Islands, Moseley says: "The Yap Islanders are amongst the few Western Micronesians who chew betel, and they are believed to have learnt the habit from the Malays, but it is remarkable that their words for areca nut and the lime used with it differ entirely from the Malay words, and appear closely allied with those in use at the Admiralty Islands. The possible drifting of a Yap canoe to the Admiralty Islands might account for the similarity of words such as those for lime and betel in the two Islands."¹

Further, according to the same writer (p. 418), though the areca nut, lime and betel-leaves are now used together, the people in the northern part of the Admiralty Islands, when Labillardiere visited the region in 1772, used lime and betel-leaves only. The habit of chewing the nut was perhaps introduced into the islands after his visit. Supposing the Yap Islanders learnt this habit of chewing the nut with lime and betel-leaves from the natives of the Admiralty Islands, the practice in the former cannot date back much more than a hundred years. As already quoted, Captain Wilson saw the practice of betel-nut chewing in Palau about 130 years ago when he visited there.

¹ H. N. Moseley, "On the Inhabitants of the Admiralty Islands, etc.," *Jour. Anthr. Inst.*, VI, 1877, pp. 393, 394.

Chapter III.

Dwellings and Household Utensils.

The buildings in Yap and Palau are generally larger and more advanced in architecture than those of the East Caroline Islands. Voyagers to Yap and Palau will see roofs of club-houses projecting from among the trees, and these are certainly one of the "sights" in the West Caroline group. There are several kinds of buildings besides the dwelling-house.

I. YAP.

The buildings in Yap may be divided into the dwelling-house proper, the kitchen-house (of which there are two kinds), the maternity-house, the women's house used during their menses, the club-house and the boat-shed. These are all separate buildings, of which the largest one is the club-house and the next largest the dwelling-house.

1. **Dwellings.**—The dwelling-houses in Yap range from small huts to large buildings, the latter belonging, of course, to influential men. They are generally built on a platform of stone about one metre high, on which are set up poles or pillars of the bread-fruit tree or *callophyllum* wood. Beams and cross-beams are kept in position, not by means of nails, but by coconut ropes, some of which are fastened artistically. The roof, which is very steep, is thatched with leaves of the pandanus or nipa palm (*Nipa fruticans*), and the eaves are usually narrower than the ridge. In most cases, windows are provided, for the eaves overhang low making the interior of the house very dark. The window is shut with a door which, when removed, hung by a hook obtained from the jaw

bone of the leather jacket, a large fish which the natives call *kou* (Fig. 63).

Bamboo screens form outer walls, and the building is partitioned into a sitting room, a bedroom, etc., by means of timbers laid horizontally. The size of the dwelling-house is roughly 20 by 8 m. The house has a stone platform around it, which is wider in front and behind. Since the gable projects outward, the ground-plan of the dwelling

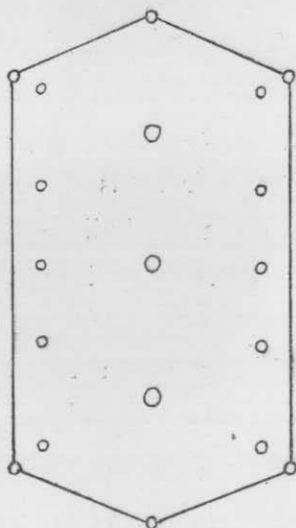


Fig. 64.—Ground-plan of a dwelling-house in Yap.

(Fig. 64). This is one of the peculiarities of archi-

tecture in Yap. The dwellings here present, thus, a striking contrast to the buildings in the East Caroline Islands which are rough in structure, consisting of only one room.

Matting.—For sitting and lying upon the islanders of Yap have nothing else than mats plaited with coco-tree leaves. In contrast with the building itself, such mats seem altogether too simple; but we find the same in Palau, where the art of building has reached a similar stage

of progress. In Yap, there is another kind of mat much prized among the islanders, with regard to which F. W. Christian writes: "There is yet another treasure highly prized in Yap, but which from its comparative rarity is seldom bartered. It is a coarse shaggy white mat resembling nothing so much as goat or dogskin; it is made from the beaten-out bark of the kal or lemon



Fig. 63.—Hook from the jaw bone of fish, used in holding the house door, Yap.

hibiscus tree. It is not for use, but merely for show, and is always kept religiously rolled up in a safe corner."¹

The natives of Yap have carved pillows, such as those in use in New Guinea.²

2. **Club Houses.**—There is one or two club-houses (called *fe-bay* by the natives) in each village. Generally they stand by the seaside and are the same in structure as the dwelling-houses, though much larger in size. Therefore, the pillars are also larger, some measuring 7 m. in height and 70 cm. in diameter. The coconut ropes binding pillars and beams are fastened more ornamentally. The gables carved and painted show wonderful skill; but on the whole, the structure of the club-houses is much more simple than that of Palau, where both the inside and outside of the building are profusely carved. But club-houses in Yap are often 10 to 12 m. in frontage and 30 to 32 m. in depth, so they are perhaps the largest buildings found in the South Sea Islands now occupied by Japan. Some club-houses in Yap, we are told, took several years before they were completed (Pl. XXIII, fig. 2).

The club-house is communal property. Though it is chiefly for unmarried young men, it is also used by married people. All meetings of the village are held in the building. While the club-house in Palau consists of one large room, the same building in Yap is partitioned into several sections or bedrooms by means of timbers laid on the floor. Two or three girls called *mespil* or *mogol* are attached to each club-house. They are common wives, so to speak, for the young men; and they are mostly slave girls robbed from neighbouring villages. Excepting the *mespil*, access to the club is strictly forbidden to other women.

¹ F. W. Christian, "The Caroline Islands," p. 237.

² F. Ratzel, "The History of Mankind," Vol. I, Fig. on p. 265.

Stone pavements around the club-house serve as a dancing place for the natives who are very fond of this pastime. Trees are also planted around the building, and lots of stones, some 80 cm. high, stand obliquely like so many tombstones. These reclining stones serve as an immovable chair when natives rest their back against them (Pl. XXIII, fig. 2). In resting they sit on a piece of bark of the betel-nut palm (?) which they usually carry with them. Kubary¹ gives a detailed account of the buildings in Yap. A comparative study of the club-house in the West Carolines and other South Sea Islands is made toward the end of the paragraphs devoted to Palau.

II. PALAU.

There are also various kinds of buildings in Palau, such as the dwelling-house, kitchen-shed, club-house, canoe-shed, and shrine. It may be noted that, though the one last mentioned is only a small building, no such building is found in Yap; while the largest building in both Palau and Yap is the club-house, which is certainly a "sight" in the way of architecture in Micronesia.

1. **Dwellings.**—The size of the dwelling-house is generally 8 by 4 m., with a bamboo or wooden floor raised 75 to 90 cm. above ground. The roof is usually thatched with leaves of the nipa palm (*Nipa fruticans*), while the walls consist of piles of bamboos, each rolled up in the same leaves. Bamboo screens sometimes form part of the walls. The entrance is usually made on the longer side of the house, and is about 1.80 m. high and 1.20 m. wide. As the house has a number of such entrances, each 1.20 m. apart from the other, it is light inside the building unlike

¹ J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," pp. 29-42; Taf. II-VII.

the houses in other islands. The natives use mats plaited of pandanus leaves (?) for sitting and lying upon. Some of the dwelling-houses in Palau have a fireplace inside, chiefly for cooking purposes; while others have a separate kitchen-shed built apart from the dwelling proper. Both the dwelling-house and the kitchen-shed are much the same in structure, only that the latter is usually more roughly built than the former.

Earthen Lamps. The use of earthen lamps in Palau may be mentioned as one of the striking features of household life in the islands. In no other islands of Micronesia can there be found such lamps, or anything like them. The following is a brief description of them.

The lamp is of unglazed, pot-like earthenware with a big, long mouth and a round bottom. It is red brown in colour,

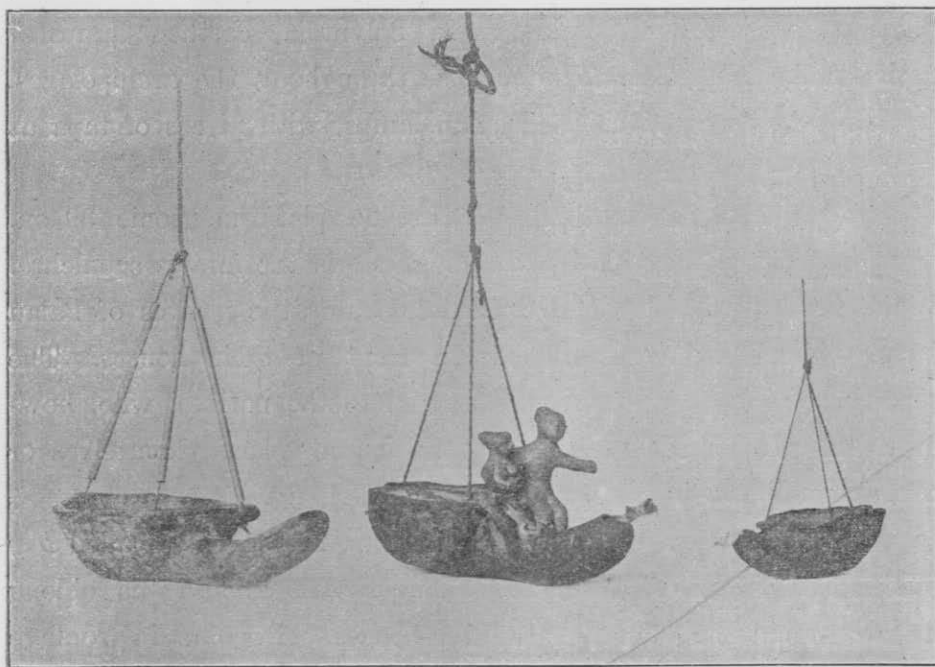


Fig. 63.—Earthen lamps from Palau.

and from 10 to 15 cm. in diameter. In the upper rim there are three holes, or three projections, each with a hole in it. Strings are put through the holes, and these strings, in turn, are passed through slender bamboo tubes so as to protect them from burning. Some of these lamps have human figures affixed in front for ornamental purposes. The wicks are cotton fibres twisted into something like threads, and coconut oil is used as illuminant (Fig. 65). Foreign-made lamps, however, have superseded the earthen lamps at Koror and its vicinity, though native ones may still be found in use in those parts seldom visited by foreigners. This change seems to be of a quite recent date, for there is scarcely any house that does not possess one or more of such lamps.

As already stated, earthen vessels are peculiar to the West Caroline group, and again earthen lamps are peculiar to Palau. Since pottery-making is unknown in Polynesia, earthen lamps of native make cannot be found in use throughout the archipelagos. In Hawaii, the natives used stone lamps, with pieces of tapa as wicks.

Tombs. In Palau, there is a stone platform, some 30 cm. high, in front of each native dwelling. It is the family sepulchre. While in Truk the dead are buried in water, the natives of Palau bury theirs, as just mentioned, in front of their houses. The sepulchre should, of course, be sacred to the natives, who, however, do not mind walking on the burial place themselves or allowing children to play on it (Pl. XXVIII, fig. 2).

2. **Club Houses.**—In Palau, as in Yap, club-houses (called *bay* by the natives) are built in each village. The building is oblong in the ground-plan like the dwelling-houses, being 5 m. in frontage and 14 to 16 m. in depth. It has a floor made of the hard wood

of the *Intsia bijuga*, some 1.20 m. above ground. The floor is supported, not by posts or pillars, but by several board-like pieces of wood placed side by side. The club-house at Koror stands on a substructure of stone. The roof of the building, which is very steep, is thatched with nipa palm leaves. The eaves are narrower than the ridge, as in Yap; but the slanting gable with its lower end inward is peculiar to Palau, as are the gables and walls which are of thick planks, neither the bark nor leaves being used. But no European element of architecture is introduced in the building, which therefore presents the native style of building in its original form. Each side has entrances, from six to eight in all, in addition to the narrow windows provided; so it is not dark inside the club-house. Door-steps consist usually of pieces of wood with notches (Pl. XXIX; Pl. XXX, fig. 2; Pl. XXXI, fig. 2).

Pillars, beams and cross-beams of the club-house in Palau are all square, no central pillars being used as in Yap. These, as well as the gables and other parts both inside and outside the house, are covered with grotesque carvings which are painted in yellow, red (ochre), white (lime?), black (soot?) and other colours. Some of the carvings are ornamental; but most of them are what may be called pictorial records, since they express the impressions of the natives or depict what has happened in the village, or the mythological traditions current among them, the carvings comprising the figures of human beings, birds, fish, trees, buildings, ships, etc. This may be compared to the practice of North American Indians who communicate their ideas to each other by means of pictures. There are some indecent carvings, but on the whole, those carvings are a testimony that the natives have the ability to express different things in a succinct way. If the native customs and manners have undergone a radical change, those carvings will

become the more valuable, forming indispensable data for the study of past customs and manners. While in Palau we received from the Aybathul, a chief of the first rank in the islands, a part of a cross-beam some 2.70 m. in length, of the chiefs' club-house, which present we brought home. This cross-beam is shown in Pl. XXXV, and has four sides, three of which are carved.

