

Some Archaeological Notes on Monthon Puket.

[W. WALTER BOURKE .]

During my three years residence in Monthon Puket, I frequently came across ancient remains or other evidences of the former inhabitants of the land, and a brief description of some of these may possibly be of interest or use to Archaeologists, the more especially, as Monthon Puket is a part of the Malay Peninsula but little known to Europeans.

Monthon Puket consists of a long strip of land bounded on the south by the Malay state of Satul in about 7 deg Lat. N., on the east by the main ridge of mountains forming the backbone of the peninsula, on the north by the Pakchan estuary and Chumpawn in about 10 deg. 30 min : Lat : N., and on the west by the sea ; comprising a total length of about 220 miles, and of a width varying from 15 to 40 miles.

Tin is found in every part of the Monthon (Province), in varying quantities, with the exception of Krabi. In Monthon Puket, the tin districts are all near the coast, and there are great facilities for transport by water, in the Federated Malay States further south, however, the tin districts are farther from the coast than those in Monthon Puket and not so easily accessible.

A most noticeable fact in Monthon Puket is the extensive distribution of ancient workings for tin, these ancient workings are found from one end of the Monthon to the other, viz : in Muangs Renong, Takuapa, Panga, Puket, and Trang. Ancient workings are also found in the Federated Malay States, but only to a limited extent, probably on account of the tin districts there not being so easily accessible as those in Monthon Puket further north. The ancient workings are of two types, viz : shaft workings, and open cast or " paddock " workings.

(1) Shaft workings.

The shaft workings consist of narrow round vertical shafts sunk through the overburden, which is usually from 20 to 40 feet thick, to reach the " Karang " or tin bearing gravel (termed in Siamese " Krasa " ကြားနား) These shafts are usually

more or less bell shaped at the bottom in order to extract as much as possible of the tin bearing gravel without the ground falling in on the miners ; and as a general rule have been sunk quite close together, sometimes as near as to be only from 12 to 15 feet centre to centre. In some places, probably richer spots, the whole surface of the ground is honeycombed by these shafts.

The shaft workings in some districts appear to be of greater antiquity than those in other districts, for instance, there are shaft workings in Muang Puket and Trang on the lower slopes of hills which are still more or less intact, and the shaft holes are often quite 20 feet deep or more ; while in other places, such as in the Tai Muang and Bangklee districts the old shafts are only traceable by circular depressions left on the surface. There is no local tradition as to who worked tin by means of these shafts, the only reply obtainable to all enquiries being that they were made by the "Kon borahn" (คนโบราณ) lit: "the ancients"

Tin has been coming out of Muangs Puket, Panga, and Takuapa for several hundred years, according to references in old histories and voyages, and as far as I have been able to ascertain was chiefly washed out of streams, or obtained by "lampan" or ground sluicing workings (Siamese "Muang Laan" เหมือง แล่น)

I have never seen any Siamese working by shafts for tin and have never been able to definitely ascertain whether the Siamese ever did work for tin by means of shafts or not ; but I rather incline to the view that they formerly did so to a limited extent. In this connection, I may mention that the old shaft workings which occur in the Federated Malay States are known by the Malays as "Lumbong Siam" which may be translated as "Siamese Mines," though whether the term as so applied is justified or not by facts, I do not know.

The Siamese have only been in more or less effective occupation of Monthou Puket since the first half of the 17th Century, and during the period that has elapsed from then till now, the amount of mining work done by the small and scattered population, harassed as it was by occasional incursions of the Burmese, cannot have been very great. On the other hand, the remains of old shaft workings are not only widely distributed, but also in places very extensive, for instance, the whole coast line from the Straits of Pak Pra up

to-Tungmaprauw in Muang Panga is riddled by these ancient shaft workings on so large a scale as to prove that there must formerly have been a large and industrious mining population settled there, for a considerable period of time, which conclusion is further borne out by the presence of large quantities of ancient slag from tin smelting which is found in various places close to these ancient workings, particularly in the district just mentioned, and in other parts of Muang Panga, as well as in Muang Puket, Takuapa, and Trang. This old slag still contains a large amount of tin, and is collected by the people and resmelted.

Ingots of tin of a peculiar hemispherical shape have also been found in Muangs Takuapa, Panga, and Puket; and small ingots of tin of a long narrow shape have been found in Muang Trang, leading to the supposition that these ingots may have either been abandoned in haste, or buried in time of war.

