THE COINAGE OF SIAM

by

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INTRODUCTION

For some reason or other, perhaps on account of its inherent difficulties, the subject of numismatics in Siam has not yet attracted the serious attention of any student of this country's history. Collectors there have been, and still are, though Siamese collectors are becoming rarer as the years go by; and twenty to twenty-five years ago very high prices were paid for ancient Siamese coins of some degree of rarity, but no serious attempt appears to have been made by any collector to present the fruits of his studies to the public. Yet it will be agreed that the study of Siam's coinage system should certainly form one of the aims of the Siam Society: and, with this in my mind, I have ventured to step into the breach, and to make an endeavour to obtain what reliable information I can regarding the coinage of Siam.

The only works which deal at all seriously with Siamese coinage that I have been able to trace are as follows:

2. A Catalogue of the collection of Siamese coins in the possession of H. M. the King of Italy, dated 1898.
3. A Book of Photographs of the Coinage issued in various portions of the Kingdom of Siam, prepared for the Library of the Ministry of Interior by Col. GERINI (now in the National Library, Bangkok).
5. "Moedas de Siam" (Siamese Coinage), by A. MARQUES PEREIRA, (1879).

(1) The present paper is the first part of a work, the concluding part of which, dealing with the coins of the Bangkok period, was published in this Journal in 1925 (JSS. Vol. XVIII, Pt. 3, pp. 153-220).
6. "Siamese Coinage", a pamphlet by Mr. Joseph Haas, the Austro-Hungarian Vice-Consul in Shanghai, published in that city in 1880, 8vo, pp. 30.

There is also a little volume on Siamese porcelain and other Tokens by Mr. H. A. Ramsden, published in Yokohama in 1911 (Jun Kobayagawa Co., 8vo, pp. 37, 20 pl. in colours). All the information given regarding their use was borrowed from Mr. Haas, and the volume has but little bearing on the subject of this work.

Of the above material, No. 1 is not available in the National Library in Bangkok, and I have not as yet seen a copy of it. I can form no idea, therefore, of the value this report may possess.

No. 2 is also not available, but in any case without the collection, with which to compare the details given, it would probably not be of much material assistance.

No. 3 is a photographic record of a collection of considerable size and variety, which has been a constant source of help. In some cases an attempt has been made to describe the marks, and to date the coins shown, but such details must be accepted with the greatest reserve.

This record is the work of Col. Gerini and is, I understand, a photographic reproduction of No. 2.

No. 4 gives an interesting account of the money in current use in Siam at the time the book was written, viz. 1687–88; and, what is more, gives a competent drawing of the marks on the ‘bullet’ coin of the reigning Monarch, King Narai, thus enabling us to place with some confidence one of the coins of the Ayudhya period.

No. 5 is a short essay on Siamese coinage by A. Marques Pereira, who was at one time Portuguese Consul-General at Bangkok. It is referred to by Mr. Haas, and is of some importance from the fact that it makes certain definite statements regarding the subsidiary coinage of the Bangkok dynasty.

No. 6 is an attempt by Mr. Haas, the Austro-Hungarian Vice-Consul at Shanghai, who visited Bangkok about 1879, to give a description of the coins of Siam. In this pamphlet, of only thirty pages, he gives a good deal of information of a miscellaneous kind, dealing with the history of the country and its gambling-houses, and including a list of the Kings of Siam, while ten pages are devoted to tributary states. The actual space given to the coinage of Siam is small indeed, and that Mr. Haas did not go very deeply into the subject may be gathered from the following remark:
"I have been unable to trace any coins from the first and second dynasty, and it still remains an open question whether such existed.\(^{(1)}\) The oldest coins of which specimens remain date from the third Dynasty (1630-1780) and were made at Ayudhya, then the capital of the Kingdom."

This is a bold statement on the part of a writer on Siamese coins, seeing that there were only seven Kings of the third Dynasty who reigned long enough to have issued coins bearing their own marks, and that at least twenty-four different marks are known, which belong to the Ayudhya and earlier periods. Still the little work is of a certain value in other directions, and I have been able to glean some interesting and, I think, reliable details from it.

This exhausts the material at my disposal already in existence, and it is not, therefore, without some reason that I call the subject practically "virgin soil".

I should not, however, forget to mention also the Report published of the Centennial of Bangkok held in 1882, to commemorate the 100th Anniversary of the city's foundation. In connection with the celebrations a Grand Exhibition was held, and the Report gives an epitome of the contents of Department No. 20 of the Exhibition, which was devoted to "Gold, Silver, Bronze and Crockery Coins". The compiler of the Report states that:

"The catalogue of the articles placed on exhibit in this room is full of interest to the antiquarian. The historical sketch of the many coins is well worth perusal, but is decidedly too long for insertion here. Antiquarian societies might afford to have it translated and published for general information."

Unfortunately, no copy of this catalogue is known, but the speculative character of its compiler was well-known, and I have been reliably told that the information given was based more on hearsay and legendary tradition than on accurate scientific research. At the same time a certain amount of interesting information is contained in the Report itself, and reference will be made to it again later on.

In my early research work, I was fortunate enough to secure the collaboration of the late H. S. H. Prince Piya, a well-known collector of coins in Siam for more than thirty years, who was kind enough to place his collection freely at my disposal in studying this subject. I owe him a debt of gratitude which I take pleasure in acknowledging here. I must also express my thanks to Mr. A. Macan, the Director

\(^{(1)}\) The italics are mine.
of the Government Analytical Laboratory, and Phra Prasada, the Assistant Director, for their kind help in determining the nature of coins.

Last, but not least, I would like to express my sincere thanks to H. R. H. Prince Damrong, our Vice-Patron, who has taken the greatest interest in this work, and has given me valuable help and suggestions throughout. It is by means of this friendly collaboration between Siamese and European students that the most useful and valuable results can be gained.
A student of the early coinage of Siam is faced with almost insuperable difficulties in his work of research, though naturally these difficulties, to the true seeker, do but add zest to the pursuit. The superficial evidence, that is, the evidence of the coins themselves, goes to show that there must have been a standardized silver coinage in use in Central Siam for many hundreds of years past, certainly as early as the time of Henry III of England and Louis IX of France (Saint Louis), and possibly earlier. The shape of this standardized coin is peculiar; indeed, as far as I am aware, it is unique in the annals of coinage. It is not flat, and bears no effigy; nor has it any written characters upon it. It consists of a short, elliptical bar of silver, with both its ends pressed inwards so that they practically meet. This is called in Siamese p'ot duang, where duang means 'worm', and p'ot means 'twisted' or 'curled', from the Pali, baddha, meaning 'bound'. On this coin, which has long been popularly called a 'bullet' coin from the shape thus formed, two marks (in one case, three) have been stamped.