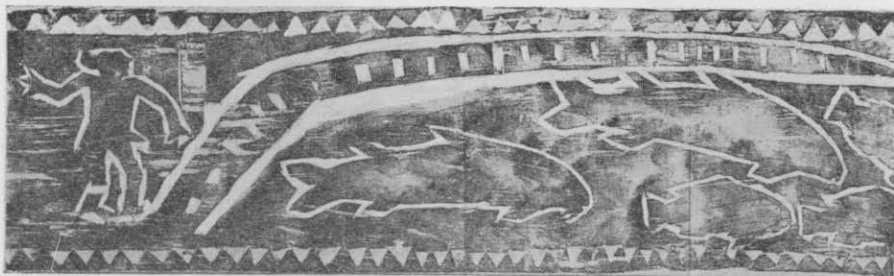


Fig. 66.—Photographic reproduction of the rubbing of a part of the carving

Fig. 66 is a photographic reproduction of the rubbing made from the carving on a beam of a club-house (Pl. XXX, fig. 2). The carving represents a mythological tradition current among the natives, concerning the origin of bread-fruit. In order to obtain food, so says the tradition, the islanders used to cut boughs of large trees, with the axe. Then, the fish, which had gone up inside the trees, came springing out of the cut ends. This, however, inflicted intolerable pain upon the trees, causing them to weep, so the natives, who could no longer continue the cruel practice, prayed to the god for another means of getting their food. The god granted their prayer. Now the fish became bread-fruit instead of the fish which originally passed through the tree, and continues to form the staple food of the natives. In Fig. 66, the figure in the center of the carving represents a tree, and the figure to the left a man cutting the bough, while the carving behind the man indicate the fish entering the tree.

Again, the figures to the right of the tree show natives trying to catch the fish which come from inside the tree.

We learned from a chief who spoke English that there were two or three kinds of club-houses. At Koror two club-houses stand side by side, one for the young men and the other for the chiefs. The latter is also the chiefs' council house. There



on a beam of a club-house, Koror, Palau. Explaining a mythological tradition.

stood formerly, we were told, another club or council house for lesser chiefs between the two buildings, but we saw no trace of it, it being destroyed in a typhoon several years before. These club-houses, where the chiefs come together for conviviality and conference, are also used for lodging guests. The young men's club-house is also their common lodging-house, as in Yap; and in Palau too, women are strictly forbidden access to it.

If we compare the two kinds of club-houses mentioned above, we find them much the same in structure. While the chiefs' council house is more richly carved than the club-house for the young men, the outer walls of the latter have shells or potsherds inlaid by means of red clay. On either gable of the latter too, a nude figure of a young woman, with her legs wide apart is carved (Fig. 39 and Pl. XXXI, fig. 2). The upper half of the figure is gone, as the result, it is said, of the order of a missionary stationed in Palau while it was a Spanish possession, to destroy the

carving as injurious to morals. But it is only the innocent part that is gone, the objectionable part remaining intact. For the figure consisted of two parts, and the upper part which was a separate carving, was affixed to the lower one carved on the gable itself. It was perhaps easy to remove the upper part, but the lower part was spared from destruction, simply because it was in all probability found difficult to destroy it. In spite of its pernicious effect on morals, the figure constitutes good material for our study in the tattooing, as already mentioned, around the vulva and on the lower limbs of women. Besides, we are told that a moral significance, as stated below, attaches to the carving, which may offset the objectionable aspect of the figure to some extent.

There is in Palau an interesting and instructive tradition explaining why such a figure came to be carved on the gable of the young men's club-house. The tradition as narrated by a chief of the second rank at Koror is recorded through the courtesy of Lieut. H. Adachi, of the Japanese Navy, stationed in Palau, as



Fig. 67.—Photographic reproduction of a rubbing of the carving on a beam of a club-house, Koror, Palau. Showing canoe sailing between two islands.

follows: "Once upon a time there was a beautiful maiden, Jilokai by name, of a good family in Palau. She was, however, so wanton that her conduct gave much anxiety to her father who

begged her time and again to lead a purer life, but in vain. The distressed father hit upon an idea, he had the image of his daughter carved above the entrance of the club-house for young men. Now the young people of the village began to tease Jilokai, who felt so ashamed of her conduct that she always kept indoors and in time became a good, chaste woman. Since that time, it has become customary for the islanders to carve a female figure on the gables of young men's club-houses."

The young men's club-house is for the common use of all the young people of the village, while the chiefs' council house is exclusively for themselves. Access to the latter is never allowed to ordinary men, still less to women.

There are in Palau seven or eight grand chiefs, of whom the most influential is the Aybathul at Koror. The present Aybathul is an old, but vigorous man, over seventy years of age. He is also a resourceful man, wielding a kingly influence over the whole of Palau. Under the grand chiefs, there are several lesser or subordinate chiefs who take charge of minor offices. These chiefs meet in conference at the council house, each taking the seat allotted to him. When we visited the chiefs' club-house at their invitation, we found nine chiefs including the Aybathul assembled in the building. They sit apart from each other, usually from 1.20 to 1.80 m., the seats are along the walls with two big fire places in the center of the room.

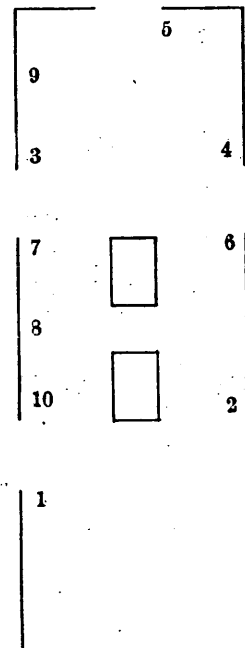


Fig. 68.—Ground-plan of the chiefs' council house at Koror, Palau. Numbers indicate the seats of chiefs in conference.

It must, however, be noted that their seats are not indicated by either chairs or mats, yet no disorder is in evidence when they take their respective positions. Though the chiefs sit with an interval between them of several metres in rare instances, they confer with each other from their own seats or without coming nearer for the purpose (Fig. 68). As stated in earlier pages, a small hole is bored in the floor in front of each seat, so that the chiefs who never cease chewing betel-nut may expectorate through the opening.

Such buildings are to be found, not only in New Guinea, the Solomon Islands, and New Hebrides, but also among the Malays inhabiting Borneo and the Philippine Islands. They are also found among the Naga, Garo and other tribes of India. The *kong-kai*¹ or club-houses of the aborigines in Formosa are buildings of



Fig. 69.—Photographic reproduction of a rubbing of the carving on a cross-beam of a club-house, Koror, Palau. Showing cock-fighting.

the same nature. The size and form vary according to the tribe and locality; but they are usually larger than a dwelling-house, and each village has at least one such building, called the bachelors' house or men's house. It is chiefly intended for a lodging-house or club for bachelors, though it serves also as the council house or hotel for guests. In most cases, women are

¹ 公廨

strictly prohibited to enter it as in the West Caroline Islands.¹

In Dutch New Guinea, there are large buildings for boys from twelve to sixteen years of age, who are too young to be admitted into the young men's club-houses (Van der Sande, p. 301); while the Bontoc Igorot tribe in Luzon and the Naga tribe in India have common lodging houses for girls and young women before their permanent marriage (Jenks, pp. 50, 53; Hadson, p. 70), which establishments correspond more or less exactly to the young men's club-houses. But instances in which there is a clear distinction between the bachelors' club-house and the chiefs' council house are rather rare, except among the Bontoc Igorot tribe which has lodging-houses for boys and bachelors as well as council houses for the elders. According to Jenks (pp. 50 and 52), "the *pa-ba-fu-nan* is the home of the various *a'-to* ceremonials. It is

¹ C. G. Seligmann, "The Melanesians of British New Guinea," pp. 223, 335, 459; Pls. XXXIV-XXXVI, XLIV, XLV. G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 223, 301, 302; Figs. 182-190. A. B. Meyer and R. Parkinson, "Album von Papua-Typen II," Pl. 16. F. Elton, "Notes on Natives of the Solomon Islands," Jour. Anthr. Inst., XVII, 1888, p. 97. B. T. Somerville, "Ethn. Notes on New Hebrides," Jour. Anthr. Inst., XXIII, 1894, p. 373. A. E. Jenks, "The Bontoc Igorot," pp. 50-52. D. C. Worcester, "The Non-Christian Tribes of Northern Luzon," Philippine Jour. Sci., I, 1906, p. 837. A. R. Wallace, "The Malay Archipelago," London, 1890, pp. 50, 51. Sir Hugh Low, "Sarawak," London, 1848, p. 23, quoted by H. Ling Roth, "The Natives of Sarawak and British North Borneo," London, 1896, Vol. II, p. 156. R. G. Woodthorpe, "Notes on the Wild Tribes inhabiting the so-called Naga Hills," Jour. Anthr. Inst., XI, 1882, p. 199. T. C. Hadson, "The Naga Tribes of Manipur," London, 1911, pp. 42, 70. H. H. Godwin-Austen, "On Garo Hill Tribes, Bengal," Jour. Anthr. Inst., II, 1873, p. 393. Y. Ino, "On the Head-house of the Dyaks and the *konq-kai* of the Wild Tribes of Formosa" (in Japanese), Jour. Anthr. Soc. Tokyo, XXI, 1903, pp. 455-459. U. Mori, "Ethnographical Album of Formosa" (in Japanese), Taihoku, 1915, Vol. I, Pls. 65, 66; Vol. II, Pls. 31, 67, 68. R. Torii, "Etudes anthropologiques. Les Aborigènes de Formose (1 Fascicule)," This Journal, Vol. XXVIII, Art. 6, 1910, Pls. XIX, XXVIII, LVIII. Y. Sayama, "Report on the Investigations of the Wild Tribes in Formosa" (in Japanese), 1913 (pp. 27-30; Figs. 8-13); 1914 (p. 157); 1915 (p. 57). The home of a local ruler in each settlement of the Bagabo tribe inhabiting Davao District, Mindanao, which serves as a social center of community, may be regarded as a sort of club-house (cf. Fay-Cooper Cole, "The Wild Tribes of Davao District, Mindanao," pp. 66, 67; Pl. XV). The large building in the Admiralty Islands, called the temple by Moseley, may also be a sort of club-house (cf. "On the Inhabitants of the Admiralty Islands, etc.," Jour. Anthr. Inst., VI, 1877, p. 404). Van der Sande applies the term of temple to the same kind of building in New Guinea.

sacred to the men of the *a'-to* (political division), and on no occasion do the women or girls enter it. All boys from 3 or 4 years of age and all men who have no wives sleep nightly in the *pa-ba-fu-nan* or in the *fa-wi*. Each *a'-to* has a *fa-wi* building—a structure greatly resembling to the *pa-ba-fu-nan*, and impossible to be distinguished from it by one looking at the structure from the outside. The *fa-wi* is the *a'-to* council house; as such it is more frequented by the old men than by the younger." From this it will be seen that the distinction between the two kinds of houses is not here so rigid as in Palau, for young men are allowed to sleep in the *fa-wi*, the council house for the elders.

There is another small structure, which is dedicated to a god. It is a club-house in miniature, being about 1 by 2 m. in size. It has painted carvings on the outside and resembles a small shrine in Japan, but containing no idols or things sacred to the deity enshrined (Pl. XXXI, fig. 1).

The boat-shed is built on the beach, where ships belonging to chiefs and others are kept and from where they put out to sea.

Dwelling-houses are scattered in the forest by twos and threes, but the road connecting them with each other is some 2 m. wide and paved with stone, a credit to the islanders. Indeed, Palau has far better roads than those in the East Caroline Islands. In Palau, there are stone platforms here and there. These are resting places, and flat stone pieces on the platform, which are some 70 cm. high, serve as the back of a chair when the natives take a rest, as in Yap. Stone pieces of the same nature also will be noticed near the chiefs' council-house. The places where the chiefs address their subjects are also provided with these stone chairs. C. G. Seligmann¹ says that in the villages on the coast of British New

¹ C. G. Seligmann, "The Melanesians of British New Guinea," p. 463; Pls. LVII, LVIII.

Guinea and the neighbouring islands, there are places where a large number of stones like tombstones stand. They are the meeting-places of the natives who discuss their affairs while squatting there leisurely. Women and girls are not allowed to enter such places. As for the buildings in Palau, Kubary's work,¹ which contains a detailed description on this subject, may be consulted with profit.

Chapter IV.

Implements and Weapons.

I. IMPLEMENTS.

In Yap and Palau, the principal implement is the hatchet, which is usually small in size, and fitted with a crooked handle. The tool also serves as a knife. The natives carry it on the naked shoulder, usually on the left, this appears to us to be a dangerous habit, but they show no signs of uneasiness, probably because they are accustomed to the practice since their childhood (Pl. XXV). The natives of the Admiralty Islands, Matty Island and in the interior of Dutch New Guinea also carry the hatchet on the shoulder.² Thus, the islanders of Yap and Palau, like the natives of the other islands, now use iron implements, but

¹ J. S. Kubary, *Ethnographische Beiträge zur Kenntnis des Karolinen Archipels*, pp. 221-267; Taf. XXIX-XLIX.

² H. N. Mosley, "On the Inhabitants of the Admiralty Islands, etc.," *Jour. Anthr. Inst.*, VI, 1877, p. 407. A. B. Meyer and R. Parkinson, "Album von Papua-Typen II," Pl. 53. A. J. P. Van den Broek, "Zur Anthropologie des Bergstammes Pësëchëm im Innern von Niederländisch-Neu-Guinea. Nova Guinea, 1907-1909, VII. Ethnographie," Leide, 1913-1915, Taf. XXXVIII, fig. 6; Taf. XXXIX, fig. 10.

formerly they employed shell-axes (Fig. 30), as already mentioned in Part I. This is clearly demonstrated by archæological remains. Besides the shell-axes, stone implements were also in use in Palau. Further, side by side with those tools, iron hatchets, though certainly small in number, were already employed in Palau some 130 years ago; for, according to Captain Wilson who visited the islands at that time, "he (the king) bore a hatchet on his shoulder, the head of which was made of iron, a circumstance which much surprized our people, as all the other hatchets they had seen were of shell."¹ It seems that the natives of Palau had another type of hatchet, the blade of which moved round. To quote Captain Wilson (p. 312), "they had also another kind of hatchet, which was formed in a manner to move round in a groove, that the edge might act longitudinally, or transversely, by which it would serve as a hatchet, or an adze, as occasion required." It is not certain whether hatchets of this type are still found in use among the islanders; but all we saw in Palau were of an ordinary pattern.