The places where these old shaft workings occur, and the old slag is found, are, especially in Muangs Takuapa and Panga, covered with virgin forest at least several hundred years old; leading one to conclude, that most of these old workings, and those in the Takuatung district in particular were certainly not made by the Siamese, who, after all, are an agricultural as opposed to an industrial people. When however, the undoubtedly Indian remains found scattered over Monthon Puket, together with the fact that from a remote period the Indians had trading connections of an intimate nature with the Malay Peninsula, Sumatra, and Java, are taken into consideration, one is irresistibly led to the conclusion that these old workings, or at any rate, the greater part of them, were made by the Indians who came to this coast, primarily to seek tin, but who probably also formed agricultural settlements where conditions were favourable, more particularly in Muang Krabi and Trang, both of which subdivisions of the Monthon or Province contain fairly large tracts of good agricultural land. In this connection it may be of interest to mention that I have occasionally noticed inhabitants of Monthon Puket of a very dark type, darker than the ordinary Siamese, and with an Indian cast to their features; also that in out of the way parts of Talung and Takuatung some few of the men do not cut their hair, but wear it long and coil it at the back of the head in a similar manner to the way the Tamils wear their hair.

(2) Open cast or "Paddock" workings.

There is only one place in Monthon Puket known to me where there remains of ancient open cast workings, viz: in the Bangklee district right on the west coast of Muang Panga. These open cast workings which are of a very extensive nature are found in the same locality as the extensive ancient shaft workings already referred to, but may possibly be of later date. As far as I know, the Chinese who came to Monthon Puket have never worked tin by means of shafts, it is only quite recently that a few Macao Chinese have done shafting work in Puket, it was the same in the Federated Malay States, no shafting work was ever done by Chinese until some Chinese who had learnt the work in Australia introduced it there. Even now the Hokkien Chinese who comprise the bulk of the Chinese population in Monthon Puket will never work underground, such work is always done by Macaos. Moreover, as far as I know the Indians never worked mines by the open cast method, but always by shafts. It therefore, seems to me an open question as to whether these open cast workings were made by the Indians, or by Chinese of the earlier period of Chinese immigration into Siam; they were certainly not made by the Chinese of the present period of immigration for the Chinese have only been carrying on tin mining in Muang Panga for about the last 100 years, and these old open cast workings are covered with big virgin jungle several hundred years old. There is no local tradition as to whom these old workings were made by, beyond the usual reply "kon borahn tam" (the ancients made then). In his connection, Colonel Gerini informs me that the emigration of Chinese from China was stopped by the Chinese Government about the last quarter of the seventeenth Century, so that these workings, if made by Chinese must have been prior to above 1700 A. D.

Whole pieces and fragments of pottery are frequently found in this locality, and I obtained one whole piece of China, apparently a ricebowl, $4\frac{1}{2}$ in. diam. and $2\frac{1}{4}$ in. high, with a crude hand painted ornamentation on the outside in dull red and green, the inside decorated with an edging round the brim of a geometrical pattern $\frac{1}{2}$ in. wide in blue, and the bottom with a lotus also in blue, the glaze is thick on the inside of the bowl. It is clearly not Sawankaloke ware, but my knowledge is insufficient to enable me to express any opinion as to its probable age and place of manufacture. It is my in-

tention, however, to submit this bowl to the examination of experts, in order to obtain definite information about it, which may throw some light on the origin of these open cast workings.

The next important fact from an archaeological point of view is the widespread distribution of undoubtedly Indian remains, which are found from Muang Takuapa on the north to Muang Trang on the south.

INDIAN REMAINS.

The most important Indian remains have been found in Muang Takuapa, and indeed the geographical situation and natural advantages of Muang Takuapa are such as to lead to the conclusion that it must undoubtedly have been a place of considerable commercial importance in the past.

Takuapa harbour is the finest in the whole Monthon, being absolutely landlocked, and affording complete shelter in either monsoon. The inland water communications, afforded, before the Chinese silted up the rivers with tailings during the last 30 years, great facilities for water transport; it having been possible within the memory of men now living, for good sized boats to go right up to Pong (ປໍງ) which is situated at the foot of the mountains right in the interior,

The former route for the tribute tin sent to Bangkok was via Takuapa and across the central range of the peninsula to the Bandon river and thence by boats to Bandon, and it is quite possible that this route may have been a trade route in the time of the Indian Settlements in Muang Takuapa.