This type of 'bullet' coin continued to be minted right up to the fourth reign of the Bangkok Dynasty, King Mongkut (1851-1868); and, as far as the Bangkok Dynasty is concerned, the significance of the marks upon it is clear. One, which is constant, represents the mark of the Dynasty, and the other, which varies, is the personal mark of the reigning sovereign. But of the pre-Bangkok coinage, with the one exception already referred to in the Preface, there is nothing to tell us which mark belongs to which King; and, although we can assign nearly all those of the Bangkok Dynasty with a certain measure of confidence, since that Dynasty only began to reign in 1782, we have only tradition and purely hearsay evidence to ascribe the coins issued in Ayudhyan and earlier times, all the official records of Siam having been destroyed at the sack of Ayudhya by the Burmese in 1767.

(1) Supra, p. 2.
There is, moreover, another entirely different type of coinage long in use in Northern Siam of a ‘bracelet’ type, which will be described later and which was probably contemporaneous with the ‘bullet’ coinage, or at least partly so; and it will thus be seen that, from a historical point of view, two important questions need to be answered, namely, (1) what is the origin of these types of coinage; and (2) who introduced them into this country?

I cannot pretend that in this work I have definitely solved these problems, but I have made strenuous endeavours during the last ten years to collect all the evidence which might shed some light upon them, and I do not think that any useful purpose would be served by waiting any longer for more evidence to be brought forward. On the contrary, I have every hope that, by recording the evidence known to me now, I may induce and stimulate other workers to take up the search.

Before dealing with the history of the country, an interesting point may be interposed here. There would no doubt in any case have been grave technical difficulties in early days in Siam in producing a portrait of a King of Siam on the coinage, but, whatever these difficulties might have been, such a portrait was taboo, and this is the reason why no effigy of a King of Siam ever appeared on a coin until within the last fifty years, when the spell was broken by King Chulalongkorn in about 1880.

In his well-known work The Golden Bough, Sir James Frazer states that it was a belief widely held throughout the ancient world that the shadow or reflection of a person was his soul or at any rate a vital part of himself. If trampled upon or struck, he would feel the injury as if done to himself. Sir James adds that “unless the sovereign were blessed with the years of a Methuselah, he could scarcely have permited his life to be distributed in small pieces together with the coins of the realm”. And a more powerful reason still may be added; he would never have allowed a portrait of himself to be thrown about from hand to hand, at the mercy of all his subjects, to be dealt with as they willed. Even as late as the xvith century the Chinese Emperor, Kang Hsi (1662–1722), issued an order that his name was not to be painted on the base of porcelain for fear of its being trampled underfoot by his subjects.

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The earliest known inhabitants of Siam were a people called Lawi, but, although their descendants are no doubt still living in the hills in remote corners of the Kingdom and scholars have managed to capture scraps of their language, practically nothing is known of their early history or of their form of government. It was probably tribal, and, as far as the issue of coinage is concerned, I think the Lawi may be safely ignored. At the most they may have used lumps of metal for barter purposes. Two very interesting bars of copper, shaped like fishes, have come out of the bed of a small river in the north of Siam. They appear to be of great age, and they are undoubtedly made to shape and not naturally formed. Are they merely toys, or were they made for purposes of barter in the bronze age? (Plate I, 1 & 2). All the peoples of the North and South are great fishermen, and there is nothing improbable in the choice of fish-shaped objects for purposes of barter. It would be interesting to know whether similar lumps have been found in other countries.

How long the Lawi and kindred tribes had this country to themselves is not known, but it is clear, from excavations and discoveries made in recent years, that Indian immigrants, probably from the South-Eastern sea-board of India, had already made their way into what is now Siam and had formed colonies there in the early centuries of the Christian Era, if not before. Buddhist images of the Amaravati period, not later than the second century A.D., have been dug up less than 100 miles west of Bangkok, and the base of a very early temple has been excavated in the same district. It was near here also that the Roman lamp of Pompeian times was found a few years ago. At Nak'on P'om near by (one of the oldest, if not the oldest city in Siam) and other places, too, have been dug up flat silver coins of a distinctly Southern Indian type, with the conch-shell of Vishnu on one side and the trident of Siva on the other (Plate I, 3). Other kinds of emblems, such as a Garuda (?) and a Deer, which is probably Buddhist, are known as well (Plate I, 4 & 5); and, as similar types of coins have been found, not only in Burma but also in Indo-China, and even as far north-east as Nak'on P'anom on the Siamese side of the Mekhong, it seems probable that these coins were not indigenous but were brought to Siam by Indian immigrants. The actual period in which they were issued or used has not yet been definitely determined; but it may, I
think, be safely said that they are the earliest coins found in Siam and ante-date the 'bullet' coin by several hundred years.

In his study of the coins of Arakan, Pegu, and Burma, published in 1882, Sir Arthur Phayre states categorically that coined money was not used in ancient times in the countries of Indo-China. In Arakan coins were first struck for the purposes of currency, and as a declaratory act of sovereignty, towards the end of the xvith, or at the beginning of the xvnth, century of the Christian era. The system then adopted was taken from that existing in Bengal under the Muhammadan Kings, with which Province of India Arakan was at that time closely connected.

Several centuries before these pieces of money were issued, coins bearing religious symbols, but without date, and occasionally without any legend, had been struck by Kings of Arakan.

A similar practice had existed in Pegu, though there is no distinct evidence as to the dynasty which caused such coins to be issued.

Some of these coins bear Buddhist, and some Hindu symbols, and these symbols were probably copied from ancient Indian coins.

In Pegu the dynasties were also originally Indian. The traditions and the native chronicles, as well as the name 'Talaing' (Môn), show that settlements were made long before the Christian era at points of the coast on and near the delta of the Irawadi by people from ancient Kālinga and Telingāna in Eastern India.

At the end of his work Sir Arthur Phayre gives illustrations of two silver coins, with no date or legend, but with the conch-shell of Vishnu on the obverse, and the trident of Śiva on the reverse, within which is an object which may represent a liṅgam with a serpent (Plate I, 6).

He states that a number of coins similar to these two were lately dug up about twenty-five miles from the town of Sittang in Pegu, and he concludes by saying that these coins, which may have been cast in Pegu at a time when Hindu doctrines had undermined Buddhism, were probably not intended for currency, but as amulets by votaries of the doctrines represented by the symbols used.