II. WEAPONS.

1. **Spears.**—There are several kinds of weapons found in the West Caroline Islands. We may first mention the spear, which perhaps shows an improvement on a similar weapon used in Truk. The cruel nature of uncivilized men may be noticed in the make of these weapons. The spear of the Yap Islanders, which is usually made of areca palm wood, has one end sharpened. And this head has a number of barbs affixed, for a length of 45 cm., with the object of doing the enemy as much injury as possible. Some

¹ G. Keate, "The Pelew Islands," pp. 55, 56.

spear-heads are made of areca palm wood and the shafts, of bamboo. These weapons are usually some 2·50 m. long, with the head and a portion of the shaft painted black, or with the shaft decorated with black parallel lines (Fig. 70). Now-a-days weapons are scarcely met with in Palau, and these are seldom actually used. But we learn from Captain Wilson¹ and Kubary² that the islanders formerly had barbed spears, the shafts of which were made of areca palm wood, the pointed ends of which were often armed with sting-ray spines.

2. **Darts.**—According to Captain Wilson,³ the islanders of Palau formerly used bamboo darts, which, inserted into the socket of a wooden sling, were discharged by the spring of the darts themselves. So it will be seen that this shooting contrivance is quite different from the spear-thrower employed by the natives of Australia, which is stick-like or board-like in shape. It may also be noted that, though Captain Wilson calls the shooting apparatus of the Palau Islanders a sling, it is entirely different from the sling as found in Truk. Incidentally it may be mentioned that stone-throwing seems to be practised among the islanders of Yap.



Fig. 70.—Spears from Yap.

3. **Wooden Swords and Daggers.**—We learn from Captain Wilson⁴ that some chiefs carried a kind of sword some 2 feet 10

¹ G. Keate, "The Pelew Islands," p. 314.

² J. S. Kubary, "Ethnographische Beiträge zur Kenntnis des Karolinen Archipels," p. 155; Taf. XXII, fig. 1-6.

³ G. Keate, *ibid.*, p. 314.

⁴ G. Keate, *ibid.*, p. 315; Pl. II, fig. 1; Pl. V, figs. 1 and 2.

inches in length into battle. They were made of very hard wood and inlaid with shell, the blade resembling that of a Japanese sword in shape. These swords were, we are told, of sufficient weight to break the skull. The natives had also daggers obtained from ray-fish spines which they carried in bamboo sheaths. They were only 13 inches long, including the hilt which often had a characteristic human figure carved on it.

Captain Wilson brought home with him specimens of these two kinds of weapons, the sword and the dagger, which are now in the British Museum. They are so famous that they are referred to by various authors.¹

Chapter V.

Decorative Patterns.

In the West Caroline Islands, as in the East Caroline group, decorative patterns will be noticed on the various things made by the islanders, such as textiles, bracelets (Fig. 46), tobacco holders (Fig. 60), bamboo cylinders for lime, wooden bowls, spear-shafts (Fig. 70), also on tattoos (Fig. 39) and on buildings (Pls. XXIX, XXXI). As in the East Caroline group, the patterns are usually geometrical, most of them consisting of triangles, squares, lozenges, zigzags, etc., while some are made up of concentric figures, a design not to be found in the East Caroline Islands. These are skilfully combined so as to produce artistic effects. It seems,

¹ We find an instrument reproduced by F. Ratzel at page 211 of "The History of Mankind," Vol. I, with the explanation "Saw of ray-spine, said to be from Pelew (British Museum)." However, there is no room for doubt that this represents the dagger obtained by Wilson in Palau, the human face carved on its hilt closely resembling the figure on the club-house in Palau.

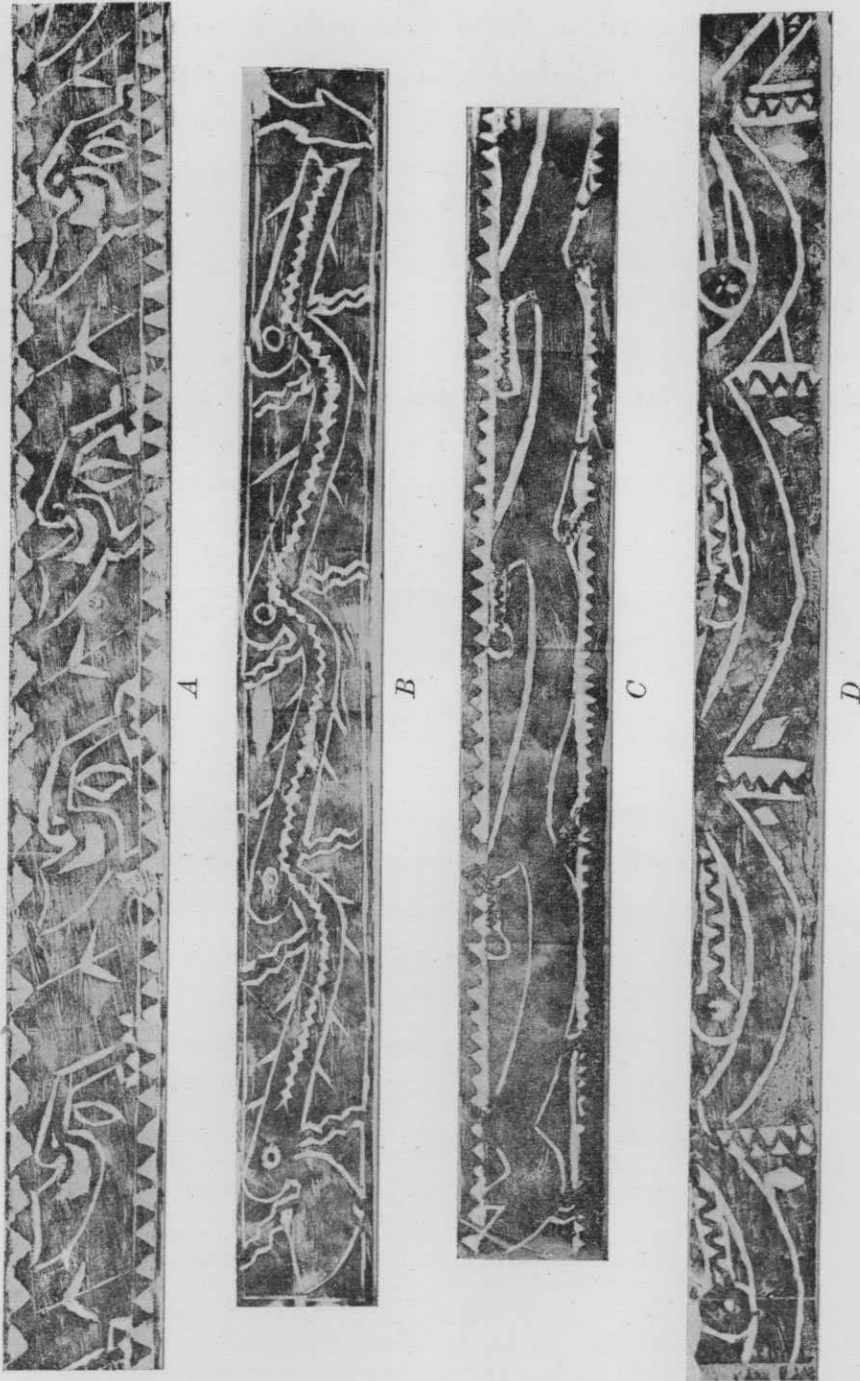


Fig. 71.—Photographic reproductions of the rubbings made from carvings on beams of the chiefs' council house at Koror, Palau.

however, that coils are not used. Some carvings on the gables and other parts of the club-houses in Palau have designs which are derived from animal life, but which it is difficult to recognize as such by observing a mere portion of them, for they are skillfully transformed into geometrical figures.

To illustrate the transformation of patterns. Fig. 71, *A* represents several, presumably aquatic birds which are carved separately, one after another; while in Fig. 71, *B*, the figures of birds have lost their natural shape with the exception of the heads, the beak of one bird becoming continuous with the body of another. In Fig. 71, *C*, this tendency becomes more marked, and in Fig. 71, *D*, there is so much transformation in the pattern that one can scarcely identify the figures. These figures are photographic reproductions of the rubbings made from carvings on several beams of the chiefs' club-house at Koror, Palau.

While spatulas used by the natives of New Guinea for handling lime and also their vessels for holding the same material are often carved in an elaborate design, the vessels for the latter purpose used in the West Carolines are simply pieces of bamboo tubes, either not carved at all or carved at best in simple geometrical patterns. These cannot bear comparison with similar vessels in New Guinea.

Chapter . VI.

Money.

In the East Caroline Islands, in Mortlock for instance, beads made of the shell of coconut or bracelets of tortoise-shell serve as money; while in the West Carolines there are special forms of money. As stated in an earlier chapter, the neck-ornament which is worn by the women of Palau and is called Palau money, is a kind of currency of extremely high value. In Yap, the natives have stone and shell money. I give a detailed description of each.

1. **Palau Money.**—The Palau money above mentioned is much prized by the natives as currency of high value, so it is very difficult to secure any specimen of it. Moreover, it is only women or girls of "rich" families who are seen wearing the Palau money on their necks. Such being the case, the available data for study, to my regret, were rather scanty. Of two or three pieces of Palau money which I saw, one was some 30 mm. in length, formed like a prism and yellowish-brown in colour, another was shaped like a ball, etc. According, however, to Kubary, there are several variations in the shape, some like the *kudatama* or *kirikodama* unearthed from ancient tombs in Japan, and others like a ball or polyhedron. Various materials are used, including glass, porcelain, agate, and what is supposed to be jasper. The pieces of Palau money have each a hole for convenience in wearing them. Their value varies according to the kind, and the kind possessed varies according to the social status of the wearer. The chiefs naturally, own more valuable pieces, some of which are worth several hundred shillings. It is not known when and by whom this money was introduced into Palau (Pl. XXVI). Kubary¹ gives a detailed account of the Palau money.

¹ J. S. Kubary, "Ethnog. Beiträge zur Kenntnis des Karolinen Archipels," pp. 1-28; Taf. I

We read in Van der Sande¹ that glass beads, like those found in Palau, are used as money in Dutch New Guinea. These beads are called antique beads, signifying that they are not of modern manufacture. Their price is from fl. 0.50 to fl. 5 each. Besides using them as ornaments, which is rare, the natives purchase their brides with them. C. Hose and W. McDougall² write, in this connection, that in Borneo very old beads made of glass or stone were formerly used as money and are now prized as family treasures. These beads are strung together into a necklace or girdle; sometimes a single rare bead is worn on the wrist for ornament. A rare specimen is valued at 100 dollars at least. These beads, it may here be added, are also distributed over different parts of the Malay Archipelago.

2. **Stone Money of Yap.**—If we land at Yap and enter a native village, we notice stone wheels placed in front of the houses or by the roadside. They form the valuable property of the islanders, who call them *fe* or *fei*, that is stone money. Now these "coins" which are made of pale yellow limestone, have each a round hole in the center, through which the natives pass a stick or pole to carry them by. There are, of course, pieces of stone money of irregular shape; however, the stone wheels are usually 30 to 55 cm. in diameter, some measuring 90 cm. to 1.20 m. In rare cases, the diameter reaches 3.50 m., though we did not come across such big ones. The piece found by the roadside near Tomil, Yap, was the largest we saw on our tour. It measured 1.93 m. in diameter and 24 cm. in thickness at the hole, which itself had a diameter of 40 cm. (Pl. XXIV, fig. 1). As regards smaller ones, we found several measuring 15 cm. in diameter, but

¹ G. A. J. Van der Sande, "Nova Guinea, III. Ethnog. and Anthr.," pp. 218, 219; Pl. XXIII.

² C. Hose and W. McDougall, "The Pagan Tribes of Borneo," London, 1912, Vol. I. pp. 226, 227; Pl. 130.

the specimen I obtained was perhaps one of the smallest, with a diameter of only 7.3 cm. The latter may not be intended for use; but it does not differ from the larger ones except in size, for it has a hole in the center, so that a piece of inner bark of the hibiscus tree may be passed through it.

Now limestone, the material of which this money is made, is found in Palau and not in Yap. If they had the material in their own island, the natives of Yap could make this stone money in large quantities, with the probable result that the pieces would no longer be of any value. But the Yap Islanders sail to Palau, some 240 miles distant in a south-western direction, in order to obtain their stone money. Wheels cut from limestone beds or rock are carried back to Yap, where they are valued as money. This is done at the risk of personal safety and at the cost of much labour; for the natives, who do not possess good vessels which would facilitate the transportation of the stone money from Palau to Yap, must rely upon their canoes or rafts, and this circumstance accounts for the great value set upon the stone wheels by the natives. In Malakal, an islet of Palau, two large pieces of stone money can be seen lying on the shore; they were probably left there, owing to the difficulty of loading or transporting them on the canoe. Of course, the value of the piece rises in proportion to its size, because of the greater difficulty in cutting and transporting. The natives measure the diameter of the piece by stretching the thumb and forefinger. However, as may easily be supposed, mere size is not valued much unless combined with fineness of material, beauty of colour, and regularity of shape, etc. The islanders try hard to secure such pieces, but their endeavours are, of course, attended with no small difficulty. It is natural, therefore, that some enterprising foreigners

should have attempted to cater to their demand. In 1890, when the late Dr. U. Taguchi and his party visited the Caroline Islands on the sailing-ship *Tenryu Maru*, they saw two Americans engaged in the manufacture of the stone money in Palau and transporting it to Yap, where in consequence, the currency was suddenly greatly inflated.¹ This money is now not prized so much as formerly, as ordinarily it cannot be put to practical use; nevertheless, the pieces are still precious in the eyes of the natives who do not like, it seems, to have them even touched by foreigners.

As to the value of this stone money, it is roughly determined by measuring the diameter in spans, as above noted. Of course, the value thus fixed cannot be accurate. We paid five *yen* for a piece, 68 cm. in diameter, of fine quality and good shape, which we brought home. We were told that a piece of this size was worth a pig weighing 45 kg. It is difficult to ascertain the exact value of a piece. In the summer of 1915, when a party from the South Sea Islands under Japanese occupation visited Japan, the natives from Yap brought and presented to the Minister of the Navy a piece of stone money, 85 cm. in diameter and weighing some 100 kg., which they said, was worth some 500 *yen*. The Minister has since presented the specimen to the Tokyo Imperial University, and it is now in the Anthropological Institute. It is, however, doubtful whether the piece is of such high value; it has in all probability no fixed value.