Takuapa, moreover, abounds in tin, both in the districts near the coast and right in the interior; which in itself, would have been sufficient inducement for the Indians to have made more or less extensive settlements in the country.

The Indian remains in Muang Takuapa, are found on the islands at the mouth of the Takuapa river, also at Kou Pra Narai and at Pong, both on the Takuapa river inland, the location of these remains can be clearly seen from the map accompanying this paper.

The remains at the mouth of the Takuapa river consist of the following;—

(1) An ancient fourarmed stone statue locally known as "Pra Nur" (ປຣາ ເນຸນ) on the summit of a hill overlooking the

sea at the southernmost entrance to the Takuapa river situated on a piece of land called " Kaw Larn " (เกาะ ลั่น). This place is reached by means of a small creek called " Klong Nur " (คลอง นูร) which flows into the river near the Pak Kh entrance, this small creek is only about 12 feet wide at its mouth and much obstructed by fallen trees; after going up the creek through a mangrove swamp for about 10 minutes, the landing is reached, close to the foot of the hill, which is roughly about 200 feet high and densely wooded. The summit of the hill is levelled off and forms a platform about 55 feet wide by 75 or 80 feet long, with a raised brick platform in the middle about 25 feet square on which stands the ancient stone figure, or rather the remains of it for it is much broken and injured.

The statue which is fourarmed, represents a man standing, clad apparently in a single garment resembling a Burmese Lungyee, with the torso bare, and wearing a high round cap resembling a Turkish fez but without a tassel. It is made of a dense compact bluish grey stone apparently somewhat similar to that of which the figures at Kou Pra Narai are made.

The figure is a little larger than life size, and is broken off just above the waist, the height from the top of the pedestal to the waist where broken off is 3 ft. 9 in. The Pedestal is 8 in. thick and 30 in. wide. A photograph of this figure taken by myself has been given given to the Society. The workmanship and execution of the figure are excellent but without the elaborate ornamentation of Kou Pra Narai figures.

The hill has steep sides all round except on the N. E. where the slope is easier, being only from 12 to 15 degrees, and on the ridge of this slope there are the remains of an old stairway, consisting of brick steps, now entirely grown over by jungle, the level ground at the top of the hill had been cleared, but the sides of the hill are densely wooded, although few of the trees are of large size. I was unable to make more than a very cursory examination as it is only possible to ascend or descend the creek leading to the main river at or near high tide and it was therefore necessary to hurry away for fear of being left stranded and unable to get away.

A curious point with regard to this figure is that it faces N. E. and the side of the raised brick platform on which it stands is not due North and South, but bears 22 deg : east of north (Magnetic).

Phra Pon, the Governor of Takuapa, informed me that about the year 1899 A. D. some Chinese were working a mine at the base of the hill on which the figure stands, and that one of their number dreamt that there was treasure under the figure, so they moved the figure and dug up the place where it had stood, but found nothing except some old jars for their pains, so they replaced these and the figure again in their former position.

(2) North of and on the opposite side of the river to this hill, and situated on the large island between the Pak Kaw and Pak Kruen inlets, is a place called "Tung Teuk" (ทุ่งตึก) or literally "the plain of brick (or stone) houses". I was not able to visit this place myself, but was informed by the local inhabitants that there are numerous remains of ancient brick houses or temples and of tanks there. They say that the Chinese worked tin mines close to these remains, but that the "spirits" or "local genii" became angry causing many men to die, so they desisted from working there.

(3) On the west coast of Kaw Pra Tawng there is a place called "Hin Kong" (หินกอง), lit: "heap of stone" the local legend concerning this place is that formerly there was an image or "Koop" (กู๊ป) there which was of such a nature that if any one touched it he forthwith died, so the image was covered up with stones and now there is no one left living who knows where the exact position of this image is.

Many years ago, when working a mine on the east side of Kaw Pra Tawng (เกาะพระทอง) a number of small gold ornaments were found about 2 or 3 sok beneath the surface, I was unable, however, to obtain any of these ornaments, so it is not possible to have any idea as to their origin.