Sir Arthur Phayre seems to think, therefore, that the coins were locally made, in the case of Burma, and were used not for currency, but as amulets by votaries. It may, of course, be so, but it is difficult to accept this as final as far as the coins found in Siam are concerned, since, if these coins were for use as amulets only, why are there no holes in most of the specimens found for hanging them round the necks of the wearers? And this question applies equally to the coins found in Burma.
Finally, according to Sir Arthur Phayre, there is no proof of coins having been struck until recent times in Upper Burma.
To continue our historical survey of Siam. Sometime during the first three or four centuries of the Christian era, the central plain of Siam seems to have been occupied by the Môn or Tâlai ng people (a branch of the Môn-Khmer race) from Lower Burma. They established their capital in the neighbourhood of Sup' anburi or Lopburi, and gradually extended their influence as far as north as Lamp'ûn (then called Hari-pùñjaya). They appear to have remained in possession of the central region of Siam until the coming of the Khmer about the end of the first millennium A.D., while their dominion in Lamp'ûn lasted somewhat longer until the founding of Chiangmai by Meng Rai at the end of the xiii century. Of this period a certain amount of sculpture and inscriptions is gradually coming to light, but of the government of the land or the conditions of living practically nothing is yet known. All that we know is that in the viiith century Chinese travellers referred to the country lying between modern Burma and modern Cambodia as Dvāravatī. Of any coinage which can be definitely ascribed to this period there is no trace at present, unless, indeed, the flat Indian coins referred to in the last chapter are the work of the Môn locally. It seems clear from their sculpture that the Môn in Siam were Buddhist by religion from early times, and it is generally accepted by scholars now that it was a Môn princess from Lopburi who established Buddhism at Lamp'ûn about the viiith century A.D. As will be seen from the marks on later coins, this would not necessarily prevent the Môn from using Hindu emblems on their coins if they issued any. Buddhist Kings of quite recent date have used the K'rût (Garuda), the Chakra (Wheel), and the Trî (Trident) as marks on their 'bullet' coins.

But the finds of these flat coins are few and far between (indeed, they are very rare) and do not point to any extensive use of them as coinage through many centuries of Môn dominion.

We come then to the period of Khmer sovereignty over Central Siam, which began about the year 1000 A.D. with Lopburi as the centre.

In his monumental tome, entitled Recherches sur les Cambodgiens, M. Groslier, Directeur des Arts Cambodgiens at Phnompenh, deals at length with the commerce and money of that country and arrives at the same conclusion as Sir Arthur Phayre in Burma, namely, that up to the close of the xvith century, no system of coinage was ever adopted by the Khmer. He pertinently asks the question "For what
were products exchanged?" and he gives as answer a quotation from Teheou Ta-Kouan, a Chinese Envoy at the close of the xinith century: "In small transactions one paid in rice, cereals, and Chinese objects, followed later by cloth; in more important affairs one used gold and silver" (i. e. by weight).

It is strange that an Empire, which lasted for at least six centuries; which stretched from Annum in the East as far as Chaïya and Nak'on Sït'ammarat in the South, Burma in the West, and Suk'ot'ai in the North; and which could produce such a wonder of civilized culture as the great temple at Angkor, still never found it necessary or expedient to employ any standard system of gold and silver coinage, as distinct from weights, throughout its territories. And yet perhaps not so strange, when we consider that China until quite recently stood in almost the same position numismatically.

According to M. Groslier, the first coins of Cambodia, of which there is any definite knowledge, were struck in 1595 by Sotha I, King of Cambodia: and from that date the use of silver and copper coinage was permanent and constant, right up to the time of the establishment of the French Protectorate. Before 1595 a great deal of silver was imported from China in well defined weights, namely variants of the tald, which in Cambodia became the damleng (Siamese, tamlawng).

As far as the issue of a standard coinage is concerned, therefore, the Khmer may also be eliminated, and we may be reasonably certain that up to the time of the arrival of the T'ai in Siam in any numbers, no gold or silver currency had been minted for purposes of coinage in this country. One link is missing, the South, or what is now the Malay Peninsula. But the history of that part of Fother India rules out any suggestion that the standardised silver coinage, with which we began this discussion, had its origin there.

We come finally then to the T'ai, who have ruled in Siam since the end of the xinith century.

At that time the position was as follows. The T'ai of the North had either driven out or absorbed the aboriginal Lawa and formed themselves into a congeries of principalities, while the T'ai of the North-Centre had overcome the Khmer and founded a Kingdom with Sawankalok and Suk'ot'ai as sister capital cities. In the South-Centre the Khmer rule appears to have lingered on, or, at any rate, its influence remained for some time longer, and it is not until the middle of the xivth century that we find a T'ai Kingdom set up with Ayudhya as
the Capital. This Kingdom absorbed the earlier one of Sukhothai-Sawankhalok within a period of seventy-five years, and finally, in the first half of the xivth century, smashed all Khmer claims to Siam by attacking Angkor, the capital of the Khmer empire, and sacking it. But the North of Siam remained independent for two hundred years—there were indeed constant wars between the North and the South—and then, in its turn, was conquered in 1557, not by Ayudhya but by the reigning dynasty of Burma (Ava). Thereafter, except for certain periods at the close of the xvith and the beginning of the xviith century, when Chiengmai was temporarily seized by the King of Ayudhya, it remained under Burmese dominion until the end of the xviith century, when the several principalities comprising the North of Siam became vassal states of Bangkok as the price of the latter’s help in driving out the Burmese.

Now the T’ai originally came from Central and Southern China, south of the Yangtze river, and maintained a kingdom there called Nanchao, until they were finally defeated by the Mongols under Kublai Khan in the middle of the xviith century. This must have brought about a flood of emigration southwards, and was probably directly responsible for the power of the T’ai coming to a head in Siam. But numbers of T’ai had long before this settled in what are now the Shan States, and there were no doubt many T’ai settlements in Siam as well.

The only possible evidence of what the T’ai used for money in their own home in Nanchao comes from a description by Marco Polo of a visit he paid to Southern China in about 1272 A.D., in which he makes mention of non-Chinese races living in a province called Karaian, with its capital at Yachi, which is thought to be Talifu, the old capital of Nanchao. He said that the people used cowrie-shells (Plate II, 1 to 4) as money and for ornament. This is not very helpful, as most of the people of the East have used cowrie-shells as money from time immemorial, and even in the second half of the xixth century they were still rated in Siam at 100 to the att (or 6,400 to the bāt). But it is a well-known fact that the Chinese, until very recent times, never minted any silver or gold for coinage, and all transactions were carried out by means of ‘sycee’, or lumps of silver, which could be cut to the required weight (Plate II, 5 & 6). It is probable then that the T’ai of Nanchao, as did the Khmer of Angkor, adopted the same custom.