Smaller pieces of stone money are kept indoors, while larger ones are laid against walls or coconut palms. Again, many large pieces are seen on the premises of chiefs' or rich men's houses, or in the compounds of club-houses (Pl. XXII, fig. 2; XXIII, fig.

¹ H. Inoue and K. Suzuki, "An Account of the Mariana and Caroline Islands" (in Japanese), Tokyo, 1893, pp. 78-81.

2). In some cases, the pieces found in one place number about a hundred (Pl. XXIV, fig. 2). As mentioned elsewhere, some pieces lie, though rarely, by the roadside. Nobody, it is said, steals or destroys them. And those pieces of stone money, of which a chief or village is proud, give an index to the wealth possessed by them. Indeed, the stone money, together with the large buildings, belong to the "sights" of the West Caroline Islands. In Yap, the pieces are used for the same purpose as coins in civilized countries, in buying and selling, or as a gift when celebrating the completion of a building or on the occasion of death. Chiefs naturally come to possess much stone money, since they can afford to manufacture the pieces or have large quantities of goods to sell. As regards the many pieces about the club-house, they perhaps represent the prices obtained for fish and shell-fish caught by the bachelors and which they sold at the club-house, and also as remuneration for their labour in assisting in building houses. Thus, club-houses have their own property. The native word for the club-house is *fe-bay*, which means the "house of stone money," a term chosen to express in all probability the plentifulness of this money usually owned by club-houses.

We are told, however, that at present the stone money is rather for show than for use. The writer is of opinion that from the beginning it served the double purpose of currency and ornament, the latter idea even predominating. It is needless to say that barter, as still practised among wild tribes, was the earliest form of trade. In the next stage of development, some valuable things were chosen as medium for facilitating exchange. They would naturally be objects which the tribe or tribes desired to possess; they consisted namely, of jewels, feathers for ornamental purposes, etc., in some regions, while in other regions clothing,

grain, salt and other foodstuffs, cattle or even slaves were chosen for the purpose. This is the origin of money in primitive communities. Later rare things came to be prized just like the commodities above mentioned; the "Palau money" greatly valued and worn as ornament by the women may be cited as an instance. At first sight, the stone money in Yap has no other object except that of serving as currency like coins in civilized countries. The stone wheels, however, are greater in value in proportion to their size and fineness in manufacture, and they are arranged out of doors. Judging from the circumstance that all varieties of primitive money possessed some immediate practical value as an ornament, foodstuff, etc., it may be proper to conclude that, besides possessing the function of currency, the stone money of Yap served also as ornament, displaying the wealth of its owner.

3. **Shell Money in Yap.**—Two varieties of shell money are found in circulation in Yap, together with stone money. They are of bivalves commonly called pearl-shell, consisting of large shells and smaller ones. The fact that the natives call the large ones "Palau shells" indicates that they are not found in Yap, a reason for their being as valuable as money. As for the shape of shell money, the parts that form the hinge and also the edges opposite are left intact, while the sides are generally cut straight. Any injury to the edges left in a natural state will lessen the value of the money. The piece thus treated has then a hole bored in the umbo or on the hinge of the valve for passing a string or cord through it. In the case of so called "Palau shells," a single piece is of enough value to be used as money; but in the case of smaller ones, six or seven pieces are strung on cords in such a way that each piece is about 18 cm. apart from the other. The length of such a cord sometimes reaches 1.50 m. (Fig. 72). The larger the

shell the greater is its value. The size, that is the value, is measured by the outstretched fingers. A single large shell is worth a string of smaller pieces, and sometimes a small piece of stone money, for it is the stone money that is the highest in value. The shell money is not used as ornament. As already described, however, the natives obtain culinary tools and fishing hooks from shells of this kind. The shells are useful to the islanders in various ways and consequently are in great demand, but they are difficult to obtain, which circumstance perhaps explains why they are used as money. When an influential native

dies, two pieces of shell money are placed upon the body, so that, according to the native belief, the deceased may buy food with them on his way to heaven.¹

As above mentioned, in Yap there are only two kinds of money proper, the stone and shell money. But necklaces made of light scarlet shells and mats of the lemon hibiscus tree, which are articles highly prized by the natives, are also employed as medium of exchange.

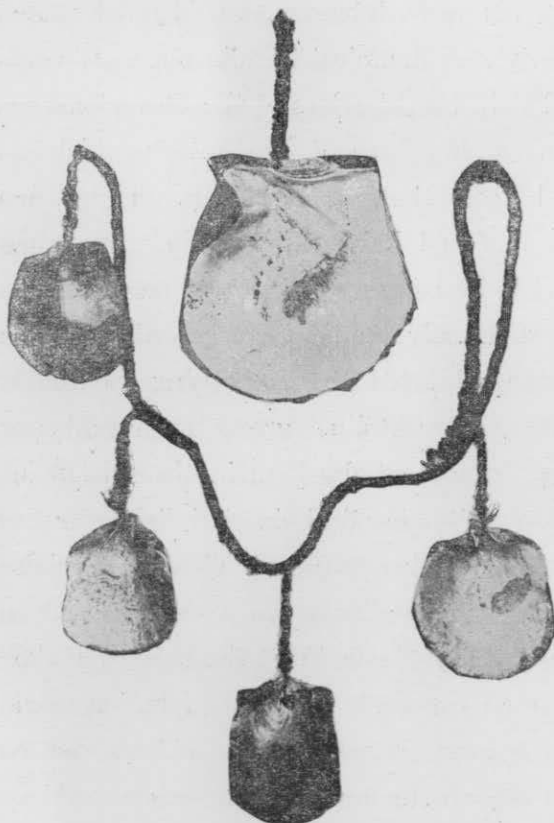


Fig. 72.—Two kinds of shell money from Yap.

¹ W. H. Furness, "The Island of Stone Money," p. 104.

Conclusion.

We shall now recapitulate our ethnographical notes on the East and West Caroline groups presented in the preceding chapters. It might be expected that the introduction of European customs into the East Caroline and Marshall groups would have changed the customs of the natives, redeeming them from their uncivilized condition, while the natives of the West Caroline Islands who still go naked with the exception of the loin-cloth and skirt linger on a lower plane of civilization. This view, however, would not be correct. On the contrary, the natives of the West Carolines are at least in some ways, more civilized than the islanders of the East Caroline group, as is evidenced by the architecture of the former which is certainly far more advanced than that of the latter. The club-houses especially, peculiar to Yap and Palau, are decidedly a credit to the natives; whilst their art in building roads is not to be despised, for these are constructed, permanently and regularly, with stone. On the other hand, it must be admitted that supposing the ruins in Kusaie and Ponapé of the East Caroline group to have been the work of the ancestors of the present dwellers in these islands, they must have possessed remarkable skill in building, for it certainly involved no small difficulty to transport stone materials and construct stone walls.

This may be open to question, but the fact that the natives of the West Caroline Islands stand on a different level of civilization from those of the East Caroline Islanders is undeniable. At the same time, it may be noticed that their manners and customs are also different. For example, the women of the East Carolines wear cloth skirts in contrast to the coarse petticoats worn in the West Caro-

lines. The potter's art is unknown to the natives of the Eastern group, whilst the islanders of the Western group manufacture earthen vessels including earthen lamps. The natives of the East Carolines drink *kava*, whereas the inhabitants of the West Carolines chew betel-nut instead. There is also more or less difference in the decorative patterns between the two groups. As regards the physical characteristics, the natives of the East Carolines are dolichocephalic, with a narrow face and of a medium stature; whereas the islanders of the Western group are mesocephalic or rarely brachycephalic, with a broad face and of a more or less higher stature when compared with the former.

The racial characteristics are always found intermingled, none of them being peculiar to one race. In other words, they partake of the characteristics of the races inhabiting Micronesia and its neighbourhood. Their civilization may be called Malay in origin or application, in that the natives of Micronesia know the art of weaving and wear cloth petticoats or waist-cloths; it is Papuan, in that the women wear coarse petticoats; it is Malay or Melanesian, in that the islanders of the West Carolines make pottery and chew betel-nut; and their manner of preparing food and the drinking of *kava* are shared by the Polynesians and some tribes inhabiting Melanesia. It will thus be seen that the islanders of the East and West Carolines have many things in common with other tribes in Polynesia, Melanesia and the Malay Archipelago.

The fact that they partake of the ethnical characteristics of those races seems to be almost a demonstration that they are tribes of mixed blood. Consequently, as has been stated in the Introductory Remarks, we would not be justified in treating the Micronesians as forming one and the same stock with the Polynesians, this nega-

tive conclusion being confirmed by the study of their ethnographical as well as their physical characteristics. But we cannot believe that racial intermixture has taken place in the East and West Caroline Islands to the same degree, for, from what we saw, they are different both ethnographically and somatologically. The West Carolines are situated nearer to the Philippine Islands and New Guinea than the East Carolines, and the natives of the former seem to possess more racial characteristics in common with the natives of the Philippines and New Guinea than the East Caroline Islanders. This is true not only ethnographically but somatologically as well, inasmuch as not a few natives in Yap and Palau are frizzy haired and brachycephalic. Ethnographically, Polynesian or Melanesian elements are in evidence in the East Caroline group, but not so prominently as is the case in the Western group mentioned above. Of the physical characteristics of the East Caroline Islanders, the same observation may be made. In short, the natives of Micronesia are an intermixture of various neighbouring tribes, and should now be regarded, in the writer's opinion, as constituting a distinct race, the Micronesian, rather than a group belonging to another race.

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PART II.

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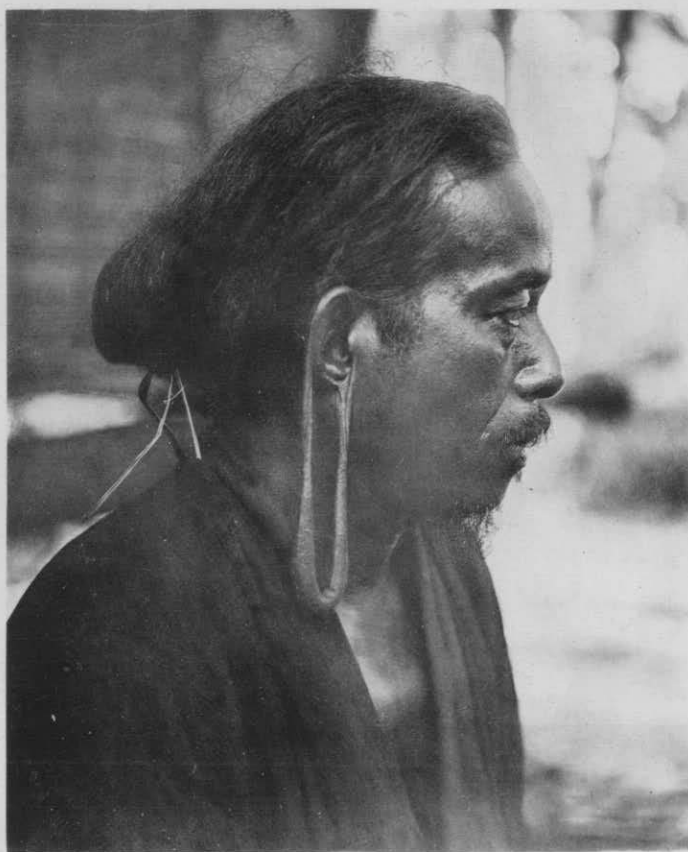
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PLATE I.

PLATE I
FEBRUARY 1912

Explanation of Plate I.

- Fig. 1.—A man of Fefän, Truk, aged 45, with a hole in the right and the left ear-lobe. The one in the left measures 121 mm. in long diameter, the other in the right 130 mm. A Truk man with typical features.
- Fig. 2.—A native of Wola, Truk, aged 35, with pierced ear-lobes hung on the auricle from the front. This is to prevent the lobes from shaking while working.
- Fig. 3.—A man of Toloas, Truk, aged 37, with ear-lobes pierced and hung on the auricle from behind.



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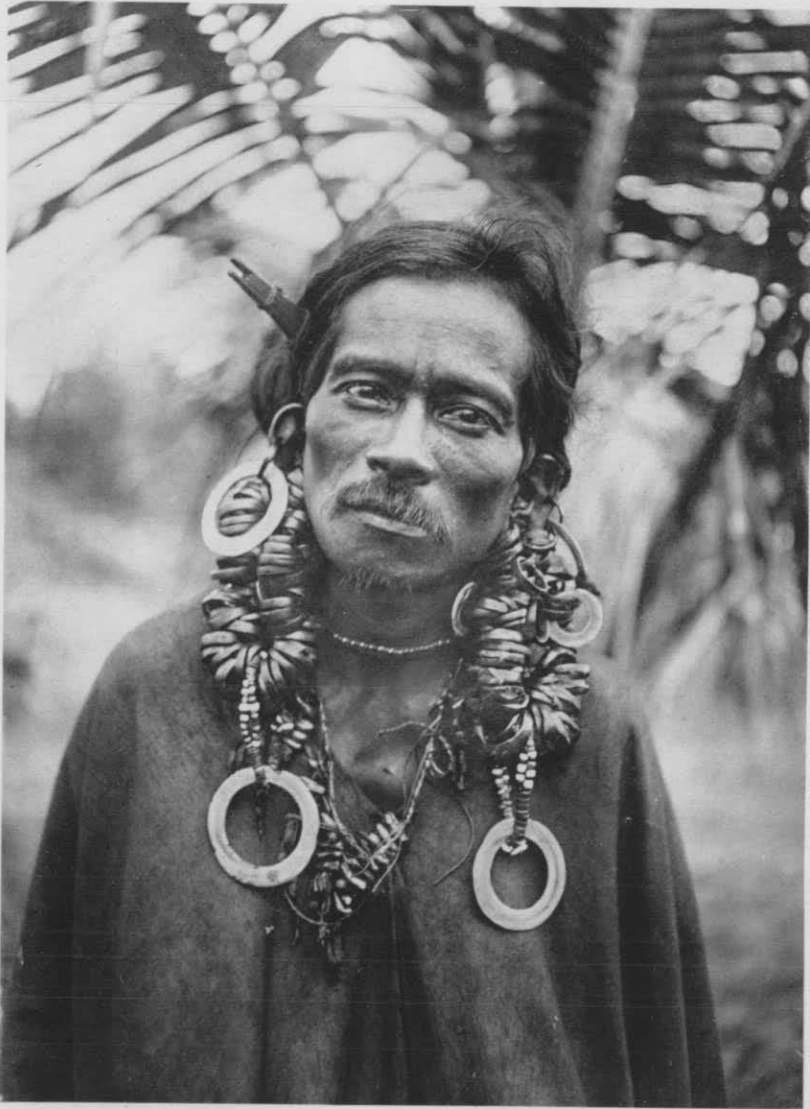
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PLATE II.