INDIAN REMAINS AT KOU PRA NARAI (เกาะพระนารายณ์)

Kou Pra Narai is situated on the Takuapa river above 3 or 4 hours journey from Takuapa Town. The remains at Kou Phra Narai consist of three stone figures, presumably those of Brahma, Vishnu, and Siva; which are now lying against two large trees on the bank of the river close to the foot of Kou Phra Narai itself.

These stone figures or "Tewarop" (เทวารูป) are made from a dense grey stone, they are four armed and of more than

life size. The stone from which they are made does not, as far as I know, occur in Monthon Puket. I consider that these figures and that at Klong Nur were in all probably brought from India, not made locally.

The figures are of beautiful workmanship with well shaped features and highly elaborate ornamentation, but are very much broken and injured owing to the trees against which they were stood having to some extent grown over them, and also broken portions off from them, as can be seen from the photograph of these figures accompanying this paper. The local legend with regard to them runs as follows:—

Formerly these three "Tewaroop" together with an ancient inscribed stone were all on a piece of levelled ground on the top of Kou Pra Narai, where there was also a quantity of old bricks and lime; but at the time of the Burmese invasion about 110 years ago, the Burmese brought these stone figures and the inscribed stone down from the hill to the place where the figures now are, with the intention of taking them back with them to Burma; but, although it was in the dry season or N. E. monsoon, such heavy rain and floods ensued that they were unable to remove them and had to return to Burma without them. The Stone figures were left by the Burmese leaning against two young trees near the river bank, which trees grew up to a large size and by their growth have partly buried and considerably damaged the figures. The inscribed stone was subsequently taken by the Siamese to Wat Weeang (วัดเวียง) which was near to Kou Pra Narai, and from thence the inscribed stone was taken to Wat Na Muang (วัดหน้าเมือง) opposite to Takuapa Town, where it was seen and measured by me. (see the drawing accompanying this paper) The top left hand corner of the stone has been broken off a little, but otherwise it is in excellent preservation. It is a piece of naturally waterworn slate without any surface dressing or working whatever, about 3 ft. high by 2 ft. 1½ in. wide, and about 8 in. through at its thickest part; one surface is nearly flat being only gently rounded, and on this there are six lines of inscription in a very fair state of preservation. I made a copy of the first two lines of the inscription which is reproduced in the drawing accompanying this paper, and I also made a papier maché squeezing of the whole six lines of inscription, which has been submitted to Colonel Gerini, who is of the opinion that it probably belongs to the 3rd or 4th century of the Christian Era, Colonel Gerini has sent the squeezing to Dr. Kern of Leyden

who has been unable to decipher it, Dr. Kern however is of the opinion that it is not Sanskrit, but as far as he could make out was in ancient Tamil. The squeezing has now gone to The Royal Asiatic Society in London, and when it has been deciphered, an interesting light will undoubtedly be thrown on the ancient history of Muang Takuapa.

REMAINS AT PONG. (၂၅)

Pong is situated right at the foot of the range of mountains forming the backbone of the peninsula, on the head waters of the Takuapa river. The remains found at Pong, although not of so important a nature as those at Kou Phra Narai, are yet of some interest.

A large quantity of ancient slag was found at Pong which was collected and remelted, some old ingots of tin of a shape approximating to a segment of a sphere were found in this locality, one specimen in the museum of the Royal Department of Mines, Puket, is $5\frac{1}{2}$ in diam : and about $1\frac{5}{8}$ ths in. thick, and weighs 5 catties 2 tamlung.

About 40 years ago, in the course of working a mine at Pong, an old ship was discovered buried about 12 feet underground, this ship was about 11 wah or 74 feet long, and there were the remains of an iron chain and iron anchor attached to the ship on the upstream side ; the natural supposition is that this old ship was in some manner sunk while at anchor in the former channel of the river, which at that time must have run in a different bed, and the ship was gradually covered up and buried by silt. The size of this ship is very suggestive, and points to the supposition that at the period this ancient ship ascended the Takuapa river, the river was navigable for large boats for a much greater distance from its mouth than it has been within say the last 50 years.