In connection with ‘sycee’, No. 7, Plate II, shows an interesting

type of Chinese silver. It was obtained in the North of Siam, where it goes by the name of 'saddle-money' from the shape, but it probably comes from Southern China, perhaps Yunnan Fu, and was brought down by one of the pack caravans.

It weighs as much as 2,926 grains, or about 12½ ǎi and is of good silver, as may be gathered from the Chinese inscriptions in the three panels, which are all identical and which read as follows:

"Hong Kùng Tang Kee" (the name of the banking house) and "Kong Ngèe Bun Ngòn" (genuine first quality silver).

Each of the two columns guarding the central panel also has the same lettering which runs, "Kong Ngèe Kong Koh Tong Pao" which, I am told, means "Genuine and negotiable for free circulation". It would seem to be a kind of Bank-Note issued by the house of Kùng Tang Kee, rather a heavy one!
IV

How was it then that the T'ai of Siam came to adopt a definite standard currency of such a peculiar shape as the 'bullet' coin?

We have seen that neither from China, Pegu, Arakan, Cambodia, nor from Malaya could the T'ai have derived their inspiration.

Now, although the 'bullet' coin became, one might say, the dominant type in Siam proper at some time or other during the centuries following the arrival of the T'ai, there is another more or less standard type of coin, much larger than the 'bullet' coin, known locally as k'ū k'im (Plate III, 1 to 4), which was used in the North of Siam contemporaneously with the 'bullet' coin in the North-Centre and Centre.

Also, there is still another type, much closer to the true 'bracelet' type, which will, I believe, prove an important link in our chain of evidence (Plate III, 5 to 7). It will be convenient to deal with these two types first, before taking up in detail the question of the 'bullet' type.

A young and enthusiastic Siamese scholar, Khun Vichitr Matra (Sanga), who has studied the subject and who has provided me with food for thought, gives it as his opinion that the T'ai originally used Chinese silver for purposes of barter on their arrival in Siam about the ninth century A.D., on account of the scarcity of silver mines in Northern Siam. This is possibly true, as even in recent times I have been told in the North that on occasions silver has been scarcer even than gold, which in its alluvial form is fairly plentiful. Khun Vichitr goes so far as to assert, on the strength of a statement by King Mongkut, that the early T'ai tried to smelt gold of inferior quality to obtain silver, and also made use of another unspecified metal which became blackish with age and was thought to be silver. He attributes the shape of the k'ū k'im coin, and that of the 'bullet' as well, to this original use of Chinese 'sycee'; and thinks that the minting of both of them began as early as the xith century, during the time of the Sung Dynasty in China, at the hands of local rulers who wished to do away with all the different types of weights found in use, and to develop trade by creating a uniform, standard currency stamped with the Royal mark.

As regards the date suggested for the introduction of the 'bullet' type, there is possibly something in Khun Vichitr's contention, as will be shown later, but, apart from the question of the weight of the k'ū
K'im coin, which is a full Siamese tael of 4 bát (1) (or 4½ bát, generally, to be exact), against the Chinese tael which weighs only 2½ bát, all the specimens of this coinage I have ever seen bear the name (abbreviated) of the town or principality of issue in a script which, it is known, was imported into the North from Suk'ot'ai as late as the xivth century, so that we can rule out the possibility of this particular type having been introduced as early as the xith century.

There are, however, as I have already stated, types of truer 'bracelet' coinage which may be, and probably are, much older than the K'ā-k'im. They bear no legends and the marks on them are peculiar, in some cases apparently meaningless, or at any rate purely decorative, but one of them shows a Bāchaste (Plate III, 7), which introduces at once the question of Indian influence. It is probable that these 'bracelet' coins were used in the north prior to the advent of the Suk'ot'ai script, and represent the earliest types of coinage issued by royal authority in Northern Siam. They vary considerably in size and weight, but are all of good silver.

This brings us to the most valuable piece of evidence which has yet come to light.

Quoting from the chronicles of the T'ang Dynasty of China dealing with Southern Barbarians, and of the Pyu Kingdom of Prone in particular, as given by Harvey, (2) the statement is made that "Gold and Silver are used as money, the shape of which is crescent-like". Now the Pyu and the T'ai of Nanchao had much contact with one another during the viith, viiith, and ixth centuries A.D., and it is highly probable that during this period the T'ai became acquainted with this crescent-like type of coinage, which is obviously the 'bracelet' type now under consideration.

There are good reasons for believing that the T'ai of Northern Burma, who may have provided the emigrants to come south to Siam, were Buddhists as early as the viih century A.D. and were acquainted with Indian customs. It is possible, therefore, that the T'ai of Northern Siam had a very early contact with Indian influence, and this prepared

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(1) Bát is the Siamese word for tical, which has long been the word used by Europeans to denote the Siamese unit of silver currency, derived from Arabic, ḫaqqāl (Hebrew, shekel). Bát is now in common official use and will be used throughout this work.

them for their meeting with further Indian influence from the Môn and Khmer. It is almost certain that the earliest types of Buddhist images found in Northern Siam came from India (Bengal) through Northern Burma and the Shan States. This would account, then, for the Tai using Indian symbols on their ‘bracelet’ coinage.

Khun Vichitr makes an interesting suggestion in seeking for a reason to account for the adoption of different types of coinage by different peoples. He gives it as his opinion that the northern folk adopted the ‘bracelet’, and, later, the $k'â \text{k'im}$ type of money because they traded almost entirely on land and through hilly country, and found this type of coinage convenient to carry about either as bracelets or strung together. Long caravans of mules and ponies still come down to Siam every year from the Shan States and Yunnan with many different kinds of produce, lead, potatoes, and walnuts among them. On the other hand, the more Southern folk used the great river system of North-Central and Central Siam as their means of communication, and it was convenient for them to carry about coins of the ‘bullet’ shape in bags, which could be easily accommodated in their boats. This suggestion seems to me to be well worthy of consideration.

It should be mentioned that the late Sir William Ridgeway in The Origin of Metallic Currency and Weight Standards (1892) contrasts the tarin of the Persian Gulf with the ‘bullet’ and $k'â \text{k'im}$ coins of Siam, and states that both the latter “are the outcome of a process of degradation from a piece of silver wire twisted into the form of a ring and doubled up, which probably originally formed some kind of ornament”.

This reasoning may well apply to the $k'â \text{k'im}$ type, as we have already seen the actual ‘bracelet’ prototype from which it was doubtless formed; but, as I pointed out to him personally some years ago, (for I was privileged to know this great scholar), it cannot, in my opinion, apply to the ‘bullet’ shape (which Sir William considered the last stage of the degradation), as this is not a bracelet at all, but a bar of metal, and appears to me to be the outcome of an entirely different process of thought. It has fundamentally more in common with the bars of silver and copper alloy ($\text{lat}$) used on the Mekhong river; or, as Major Erik Seidenfaden, a well-known Danish authority on Siam, has suggested to me, it may be that the origin of the ‘bullet’ coin is to be found in the shape of the cowrie-shell, and that the original idea was to make silver cowries. This is indeed an ingenious suggestion.