Explanation of Plate II.

A man of Toloas, Truk, aged 35, wearing ear-rings. The white ones are of shell, the black ones of coconut rings. In the left ear alone there are 77 rings, weighing 230 gram. Some of the necklaces he wears are made of the teeth of dogs or pigs. He has a wooden comb on his right temple, while his garment is of cotton, poncho-like in shape.



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PLATE III.

Explanation of Plate III.

Fig. 1.—A man of Toloas, Truk, aged 25, wearing a comb.

Fig. 2.—Front view of the same.



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PLATE IV.

Explanation of Plate IV.

Fig. 1.—Group of girls of Wola, Truk, dressed in foreign style. Girls are now usually dressed as shown in this figure.

Fig. 2.—Two girls of Toloas, Truk, attired in poncho-like garments and petticoats. Their heads are adorned with flowers and they wear large rings on their ears,—a typical style for girls.



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PLATE · V.

Explanation of Plate V.

Fig. 1.—A woman and a young bread-fruit tree at Toloas, Truk. The tree grows so large that a canoe may be built of its trunk. Strings are attached to the fruit on the tree, I could not ascertain for what purpose.

Fig. 2.—A taro field at Toloas, Truk. The taro is grown on low ground, women attending to its cultivation.



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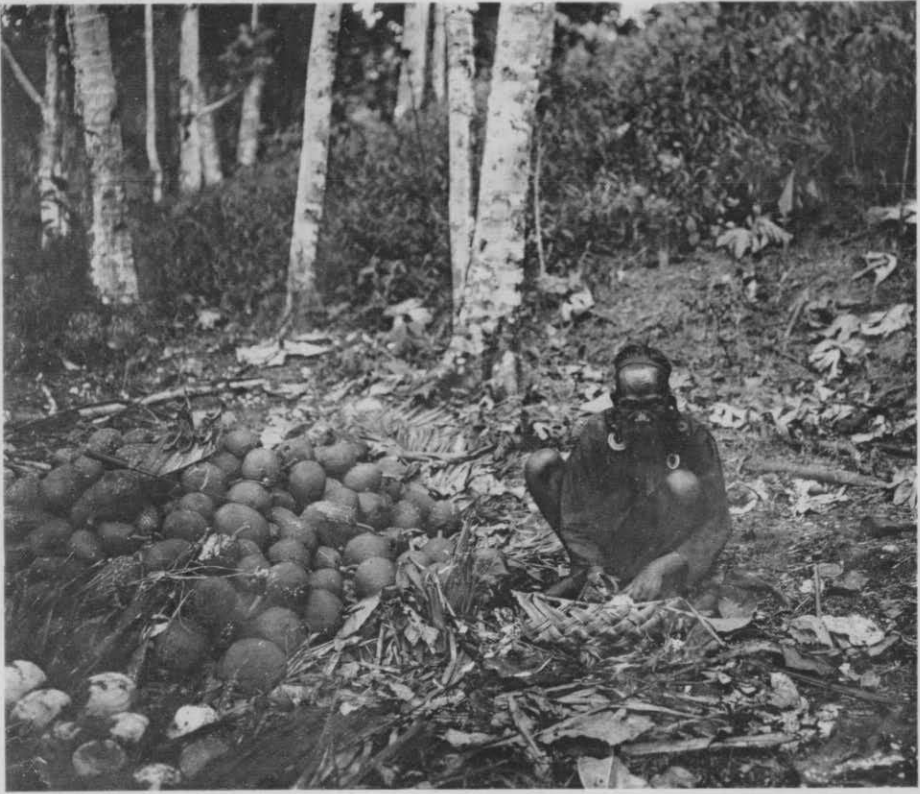
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PLATE VI.

Explanation of Plate VI.

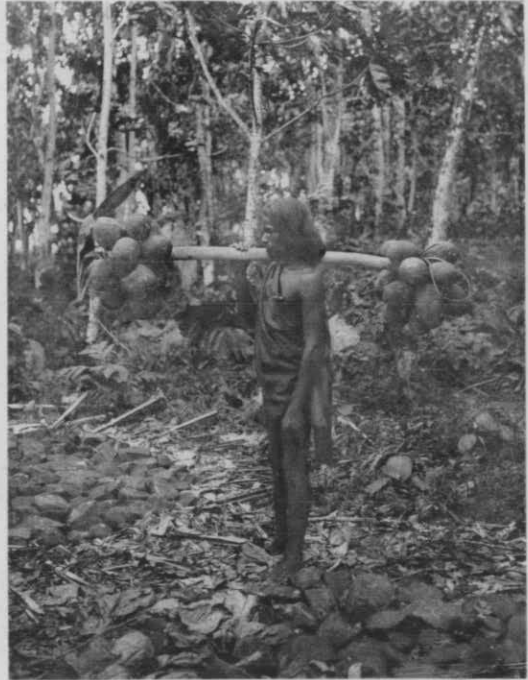
- Fig. 1.—The paring of bread-fruit at Toloas, Truk. The black balls are fruit not yet pared, while from the white ones at the left corner, the rinds have already been removed. A scraper made of cowry shell is held by the old man in his right hand. This figure shows the paring process in preparing food for cooking or storing.
- Fig. 2.—A woman carrying food, Toloas, Truk. She has bread-fruit cakes wrapped in banana leaves, on her head. The bread-fruit cooked by men in kitchen-sheds is thus carried by women to their dwellings.
- Fig. 3.—Transportation of bread-fruit, at Fefän, Truk. Some 15 or 16 bread-fruit are fastened to either end of a pole, and this pole is carried by the native on his shoulder. Two places regularly paved with stones indicate where the bread-fruit is stored underground.



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PLATE VII.

Explanation of Plate VII.

Fig. 1.—A native dwelling-house at Wola, Truk. It is a hut built among bread-fruit trees, of poles driven into the ground. The sides are all open except the section where the family sleep. The hut is one of the simplest dwellings in Truk.

Fig. 2.—Another dwelling-house at Toloas, Truk, more advanced in structure than the one shown above. It is a typical Truk house, with low overhanging eaves, no windows and only a small entrance. The inside of the house is dusky.



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PLATE VIII.

Explanation of Plate VIII.

Fig. 1.—Truk canoe, with bananas on board, approaching our ship.

Fig. 2.—A canoe-house, at Fefān, Truk. It is built of larger timbers, with eaves only slightly overhanging; this is worth noticing among the primitive buildings in the island. At the right lies a canoe, with a prow ornament.



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PLATE IX.

Explanation of Plate IX.

Fig. 1.—Women fishing with nets on a reef at Toloas, Truk. The woman at the extreme right wears a hat made of pandanus leaves. It is worn when going abroad, as when fishing.

Fig. 2.—Fisherwomen of Fefän, Truk.



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PLATE X.

Explanation of Plate X.

Fig. 1.—Women and boys bathing, at Toloas, Truk. They are splashing water on themselves, undeterred by its extreme muddiness.

Fig. 2.—A group of men, at Wola, Truk.



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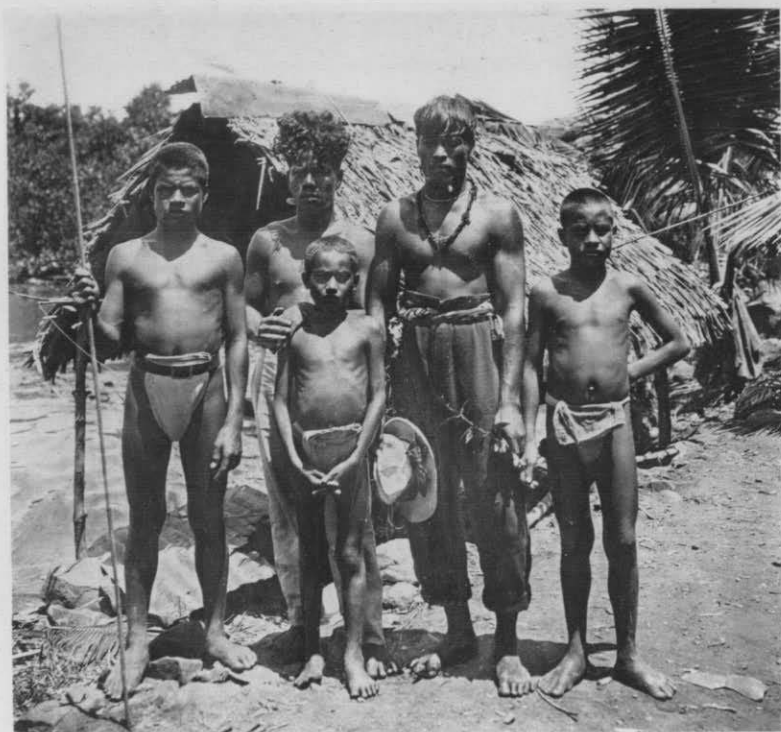
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PLATE XI.

Explanation of Plate XI.

Fig. 1.—Inhabitants of Jokaj, Ponapé, who are settlers from Mokil.

Fig. 2.—Natives of Ponapé. Photographed at Tomil, a harbour on Yap.



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PLATE XII.

Explanation of Plate XII.

Fig. 1.—Pingelap women at Jokaj, Ponapé.

Fig. 2.—Inhabitants of Jokaj, Ponapé, who are settlers from Pingelap. In 1910, when the natives of Jokaj revolted, the ringleaders were caught and executed, and the other villagers deported to the West Caroline Islands; while the district was repopled by settlers from Pingelap and Mokil, etc.



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PLATE XIII.

Explanation of Plate XIII.

Fig. 1.—Pingelap settlers at Jokaj, Ponapé, engaged in storing bread-fruit underground. They are covering the pared fruit with banana leaves, etc.

Fig. 2.—Mokil women at Jokaj, Ponapé, who go generally half-naked. They wear skirts of European style, different from those worn by the women of Truk.



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PLATE XIV.

Explanation of Plate XIV.

Fig. 1.—A village of Pingelap settlers at Jokaj, Ponapé. As shown in the figure, the floor of the houses consists of logs laid across the room. There are walls, but of a very primitive nature. The front, i.e., the side facing the road is always open, it is not provided with doors. The roof is too low for the inmates to stand upright in the interior.

Fig. 2.—Native houses of Mokil settlers at Jokaj, Ponapé. The building in front is the dwelling-house, the size of which is about 3 by 4 m. The sides are all open, excepting the sleeping section. We are told that the building in the rear is a women's club-house. We saw a number of women frequenting it, but are not sure whether the building was really a club-house or not. So far as my observation or information went, there was no women's house in other islands of the Caroline group, though there are club-houses for women in the Philippine Islands.



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PLATE XV.

Explanation of Plate XV.

Fig. 1.—Women of Lele, Kusaie, one of them is making nets.

Fig. 2.—Women and girls of Lele, Kusaie. The islanders of Kusaie are the most Europeanized among the natives of the Caroline Islands. They dress in European style as shown in this figure, and never wear the poncho-like garment. Two or three women in this figure have wreaths of grass on their heads. The young woman in the center holds a man's hat. Hats are made by women. A house stands in the background with walls typical of the dwellings in Kusaie.



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PLATE XVI.

Explanation of Plate XVI.

Fig. 1.—A dwelling-house and kitchen-shed at Lcle, Kusaie. The larger building is the dwelling-house and the smaller one the kitchen-shed. The dwelling-place in Kusaie usually consists of these two buildings, which are generally built on stone foundations. The dwelling-house has a floor; while the kitchen-shed has none, i.e., the bare ground serving as one. The latter is more roughly built than the former.

Fig. 2.—The construction of a canoe at Lcle, Kusaie. Built by hewing out a trunk of the bread-fruit tree(?), with iron implements. Formerly shell chisels were employed for the purpose, as may be seen from the fact that the natives of Kusaie still have such chisels in their possession.



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PLATE XVII.

Explanation of Plate XVII.

Fig. 1.—Men and women of Jabor, Jaluit. Jabor is one of the best harbours in the Marshall Islands, it is frequented by foreign vessels. The islanders are generally Europeanized, and seldom go naked. This may be due largely to the influence of Christianity. This figure shows them in their everyday clothes.

Fig. 2.—Coconut scraping at Jabor, Jaluit. The girl on the right side is astride on the apparatus, scraping coconut meat into a basin.