There are many indications throughout the Malay Peninsula that the level of the land has been very appreciably lower than it is now during quite recent geological times. At the mouth of the Takuapa river itself there is a raised beach with the sea shells on it so fresh that they still in most cases retain their colours unimpaired. (see map) I consider it highly probable that at the time that the Indian influences in Monthon Puket were at their height, say about 1,000 years ago or more, the level of the land in Monthon Puket was appreciably lower than it is at present, although until a careful series of

detailed observations has been taken, it would not be possible to form any estimate of the amount of the change of level since that time.

A large number of brass trays and other utensils were also dug up in the Pong district, one specimen of a brass tray so found is now in the museum of the Royal Department of Mines, Puket, and is apparently of Indian origin. It is made of brass about 1/16th of an inch thick, the outside diameter over the flat rim is 23 inches, and the inside diameter 18½ inches, with a dept of 1½ in.

Numerous small articles and gold ornaments and images have also been found at Pong at various times, but I was unable to obtain any specimens of them.

I was informed by an old resident of the Pong district that before about 40 or 50 years ago there were no people living in the Pong district as it was all virgin jungle and they were afraid of the wild elephants.

An ancient silver coin was once found in a mine not far from Takuapa Town, and was presented to His Majesty the King. It would be interesting to know the character and age of this coin.

REMAINS IN MUANG PANGA.

Beyond the extensive ancient workings in the Tai Muang and Bangklee districts, and the China bowl found there already referred to, I came across nothing of any archaeological importance in Muang Panga; but I have been informed by Colonel Gerini that some years ago an ancient bronze Buddha with a Sanscrit inscription was found in Muang Takuatung, but the locality is not known to him, it would be very interesting to know exactly where this Buddha did come from. Ancient shaft workings are found scattered over the greater part of Muang Panga. Various gold ornaments and other small articles have occasionally been found when working the mines, but I was unable to obtain any specimens of such.

REMAINS IN MUANG KRABI.

Krabi is but little known to me, I possess however, a few beads from the locality of Klong Auleuk which seem to be of Indian origin. I have also received circumstantial details of a rock inscription with a figure of a man with a bull or buffalo, and three lines of inscription in some

unknown characters, said to be on a rock close to the sea at Kou Laam in Tambun Karote (เขาหมอลม ตำบล กาวัด) but so far I have never had an opportunity of visiting this place.

Krabi is a good agricultural country and it is highly probable that there may have been extensive agricultural settlements of Indians there.

REMAINS IN MUANG PUKET.

There are old workings found from one end of Puket island to the other, and I am convinced that it was at one time under Indian influences, but so far, I have not come across anything which can be said to be definite evidence of an Indian occupation of the island. I have received accounts, however, from eyewitnesses of a rock inscription in some unknown characters, different from Siamese, supposed to in Kou Nang Pan-Thurat; but I have never been able to go myself to verify the statements of my informants. The natives say the place of the inscription is difficult to find, and can only be found, as a rule, if one happens to lose oneself on the mountain.

An interesting point, however, is the discovery of an old iron anchor and chain dug up at a mine on the way to Kathoo and of an old ship about 10 or 12 wah long dug up in a mine at Lawlong many years ago; as appearing to strengthen the conclusion already arrived at with regard to Takuapa viz: that the level of the land in Monthon Puket must have been appreciably lower than it is now within historical times

A brickwork Prachadee was dug up at Tungtong near Ban Kai many years ago, but I have been unable as yet to obtain any details concerning it.

A very interesting find that I came across was that of some Sawankaloke ware that had been dug up in a mine near Sapam, buried about 10 or 12 feet underground; the piece I have is about 5½ths in. diameter and 2 in. high, it was found with about 8 or 9 others all unbroken, I think it possible that they may have fallen off some old trading ship into a creek and thus escaped fracture. Formerly there was a good sized creek at Sapam and it is most probable that it has changed its channel in the course of time, and that the tin mine was actually working in the former bed of the creek when the pieces of Sawankaloke ware were found.

Polished stone "celts" or Neolithic flint implements are occasionally found on the fields both in Puket Island, and in the Takuatung district, they are locally known as "Hin Fwan Fwa" (หิน ฟวาน ฟัว) and are supposed to fall to the earth when it thunders and lightens. They are considered to be a most valuable medicine, and are powdered and taken as a specific in various ailments. It is therefore difficult to obtain specimens, but from the fragment I have obtained and from the description of them given by the local inhabitants they appear to be mostly axe heads. The piece of an axe head I possess, is made from a brownish yellow flint; I have never come across any stone like it in Monthon Puket.