Plate IV, 1 to 4, shows specimens of the different kinds of $\text{lat}$
in use. Some of them are stamped with marks, and others not, and they may be said, roughly, to come from the valley of the Mekhong, from the Sip Song Pan Na down to the borders of Cambodia.

Nos. 1 and 2 appear to obtain a certain proportion of silver. No. 1 is 4.5 inches long, weighs 1.450 grains, and is marked in three places with a serpentine letter, or figure, the meaning of which, if any, I do not know. No. 2 is 3.2 inches long, and weighs 937 grains; and is stamped in three places with a circle, inside which are two diameters at right angles to one another and four dots, one in each segment. This may possibly be intended to represent the K’rat, or Garuda Bird, in a very primitive form, as it bears a resemblance to the rough presentation of that Hindu demi-god, as seen on the ‘bullet’ coins of the Third Reign of the Bangkok Dynasty.

No. 3 is of a different type, and is shaped like a shallow dug-out caucoe. It is of copper, and weighs 369 grains. It is 2.6 inches long, and is not stamped in any way.

No. 4 is of a different type again, and is considerably scarcer than any of the other types of bar money. It appears to have a certain admixture of silver, and is stamped in three places. It has an elephant in the centre facing right; while to left and right are marks similar to each other, which may conceivably be characters of some kind, but which are not at present recognisable. (1) It is 2 inches long and weighs 379 grains. I was told in the North that this coin was an issue of the ancient Kingdom of Wieng Chan on the Mekhong, but I have as yet no evidence to prove this assertion.

These four types of money have a surface of plain, blank metal on the reverse.

Nos. 5 and 7 are normal Ayudhyan bāl of between 220 and 230 grains in weight, while No. 6 is an example of a Northern ‘bullet’ coin of lesser weight, namely 189 grains, which is shown for comparison.

To turn now to the ‘bullet’ type of coin itself, I have prepared a plate of eight coins (Plate V) which is designed to show what I can only call “the evolution of the bāl.”

The introduction of this type of coin is popularly ascribed to the great ‘Phra Ruang’, or K’un Rām K’aunheng, the son of the founder of the Sawan’ālōk Kingdom, (approximately 1275-1315 A.D.), who is regarded as the ‘Father of the Tai’, so much so that the origin of

(1) In the illustration this coin is upside down.
most things Siamese is attributed to him; while that of the k'ā k'im coin is attributed to his worthy contemporary and friend, Meng Rai, who founded the city of Chiangmai in Northern Siam in 1296 A.D. and who is regarded as the 'Father of the North'.

For reasons which will be given later, I do not think it probable that Rām K'āmheng was the actual inventor of the 'bullet'-shaped coin, but he or his father may well have been the originator of a system of standardised 'bullet' coinage.

Whoever was the founder, the types shown on Plate V close with a typical Ayudhyan bat of the xvith, xviith and xviiith centuries, and the interesting feature to the student is to observe how, in the course of centuries, the shape has gradually changed.

In what appears to be the earliest, most primitive type (1) the coin is relatively oblong, the sides are rounded and bear no hammer-marks. The ends meet firmly below, and the hole in the centre formed by bending the ends is large and triangular in form. There are no 'cuts' on the ridge of the coin. There is little doubt that the holes formed were used in early times for stringing the coins together and carrying them in girdles round the waist. A man in troublous times or for purposes of business could thus carry a good deal of his property about with him.

In the next type (2) the coin is more rounded in shape, the ridge in the centre is higher and not so flat. The ends meet, but the hole formed is elongated and deepish 'cuts' appear low on both sides.

In type (3) the coin is larger and broader than in type (2), and higher in the centre of the ridge. The sides are still rounded, but the 'cuts' on the sides are very small. The ends still meet, and the hole is triangular though smaller.

In type (4) the ends still meet, but the 'cuts' on the sides are deep, and the coin is slightly broader, while the sides, though still rounded, show faint signs of hammer-marks, thus beginning to form angles. The hole in the centre is now decreasing in size.

Type (5) is somewhat larger than type (4) and has a very high ridge in the centre, but this may be accidental. The 'cuts' are pronounced, and the hole in the centre is about the same size as in type (4), but what particularly distinguishes this coin from the previous four is the presence, for the first time, of small but distinct hammer-marks, which can be clearly seen in the photograph, on the ends of the coin. There is a tendency, also for the first time, for the ends to part.

Type (6) is the three-mark coin popularly attributed to Rām
Kamheng of Sukhothai, though from the shape this is improbable. On this coin the hammer-marks are very prominent, forming distinct angles at the sides. The coin is broad and the 'cuts' are distinct, but there is again the tendency for the ends to part, and the hole in the centre has been reduced to a minimum. The shape is approaching the later Ayudhyuan type, and may belong to the late xivth, or early xvth century. There is, it may be said, a two-baht piece (Plate VIII, 2) with the same three marks, which is still nearer to type (8), and which thus strengthens my view in regard to its date of issue.

Type (7) still shows a resemblance to type (6) in its breadth and in the length of its hammer-marks, but the ends have definitely parted and the hole in the centre has completely disappeared. The 'cuts', too, are growing smaller again.

The coin, taken as a whole, is rapidly becoming of a standard shape; in fact the mark upon it is also known upon coins almost exactly corresponding to type (8). With great reserve I suggest that this type may belong to the end of the xivth century, and that during the course of a long reign (possibly Ramathibodi II, 1491-1529) the standard type described below gradually came into being.

Type (8) shows a typical Ayudhyuan baht of the xvth, xvith, and xviith centuries. It is more compact than the earlier types and of a definite standard shape. The single hammer-mark on each side is round and very firmly stamped, and the ends of the coin are far apart. The coin is remarkably well made, and it will be noticed that the 'cuts' on the sides have now disappeared. They are never seen again. It may seem an odd note to strike in a paper on coins, and the effect is almost certain to have been accidental, but in the standard Ayudhyuan type the form resembles closely the lower part of a woman's torso (the hips and inner part of the thighs), and, unless the shape of a coin corresponds closely to this description, it may almost certainly be rejected as a forgery, or as belonging to the period of the Bangkok dynasty (1782 onwards), during which the shape of the 'bullet' coin showed a sad deterioration.