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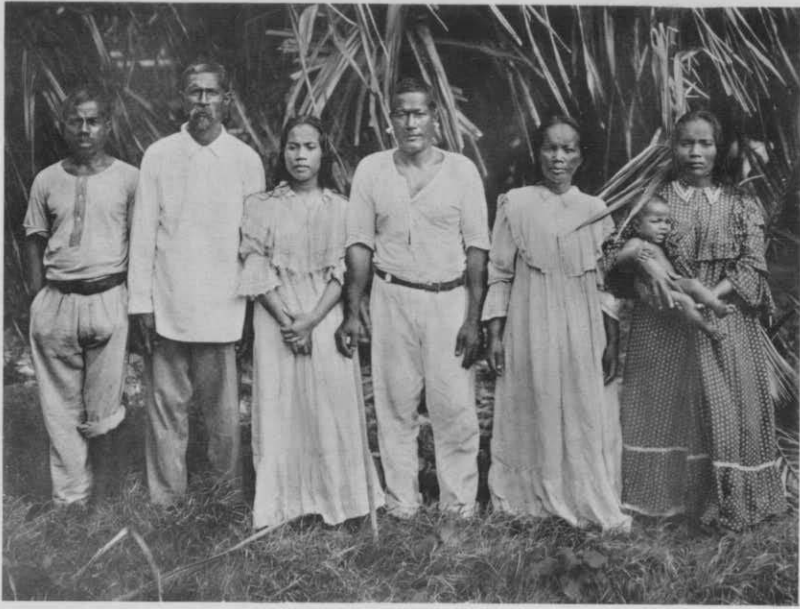
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PLATE XVIII.

Explanation of Plate XVIII.

Fig. 1.—A group of men and women of Jabor, Jaluit.

Fig. 2.—Plaiting at Jabor, Jaluit. The woman at the left in this figure is making ribbons of pandanus leaves(?). Women of the Marshall Islands are skilful in plaiting, producing beautiful mats. In this figure one portion of the native dwelling is also shown. The family sleep on mats placed over fragments from coral reefs. There are three kinds of mats, of which two are shown in the figure, the third (Pl. XXXIV, fig. 10) being of a superior kind as has been mentioned in the text.



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PLATE XIX.

Explanation of Plate XIX.

Fig. 1.—A canoe at Jabor, Jaluit. The canoe of the Marshall Islanders has its bottom hewn from the trunk of a tree, the sides consisting of separate boards. It has an outrigger almost as long as itself. Its bow and stern do not rise so erect as those of a Truk canoe. The high mast carries a sail plaited of pandanus leaves. The Truk Islanders also build the sides of their canoes of separate boards, and use mat sails.

Fig. 2.—A native house at Jabor, Jaluit. Houses in Jaluit are generally simple and small, the roofs are thatched with pandanus leaves and the walls are also made of the same leaves. Some houses have board walls, but this is of course rare. The art of house building in Jaluit shows little progress as compared with the Europeanization of their clothing.



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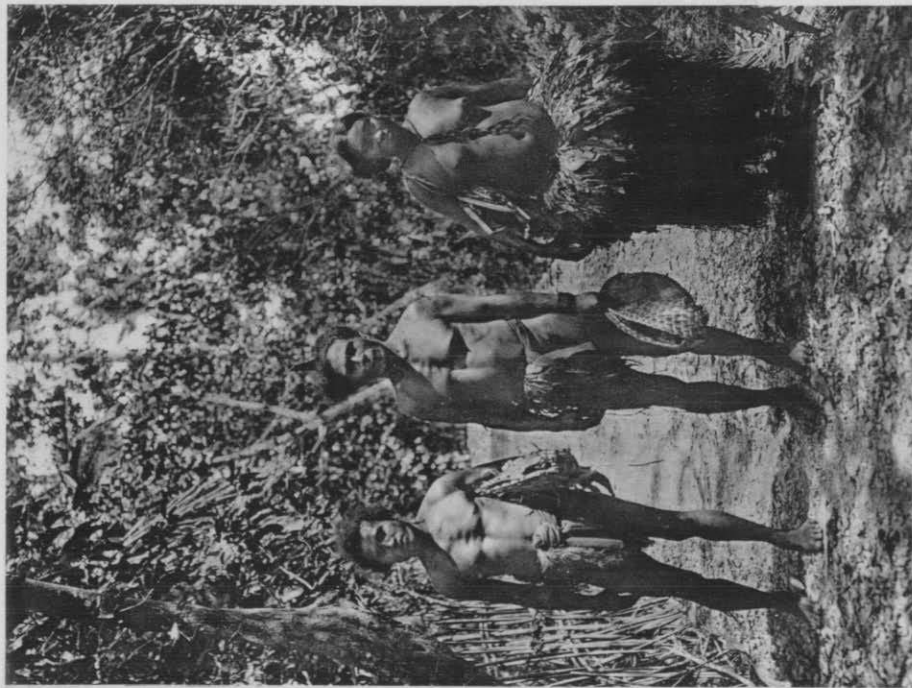
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PLATE XX.

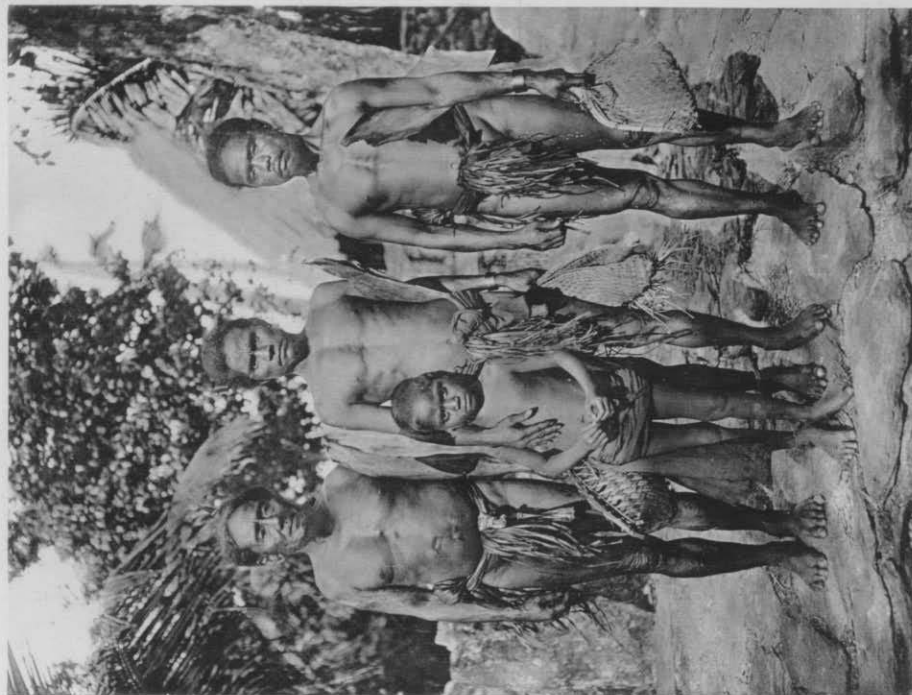
Explanation of Plate XX.

Fig. 1.—Two men and a woman of Yap.

Fig. 2.—Men of the Yap Islands. Besides the loin-cloth, they wear a long belt made of the inner bark of hibiscus, partly as ornament. On their left wrists they wear tortoise-shell bracelets. Each of them carries a basket plaited with leaves in his hand, containing tobacco and things used in chewing betel-nut. A cylinder, protruding from the basket held by the man in the center, is a lime-holder. The same man also wears an anklet on the right leg. Under their arms they carry pieces of the bark of the betel-nut tree (?), which they use for sitting upon. Notice the toes of the man at the extreme right.



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PLATE XXI.

Explanation of Plate XXI.

Fig. 1.—Three women and two children near Tomil, Yap. Each of the women has a neck ornament made of hibiscus bast dyed black. Every woman and marriageable girls must wear this ornament, the lack of which is considered disgraceful. The women in this figure have large petticoats made of coco-tree leaves. Little girls, carried in their mothers' arms, must also wear the same kind of petticoat. They wear several rings of shell and coconut shell on their arms.

Fig. 2.—Woman from Yap.



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PLATE XXII.

Explanation of Plate XXII.

Fig. 1.—A native house near Tomil, Yap, rude in structure and small in size.

Fig. 2.—Part of the premises of a native dwelling near Tomil, Yap. The woman is plaiting a large basket with coco-tree leaves. The stone wheels at the left are currency.



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PLATE XXIII.

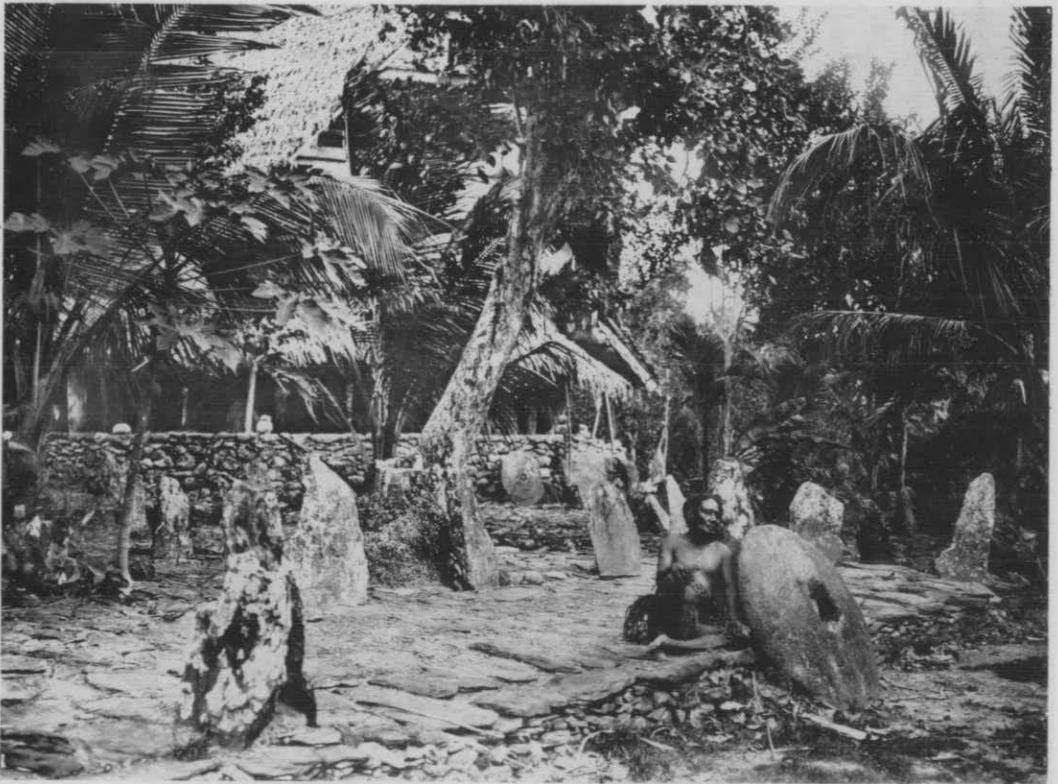
Explanation of Plate XXIII.

Fig. 1.—A club-house(?) near Tomil, Yap. Most of the club-houses are built on stone foundations in the shape of raised platforms, on the seashore. They are among the "sights" of the West Caroline Islands.

Fig. 2.—Part of the ground in front of a club-house near Tomil, Yap. The ground around the building is covered with flat stones, with additional stones some 80 cm. in height standing in a slanting position on the pavement. When the natives come together for a conference, they recline against these stones, just as the man shown in this figure is doing. The ground in front of the building is not small, since it serves as a dancing-place. Pieces of stone money of various size are arranged round the building.



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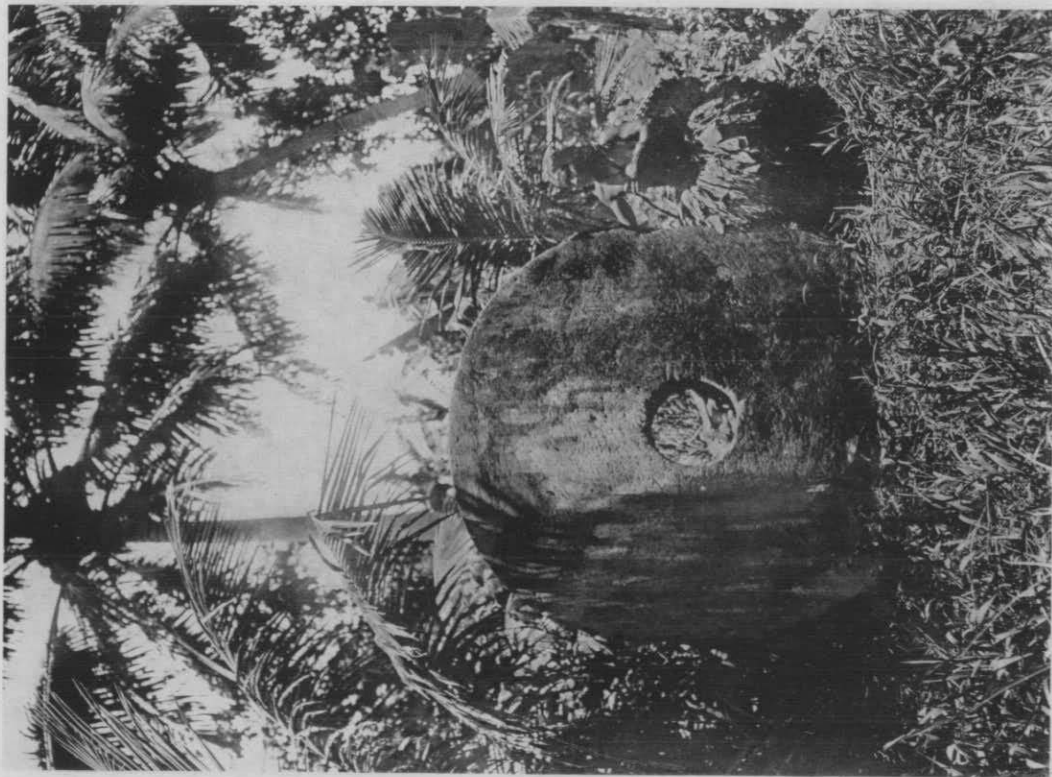
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PLATE XXIV.