TRACES OF PORTUGESE INFLUENCES.

There are traditions still extant in Puket regarding the Portugese trading posts that were at one time established there. At Tharua there is a levelled piece of land which they call the "Talat Farang" or "Foreigner's Market"; and descendants of the early Portugese settlers are still to be found in the Talang and Takuatung districts. They have more hair on the face than is usual among Siamese, and often have large moustachios; they are as a rule fairer than the ordinary people, and there is a more or less European cast to their features. I am informed that they do not profess Buddhism, and appear to be without any definite religion, but do not work on Sundays, and reverence Fridays as a holy day. Their numbers are now small.

There are the brickwork remains of a fort on Kaw Tapou Noi (เกาะ ตะพาน น้อย) in Puket harbour which I have seen from a distance, but never examined, so am unable to give any information about them, they may possibly, however, be the remains of a Portugese fort.

REMAINS IN MUANG TRANG.

The Indian remains in Trang are of considerable interest: they consist of certain unbaked clay sacrificial tablets found in limestone caves, and of the remains of the brickwork of ancient temples.

These unbaked clay tablets, which are known locally as "Pra Pim" (พระ พิมพ์) lit: "stamped image" are flat in shape, ranging from about 3in to 5 in long, from 2in to 3in wide, and about 1 in thick. They have been stamped on one

side with figures of Indian Divinities or of Buddha, and on the back in some cases with Buddhist texts in Sanscrit characters. They are found put face to face and laid in rows in great numbers in the caves at Wat Harn (วัด หาร์) and "Tam Kow Sai" (ถ้ำ ไท่ ไท่) which caves are situated not very far from the Trang river north of Kouantani. They must have lain undisturbed in those caves for a very long period of time for they all are covered up by a deposit of bat guano. It was owing to the Chinese pepper planters working these bat guano deposits in the limestone caves that the existence of these clay tablets first became known. When first taken from the cave, the tablets are quite wet and soft, but soon harden in the sun. There are four different kinds of clay tablets in the cave at Wat Harn, and over six different kinds in the cave at Tam Kou Sai. The tablets from the cave at Tam Kou Sai are different to those from the cave at Wat Harn.

From the type of the Sanscrit character employed, Colonel Gerini places their approximate age at about eight hundred years or about the 11th century.

There is also a cave in Trang where there are immense quantities of the round clay balls used for shooting from a bow, but I have not visited the cave myself.

At another cave which I have also not visited, there are ancient Buddhas of Indian type, and the remains of ancient brickwork, with large sized bricks. These last two localities were visited by Mr. Steffen, who formerly resided in Trang for some time.

Mr. Steffen also informed me that in the mountains in Trang, he had come across a solitary stone pillar, with some carved representation on the top, similar to the temple pillars in India, but there was no inscription on it. The local superstition with regard to these clay tablets is that they are made by the "spirits" and that no matter how many tablets may be removed from the caves, the spirits make new ones to take their place.

The tin district in Trang is limited in extent, and the ancient workings not on a very large scale. I am of the opinion that there were agricultural settlements in Trang at the time of the Indians, and that the route to Patalung through Trang was probably one of the important trade routes across the peninsula. The mountain passes are not high, and local

traditions are to the effect that the Indians who first settled in Trang subsequently passed over to the Patalung side, possibly on account of hostile incursions from Sumatra into Trang.

There is a limestone cave at Kou Sabab on the Trang river where there are the remains of an old Buddha, and an inscription in Siamese written in red paint on a smooth face of rock near the mouth of the cave; it describes how certain monks had gone there to exalt the religion of the Lord Buddha and how a Buddha had been made, the date given in the inscription fixes the age of the same at 1614 A. D. This is of interest as giving a definite date at which the Siamese were in occupation of Trang,

In conclusion, I take this opportunity of expressing my deep sense of obligation to my learned friend Colonel Gerini, who has given me the greatest assistance in the preparation of this paper, and to whose influence is principally due the interest I have taken in Siamese Archaeology; and to Mr. Giblin, Director of the Royal Survey Department, who has taken great trouble and done his utmost to help me in every way, as the beautifully printed maps and drawing accompanying this paper will show.