It will be of interest to place on record the weights of these eight specimens, which have been chosen for their shape alone, and which may cover a period ranging from 500 to possibly 700 years.

<table>
<thead>
<tr>
<th>Type</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>194 grains</td>
</tr>
<tr>
<td>2</td>
<td>187</td>
</tr>
<tr>
<td>3</td>
<td>217</td>
</tr>
<tr>
<td>4</td>
<td>224</td>
</tr>
</tbody>
</table>
Type 5 = 243 grains
Type 6 = 220 "
Type 7 = 225 "
Type 8 = 223 "

Allowing for age and wear and tear, types 3 to 8 are obviously allied, and are close enough to the standard weight of the bat, which is approximately 233 grains, though type 5 has certainly, for some reason, more than its fair share. Types 1 and 2 are clearly examples of a lesser standard weight.
V

LARGE TYPE OF BASE METAL

In this general survey of the early coinage of Siam there is another type to be considered (Plate VI).

This type is of a primitive 'bullet' shape, but is much larger than the normal type. It is not of silver, and as a result of an analysis by the Government Analytical Laboratory it has been found that its composition varies from tin (almost entirely) to an alloy of copper and nickel, that is, German silver except for the absence of zine.

Tin is plentiful in Southern Siam and may well have been brought from there to the North and Centre, while the copper and nickel alloy is found on the borders of Siam and the French Lao States, in the Nān region. It is still in use in Bangkok among the Chinese silversmiths, who are said to mix it with Chinese dollar silver for the manufacture of silver articles.

Although all types conform to the 'bullet' shape in general, the form varies a good deal, as will be seen from the illustrations. Also the weights vary considerably according to size. The marks, however, are fairly constant, being five in number generally. On the top is the Wheel of the Law, and round the sides are found, the Elephant, the Chakra (weapon of Vishnū), the Rājavihāra (Royal Dominion), and the Yantra (cabalistic sign). All these signs are Indian, and are similar to those found on the silver 'bullet' coins. It is probable then that they belong to the same period as the latter, and, as this type was already standardised in silver, I am inclined to think that these lumps of non-precious metals were issued as weights and not as currency at all. There seems to me to be no good reason for supposing that in those early days the same dynasty or line of Kings would issue a standard coinage in silver and another and much larger coinage in tin or copper-nickel alloy, in spite of the analogy with modern European practice. They are, besides, much too heavy to be conveniently carried and used as coinage. The use of the royal marks stamps them, however, as having been issued by authority.

In support of this opinion I cannot do better than quote from the famous stone inscription of King Rām K'āmheng of Suk'ōt'āi (1282 A.D.):
"During the time of Kim Rüm K'ambong this realm has prospered. There is fish in the stream; there is rice in the paddies. The King does not tax his subjects. Along the roads his people lead their cattle, or ride their horses, to market. Whoever wants to sell elephant's or horses, may sell them. Whoever wants to deal in silver and gold, may do so. His subjects all wear happy faces. (1)"

This shows that silver and gold were in general use in the Suk'öt'ai period for purposes of exchange, and there is little doubt that low-priced goods would be paid for in cowrie-shells, which have always been until recently in constant use in Siam.

The weights of the seven pieces shown on Plate VI are as follows:

No. 1 2,203 grs. = 9 bat and 115 grains  
No. 2 1,273 " = 5 " " 113 "  
No. 3 1,198 " = 5 " " 38 "  
No. 4 1,179 " = 5 " " 19 "  
No. 5 913 " = 3 " " 217 "  
No. 6 740 " = 3 " " 44 "  
No. 7 708 " = 3 " " 12 "  

The above weights, which are of representative specimens, would indicate that they have no connection with the taél (tambu'ng) or its derivatives, which is curious, whether these pieces were actually issued as currency or as weights.

(1) Lines 18-31.
CONCLUSIONS

It will be as well now to summarize the evidence at our disposal and to see if we can draw any probable conclusions from it.

1. I think it may be accepted that it was the T'ai who in Siam were the first to introduce a standardised silver currency, and they are to be commended for being the first country of the Far East to adopt such a standard.

2. It is highly probable that the T'ai did not invent the idea of currency, but borrowed it from elsewhere, in the same way that Rām K'amheng, although he claimed in his famous stone inscription to be writing Siamese characters for the first time, based these characters on the Cambodian (Khmer) script. It will, I think, be usually found that nearly everything in this world is either an adaptation of, or an improvement on, something that has gone before; in fact, that there is nothing new under the sun!

3. It seems conclusive that neither China, Cambodia (the Khmer Empire), nor the Malay Peninsula (pre-Malay) ever had any standard currency, and, therefore, that the T'ai could not have drawn their inspiration from any of those countries. There remains, therefore, only Burma to consider.

4. It is true that Sir Arthur Phayre states categorically that there never was any coined money in use in Burma in early times, and, if we regard coined money in the form that we understand it today, this is no doubt true. But we also know from the chronicles of the T'ang Dynasty of China (600-900 A. D. approx.) that the Pyu of Prome (a race now extinct in Burma) in the sixth and seventh centuries did use gold and silver as money in a crescent-like form, and we also learn from the same Chronicles that the Pyu had much contact with the T'ai Kingdom of Nanchao in Southern China. In fact, in 808-09 A. D., the King of Nanchao styled himself 'Lord of the Pyu', and just before this a deputation of Pyu had accompanied a mission from Nanchao to the Court of the Chinese Emperor at Si-an-fu. (1)

The present Shan States, which are peopled by the same race as the T'ai of Siam, are contiguous to Northern Siam on the one side and to

Burma on the other, and it is more than probable that most of the early Tai settlers in Northern Siam came from the Shan States or from Upper Burma, which in the viiiith century was also under the sway of Nanchao, and did not come from Nanchao direct.

Now, the crescent-like money is obviously the 'bracelet' type which we have been considering already, and the conclusion that we may, I think, draw is that the early Tai settlers were accustomed to using this type of money in Burma and brought it with them to Siam. The date of the earliest Tai principality in Northern Siam is usually accepted by historians as being in the ixth century, when a Tai prince is said to have established himself at Mu'ang Fāng in the far North, and if he or one of his successors decided to issue currency on his own initiative, he probably made use of the type to which he was accustomed.

In time, due perhaps to Meng Rai at the beginning of the xivth century, the 'bracelet' currency took on a more definite and standard form in the shape of the kū k'īm, and this form was eventually adopted by all the Northern principalities. It is known with the names of Sen (Chiangsen), Mai (Chiangmai), Rai (Chiangrai), Nak'on (Lampang), Phrè, and Nān, all of which were at one time or another distinct principalities, but, as has been said, the script upon them is of a type not known before the xivth century, when it was imported from Sukhōtāi in a modified form. The kū k'īm type is believed to have remained in use in the North until the xviiiith century, and this would account for the comparative frequency with which it is met nowadays.