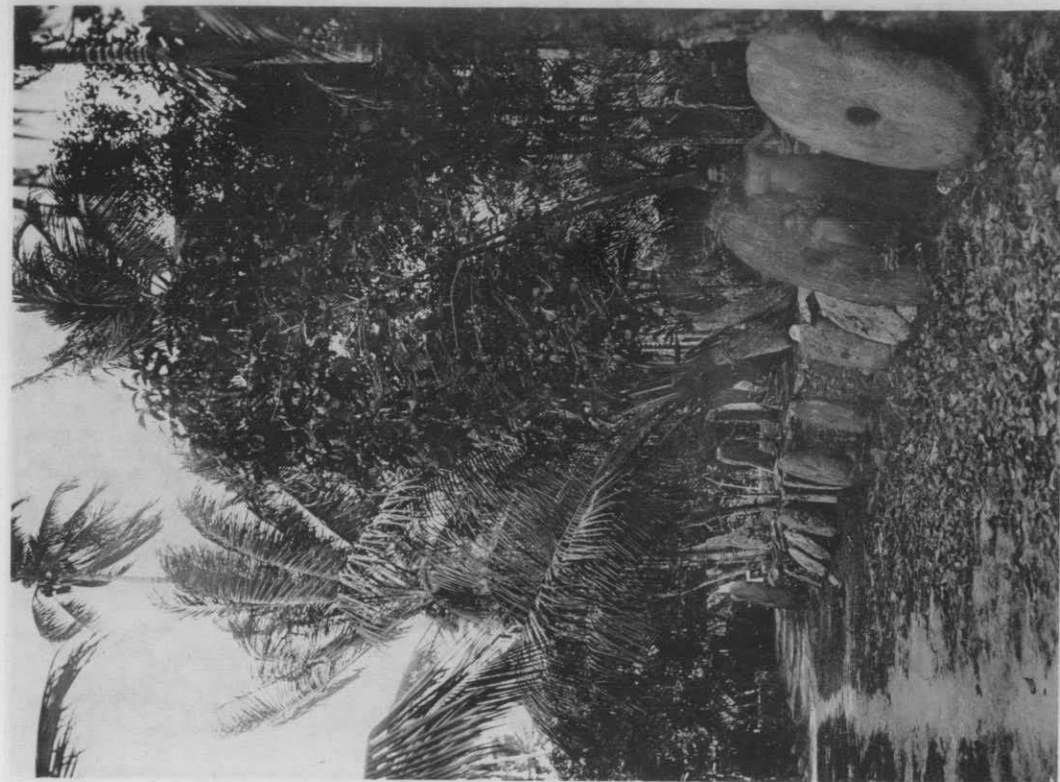
Explanation of Plate XXIV.

Fig. 1.—A large piece of stone money by the roadside near Tomil, Yap, with a diameter of 1.93 m., the hole itself being 40 cm. in diameter. It is of limestone from Palau.

Fig. 2.—Pieces of stone money arranged by the roadside in front of a club-house near Tomil, Yap. Particularly large collections of such pieces are found around club-houses. The natives are proud of their collections as showing the amount of their wealth. The pieces are of various sizes, but the most common are some 60 cm. in diameter.



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PLATE XXV.

Explanation of Plate XXV.

Chiefs of Koror, Palau, in their typical dress, with the exception of one or two. The old man in the center, who wears a helmet, is the Aybathul, a chief of the first rank. He is practically king of all Palau, for his influence extends over the whole islands. He wears an armlet consisting of the atlas vertebra of the dugong; this ornament is the "Order of the Bone," a symbol of dignity. The same kind of armlet is also worn by the old man, the second from the right. Each of the chiefs has a bag plaited with leaves, which contains things used in betel-nut chewing, etc. The old man left of the Aybathul has a hatchet, which also serves as a knife, on his shoulder. Grown up men go about carrying their hatchets in this manner.



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PLATE XXVI.

Explanation of Plate XXVI.

Figs. 1 and 2.—Women and girls of Koror, Palau, dressed in their typical native style. The petticoats consist of two pieces, front and back, which are made of stems of the *Eleocharis plantaginea*. In most cases, narrow belts which are plaited of pandanus leaves and coloured woollen yarn are worn, but sometimes imported cotton cords are met with as shown in these pictures. Such cords or belts must be worn by girls of marriageable age, like the neck cords worn by the women of Yap. Two little girls in Fig. 1 are too young to wear the belt or cord. The third girl from the left in Fig. 1, and the woman at the left end in Fig. 2 wear necklaces of so-called Palau money, which is highly prized by the natives. The women in Fig. 2 carry tobacco-holders under their petticoats. Notice the frizzy hair of some of the women and the manner of holding the child.



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ETHNOGRAPHY OF MICRONESIA.

PLATE XXVII.

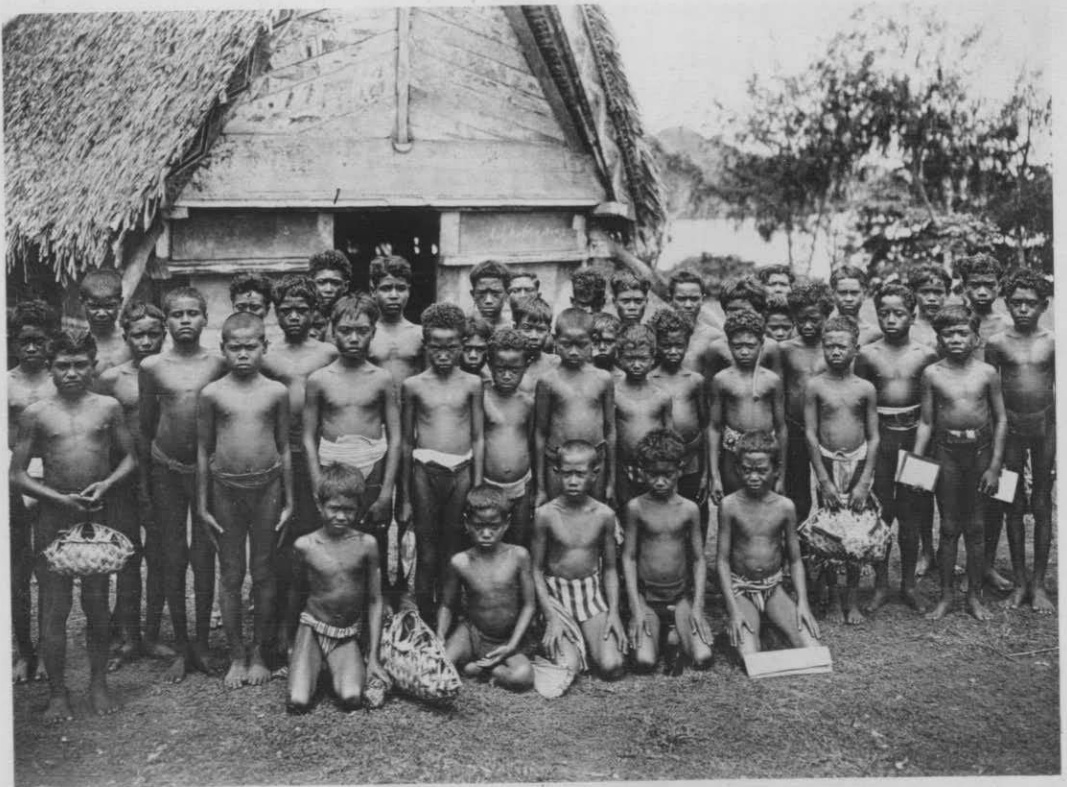
Explanation of Plate XXVII.

Fig. 1.—A dance of children of Koror, Palau. They dance in a circle, singing and making various gestures.

Fig. 2.—A group of boys in front of a club-house at Koror, Palau. Like grown-up men, they wear nothing but the loin-cloth.



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PLATE XXVIII.

Explanation of Plate XXVIII.

- Fig. 1.**—The dwelling and kitchen-house of the Aybathul, at Koror, Palau. The front building is the kitchen-house, while the building in the rear is the dwelling-house. Both have floors and large entrances, much better than similar buildings in the East Carolines.
- Fig. 2.**—A typical native house at Koror, Palau. The stone platform in front of the dwelling is the family tomb. Each house has such a tomb.



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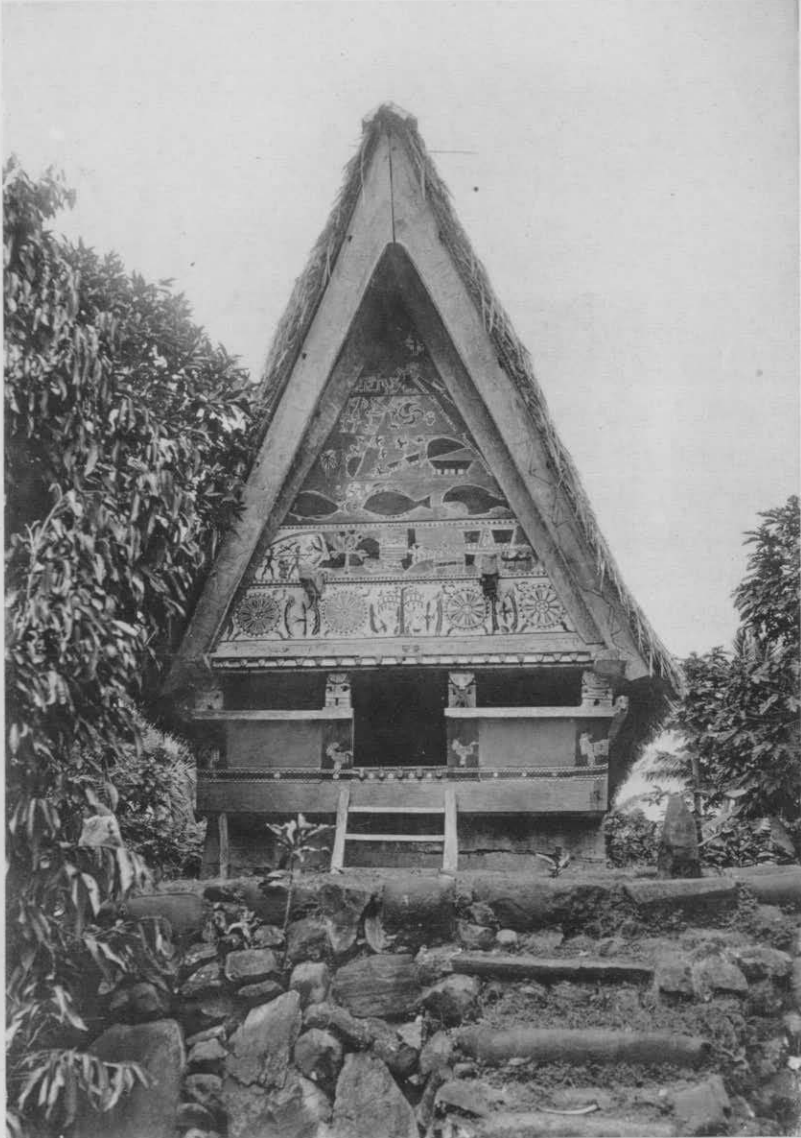
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PLATE XXIX.

Explanation of Plate XXIX

The council-house for chiefs at Koror, Palau. The building stands on a substructure of stones. It is some 5 by 16 m., with a floor about 1.20 m. above the ground and also a very steep roof. It is full of carvings both inside and outside the building, which are painted white, red, black, yellow, etc. Some of these carvings form decorative patterns, but most of them may be called pictorial records. Villagers in general, particularly women and girls, are strictly forbidden to enter the council-house. Close by this building stands the young men's club-house.



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PLATE XXX.

Explanation of Plate XXX.

Fig. 1.—Girls carrying loads on their heads, Koror, Palau. The left girl carries on her head a vessel made of two pieces of the bark of the betel-nut tree (?). She also carries a vessel made of the same material under her arm. The girl on the right has a basket of plaited leaves on her head. This custom of carrying things on the head prevails extensively among the natives.

Fig. 2.—The club-house at Koror, Palau. Formerly it was in the village, but was moved during German rule to the site opposite the governor's office, where it now stands. It, however, retains its old appearance and is carved extensively both in and outside.



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PLATE XXXI.

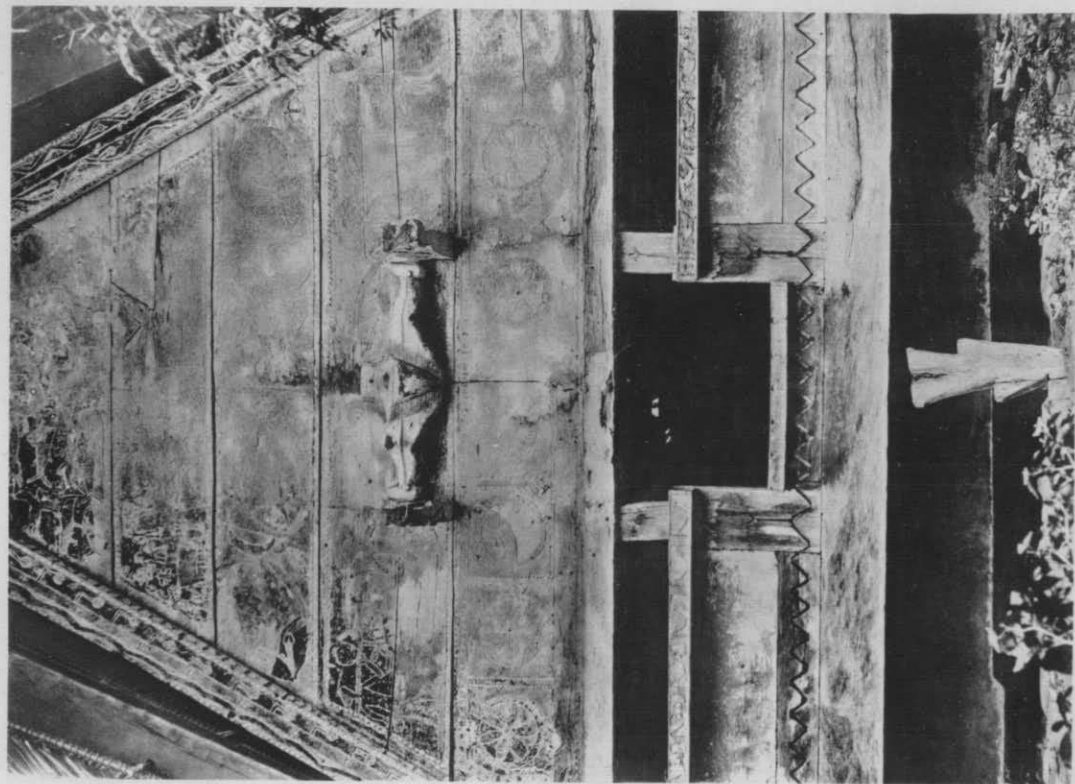
Explanation of Plate XXXI.

Fig. 1.—A shrine at Koror, Palau. In its structure, it is a club-house in miniature, being about 1 by 2 m. It has simple carvings on the outside, but has no idol or image of a deity, though it is a place of worship.

Fig. 2.—The entrance to the young men's club-house at Koror, Palau, and the carvings on its gable. Besides decorative patterns and pictorial records, the gable has a carved figure representing a woman stretching her lower limbs (See also Fig. 39 in the text). This furnishes material for studying tattoos on the lower limbs of women. The upper part, however, of the figure is now gone, it was destroyed on moral grounds. The door-steps consist of logs with notches. Ordinary dwelling-houses have similar steps.



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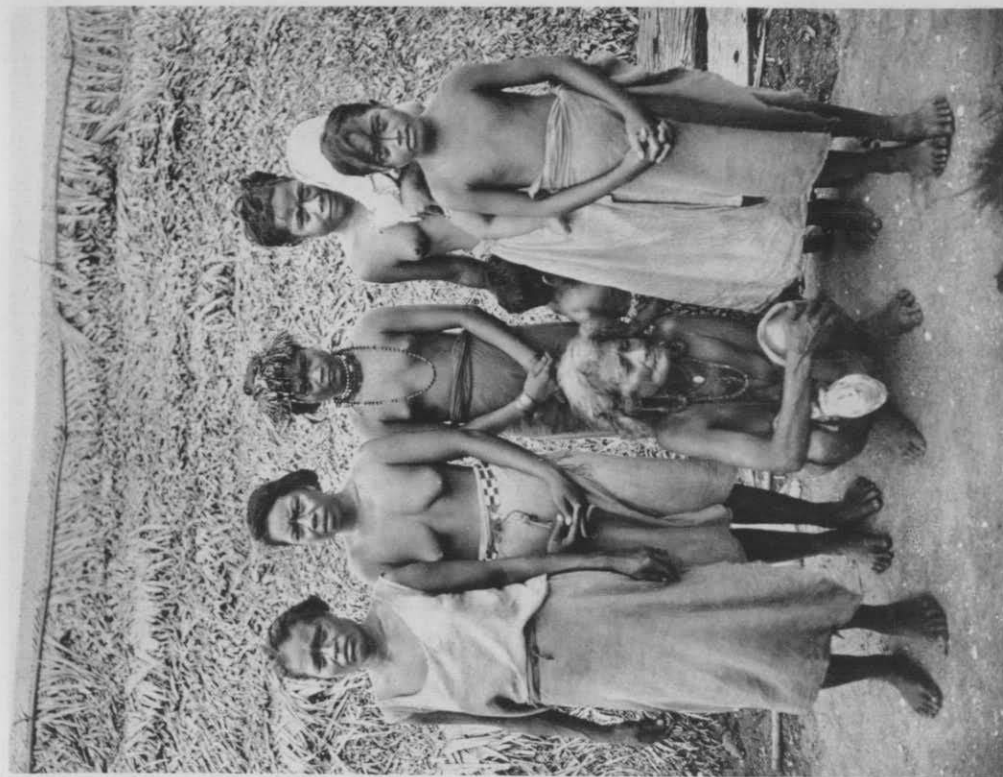
PLATE XXXII.

Explanation of Plate XXXII.

Figs. 1 and 2.—Women of Tanapag village, Saipan. The natives of Saipan, with the exception of the Chamorro tribe, are the offspring of settlers from the Caroline Islands. They resemble the natives of Truk in many points. Their personal adornment is much the same as that of the Truk Islanders, but the women of Saipan are generally half-naked. The band fastened above the petticoat consists of a series of shell rings much prized in Truk. The custom of wearing ornaments through a hole made in the ear-lobe is in vogue among the islanders. Notice the manner of holding the child.



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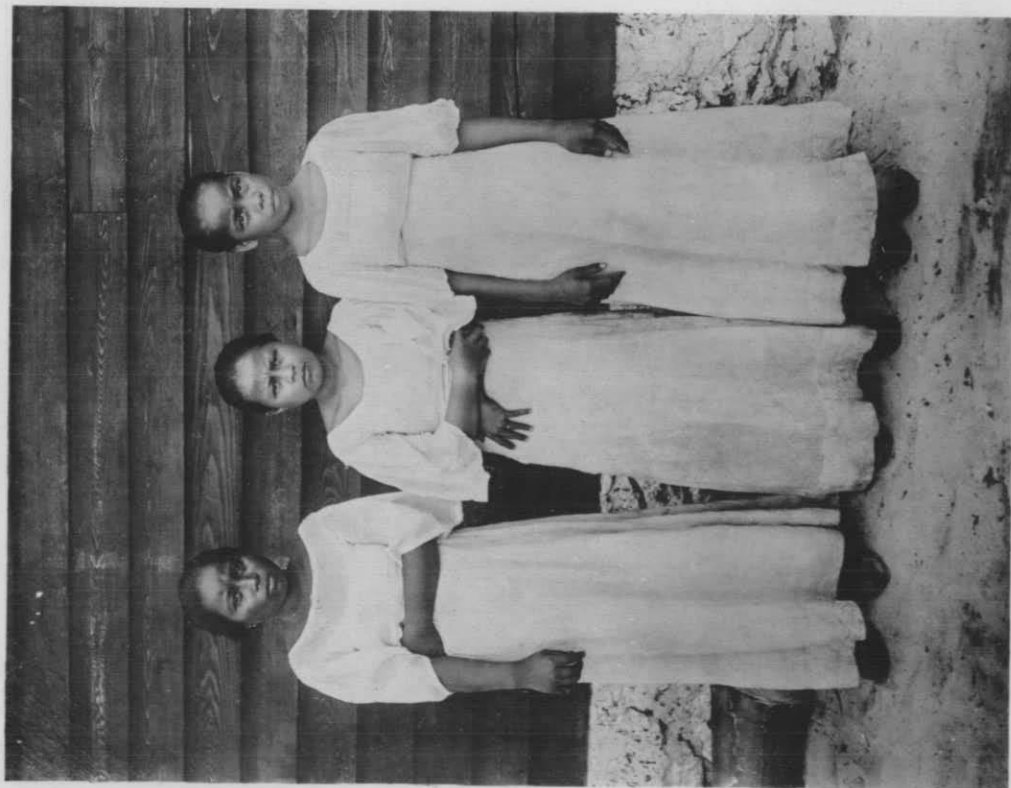
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PLATE XXXIII.

Explanation of Plate XXXIII.

Fig. 1.—Three girls of the Chamorro tribe in Garapan, Saipan. The Chamorro tribe and the Caroline Islanders seem to be from different stocks, the former being probably allied with the natives of the Philippine Islands. Both men and women of the Chamorro tribe dress in European style, but women's clothing consists of an upper garment and skirt, unlike those worn by the natives of the Carolines. The Chamorros seem to be fond of white clothes. They wear sandals made of leather, a fact not seen in other South Sea Islands under Japanese occupation.

Fig. 2.—Men and women of the Chamorro tribe in Garapan, Saipan.



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PLATE XXXIV.

Explanation of Plate XXXIV.

Fig. 1.—A wreath (sometimes used as a necklace) worn by the Mokil settlers at Jokaj, Ponapé. It consists of flowers of the *Caesalpinia pulcherrima* and leaves of a *Pteris* sp.

Figs. 2-4.—Shell necklaces from Truk.

Figs. 5 and 6.—Combs decorated with feathers from Truk.

Fig. 7.—A wreath made of flowers of the *Guettarda speciosa* and leaves of a *Polypodium* sp. worn by Jaluit women.

Figs. 8 and 9.—Bands worn by Truk women. They consist of small coconut and shell rings strung on strings.

Fig. 10.—Mat from Jaluit. Skilfully plaited and quite beautiful, they are sometimes worn round the waist by men and women. The size of this mat is 73 cm. square.



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PLATE XXXV.

Explanation of Plate XXXV.

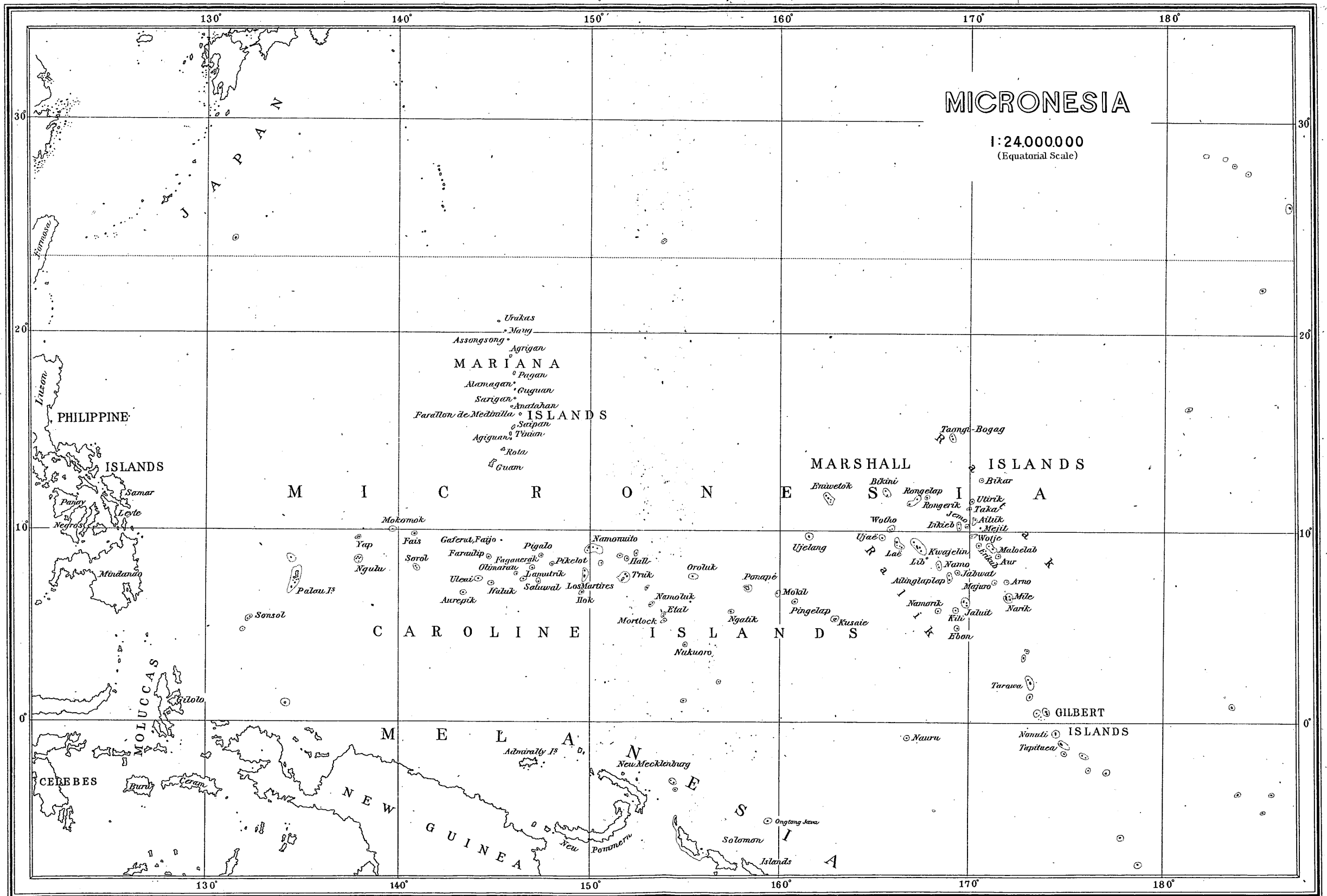
This plate shows the section of a cross-beam from the chiefs' club-house at Koror, Palau (Pl. XXIX) which was given us as a present and is now in the Anthropological Institute of the Tokyo Imperial University. It is not certain what wood the cross-beam is made of, though it seems to have been obtained from the bread-fruit tree. The section shown in this plate is a square piece some 2.70 m. in length and 24 cm. in breadth at the widest part, and is carved on all sides except the upper.

The first is the representation of a whaler which once visited the islands. It has a gun at the bow. Each person holds a paddle. All are naked, and their posture, etc., are very characteristic of the natives, so it may be supposed that the figures represent those islanders who were hired to work on board of the whaler.

The second and third series of carvings are possibly tales from the native mythology or tradition, but the information furnished by the islanders on this point was very imperfect. So far as the carvings themselves go, the second series are figures of men and alligators, the man in the middle is about to be swallowed by the alligator.

The third series consist of figures of men and women, together with two dark figures which probably indicate club-houses. The carving on the roof of the house at the right end shows a man who is perhaps watching what is happening on at a distance. One or two persons have several black lines projecting from the back of the waist, which probably indicate petticoats, hence the persons represented must be women. The figures affixed in front with a characteristic symbol, reddish brown in colour, show that they are men. The conduct of the two persons at the left end needs no remarking.





ERRATA

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|------|------|---------------------------|-------------------------|
| 8 | 17 | <i>for</i> Moltlook | <i>read</i> Mortlock |
| 24 | 5 | <i>for</i> Ontong | <i>read</i> Ongtong |
| 47 | 4 | <i>dele</i> pieces of the | |
| 62 | 19 | <i>for</i> caves | <i>read</i> eaves |
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| 148 | 22 | <i>for</i> indicate | <i>read</i> indicates |
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| 168 | 10 | <i>for</i> leastt | <i>read</i> least |
| " | 14 | <i>for</i> credi | <i>read</i> credit |