There is a very curious theory still extant in Northern Siam regarding this type of coinage. It may be stated frankly that the kū k'īm coins (Plate III) are supposed to have been used in pairs, and to represent the male and female genital organs, by which they are known locally; and when I first began investigating the coinage system of the North, I thought it not improbable that such was the case, bearing in mind the well-known Chinese symbol, the Yin Yang, in which two fish, one dark-coloured and the other light, are joined together head to tail in one circle and represent the eternal forces of generation. But I am now satisfied that this is not so, and that the coins in question are of a similar type, but issued by different principalities: hence the slight divergence in shape and weight.
5. The origin of the 'bullet' type presents a more difficult problem.

As to the reason for its adoption I am inclined to agree with K'm Vichitr. The 'bracelet' type was suitable for caravan travelling, but not for boats, and, in the absence of further contradictory evidence, I consider his theory a tenable one. If the T'ai had come in contact with the bar and boat-shaped forms in use on the Mekong, some of them may have found those forms too clumsy, and have turned them into a more convenient shape merely by pressing the ends inwards. Or they may, as suggested by Major Seidenfaden, have tried to produce the cowrie-shell in silver.

When the 'bullet' coin first came into use in Siam is entirely obscure. That with the three marks of the Rāchāsī, Rāchawat (Rājaveṣa), and Wheel of the Law on it may have been issued by the famous Rām K'amheng at Suk'ōt'ai at the end of the xith century, as popular tradition has it. I think it very unlikely, as I have already stated, but at any rate I feel certain that some of the types illustrated on Plate V are earlier than that type, and if popular tradition has by chance any substance in it, then the 'bullet' coinage must have been introduced before the Suk'ōt'ai period, and may possibly date from the xth or xiih century. The three-mark coin is of far too settled a shape to have been the first issued; Types 1, 2 and 3 on Plate V are of a much more archaic form, and Types 4 and 5 are, I believe, also of an earlier period. This raises, however, a difficulty. If the 'bullet' coinage was issued before the Suk'ōt'ai period, who was the first to issue it?

We have already dealt with the 'bracelet' and kā k'lm types of coinage, and if the conclusions drawn from the evidence have any weight, then that coinage certainly belongs to the northern region. I was inclined for a long time to think that the 'bullet' type must per contra have originated in Central Siam, but I now feel it necessary to modify that opinion. In the first place, the Khmer were in possession of the Suk'ōt'ai and Central regions of Siam from the xth century onwards until the time of the father of Rām K'amheng and, as far as is known, issued no coinage of any kind.

This is a serious difficulty to overcome. But apart from this, certain evidence can be produced which leads me to believe that the origin of the 'bullet' coin is also to be found in the north of Siam, and that at some later date, possibly in the time of Rām K'amheng of Suk'ōt'ai, its weight was changed, its form standardised, and its mark improved.
In volume I of the *Records of Relations with Foreign Countries 1600–1700*, published by the National Library in Bangkok, a ray of light is thrown on the Northern money of the period in an interesting letter of instructions, dated August 27th, 1615, from Lucas Antheunis, the Agent of the English East India Company in Ayudhya, to Thomas Samuel, his sub-factor, who had then gone on a trading expedition to Chiangmai. In this letter Antheunis states that:

"The Janggamay (Chiangmai) tical is lesser than the Siam, for 100 ticals Janggamay weight but 85 Siams. Besides the Janggamay mint is baser in value, for 100 of those are worth but 75 of these in Siam, according to which computation we are to guide ourselves for that 424$\frac{2}{3}$ ticals Janggamay weight\(^{(1)}\) is as above said in Siam 375$\frac{2}{3}$."

It is difficult to follow the working of this sum in arithmetic (which possibly was not a strong point of education in Elizabethan days) since, by the above standard of reckoning weight, 424$\frac{2}{3}$ ticals (Chiangmai) would be equal to 360$\frac{2}{3}$ ticals (Siam), and not 375$\frac{2}{3}$, as stated by Antheunis; but it is clear that one Chiangmai tical would weigh roughly 195 grains against 233 for a standard bōd. It is interesting also to note that the Chiangmai tical had a greater admixture of alloy than the Siam tical, and was worth only three-quarters of the latter, i.e. three suw'ng; and also that the 'bullet' type of coin was in vogue in Chiangmai in the early years of the xviiith century.

Writing in *An Asian Arcady*\(^{(2)}\) I went on to say that, whatever the origin of the 'bullet' tical, its use in the North was probably in imitation of Ayudhya. I do not think so now. If it were an imitation, why change the weight? And it will be noticed that the two undoubtedly earliest types of 'bullet' coins on *Plate V* also weigh 194 and 187 grains respectively, practically the same as Nos. 15 and 16 on *Plate I* of *An Asian Arcady* (the second of which is here produced on *Plate IV, 6*). I have, besides, seen a number of other so-called 'Northern' bullet coins which are much the same shape as, but are all a good deal under weight compared with, the typical Ayudhyian coinage. What does this mean? It looks to me very much as if there were a distinct link between these early archaic forms of 'bullet' coins and the Chiangmai 'bullet' coins of 1615. That is to say, that the later Northern 'bullet' coins, wherever issued, kept to an old

\(^{(1)}\) Evidently the total of an account.

tradition and weight of 185-195 grs., while Rām K'amheng or an early Ayudhyan King found it convenient to adapt and improve the original primitive shape for his own purposes. Exactly where the cleavage between the ‘bracelet’ and ‘bullet’ types of coinage came in the North, and when, must remain a mystery for the present. But it seems to me reasonable to conclude that the ‘bullet’ type of coin did originate in some district of the North of Siam, probably for the reasons set out by K'un Vichitr and possibly in the xith century or earlier, and that the Tai of Suk'ot'ai and Ayudhya in the xith and xivth centuries adopted and standardised it as the most convenient type for their use.
PART II

THE COINAGE OF THE AYUDHYA (AND EARLIER) DYNASTIES

I

THE MARKS

When a student of Siamese coinage first turns to the actual marks on the 'bullet' coins, and tries to gather information, of whatever nature it may be, as to the number of genuine marks that exist and the probable reigns to which they may belong, he is sure to be misled, for a good reason.

Thirty years or more ago there was a certain Nai Kulabb, now gathered to his fathers, who published in Siamese a kind of 'Guide to General Knowledge'. Among many other subjects treated, he purported to give a full list of all the marks on coins issued during the Ayudhya period, and at the same time to ascribe each mark to its particular reign. I have his illustrated list before me as I write, and I find it very hard to visualise mentally the cool, calm, and confident 'check' of a man who will, in the absence of any direct evidence, solemnly set out to fulfil such a task. Yet there it is, and although Nai Kulabb is now generally discredited among scholars, these marks and reigns have stuck in the minds of collectors, and have in many cases been accepted at their face value.

Nai Kulabb gives illustration of twenty-five marks as belonging to the Kings of Ayudhya, of which, quite apart from the question of the ascription of each to its particular reign, it seems more than likely that at least twelve have never existed, except as a figment of the author's lively imagination. When I think of the weary hours I have spent in the years gone by in searching for these marks in the pawnshops of Bangkok—in vain, my feelings towards Nai Kulabb and his memory are best left unexpressed! It is only very recently that I have been able to realise that practically all, if not all, the marks of the Ayudhya dynasty have been successfully traced.

Nai Kulabb was not content to turn the full force of his imaginative mind on to the problem of the coinage of the Ayudhya dynasty, but he affirms that there were also forty-six Kings of the Suköt'ai
dynasty, all of whom issued 'bullet' coins with distinctive marks. There were actually only five, or six at the most, who are at all likely to have issued such coinage. Happily, the attempt to illustrate all these forty-six marks was a feat beyond even Nai Kulab's powers, and so we may take leave of him, in the hope that never again will he lead the collector of Siamese coins astray.

At the other end of the scale we have M. de la Loubère, the French Ambassador who came to Siam in 1687–8 from the Court of Louis XIV.

In his work entitled Du Royaume de Siam, published in 1691 after his return to France, we find a detailed statement on the Money and Weights of Siam, in which he makes the following blunt reference to the 'coings' or 'marks'.

"Their marks, of which there are two on each coin struck side by side in the middle of the bar (and not on the ends), do not represent anything known to me, and I have never found anybody who could explain their meaning."

A very modest man, compared with our friend Nai Kulab!

At the end of the work a clear illustration is given of the bät in use at the time of King Narai, and of the marks on it (cf. Plate XI, 6 & 7), though No. 6 has been drawn by him upside down. This is the only direct evidence that we have regarding the ascription of marks to certain reigns.

Poor M. de la Loubère, but if he could find nobody two hundred and fifty years ago to interpret the meaning of the marks on early Siamese coins, how much less likely am I to find anyone now? Still I do not feel in quite the same parlous state as he even at this late date, and I think that a good many of the marks bear a significance which is reasonably clear.

Of the sixty different marks which I have been able to recover and which I regard as genuine, forty-five appear on the standard bät value, and fifteen on coins of lesser value. Certain types occur in various forms, the chief of which are the Rāchavat (Skrt. Rājavyāça), the Yantra (or Cabalistic Sign), the Couch-shell, and the Lotus (either as a single flower or in a bunch). The forty-five marks on the standard bät are reproduced at the end of this chapter, while the remaining fifteen are shown in Chapter III of this part.

Although I do not by any means claim infallibility in determining the meaning of all the marks given, I have made an attempt to divide them into groups, with the following result:
# List of Marks

<table>
<thead>
<tr>
<th>Anchor</th>
<th>1</th>
<th>19</th>
</tr>
</thead>
<tbody>
<tr>
<td>„ , inverted, resting on dots</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Couch-shell, vertical</td>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td>„ , horizontal</td>
<td>5</td>
<td>23, 54, 56, 58, 60</td>
</tr>
<tr>
<td>„ , „ (with 2, 3, or 4 pearls)</td>
<td>4</td>
<td>25, 55, 57, 59</td>
</tr>
<tr>
<td>Elephant</td>
<td>5</td>
<td>16, 24, 49, 50, 51</td>
</tr>
<tr>
<td>Garuda (Bird of Vishnu)</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Hare</td>
<td>2</td>
<td>46, 48</td>
</tr>
<tr>
<td>Lotus (single, open)</td>
<td>3</td>
<td>22, 35, 36</td>
</tr>
<tr>
<td>„ (Bunch of Flowers) — probably</td>
<td>12</td>
<td>4, 6, 17, 21, 27, 29, 31, 32, 37, 38, 39, 52</td>
</tr>
<tr>
<td>Ox</td>
<td>2</td>
<td>14, 53</td>
</tr>
<tr>
<td>Pyramid of Dots (Rājavana) — probably</td>
<td>3</td>
<td>10, 15, 43</td>
</tr>
<tr>
<td>Rachasi (Mythical Animal)</td>
<td>2</td>
<td>12, 47</td>
</tr>
<tr>
<td>„ (between two Conch-shells)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wheel</td>
<td>4</td>
<td>5, 8, 11, 18</td>
</tr>
<tr>
<td>Yantra (Cabalistic Sign) — probably</td>
<td>5</td>
<td>20, 30, 34, 40, 41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>52</strong></td>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

Of the remaining eight, three marks (Nos. 3, 26, 28) show a circle of 6, 7, and 8 dots, respectively, surrounding a central dot. That with 6 dots has no outer frame; that with 7 dots has a single circular frame; while that with 8 dots has a double circular frame. What these are intended to mean, unless a stylised lotus, escapes me. Two others are known in Siamese as Chó Dók Rak (No. 2) and Ut'ump'ôn, or Dók Madu'a (No. 42). The Rak mark, which is on a very early coin, may refer to the flower of the lacquer tree, or to a small weed-flower which grows extensively today, a small shamrock-like flower in two colours, purple and white. The Dók Madu'a, or 'Flower of the Fig-tree', is non-existent, but there is a legend in connection with this mark which is worth recording. This mark is popularly ascribed to the reign of King Ut'ump'ôn (1758) and the story goes that, while he was still in his mother's womb,
the King, his father (Boromakōt), dreamt that a white monkey made him a present of a flower of the Fig-tree, and as the Fig-tree never bears a flower, he was so much struck by the dream that he took it as an omen and named his son Ut’ump’ōn (Fig), who later adopted the mark on his own coins. This story may seem to us now far-fetched, but in any case King Ut’ump’ōn abdicated after a reign of a few months and certainly issued no new coinage; and, if the legend has any substance in fact, it must have been his father, Boromakōt, who took the mark for his own.

The remaining three marks shown (Nos. 7, 13, 44) have no Siamese names, and “do not represent anything known to me”, though one (No. 44) is said to be like the flower of the Mont’a tree (Frangipanni), and another is rather similar to the ‘Fleur de Lys’ resting on a base of dots (No. 13). As this mark is on a coin issued certainly not later than the early xvth, and possibly in the xivth century, it must have been contemporaneous with the early use of this mark on coins in France (cf. Charles V, 1350-64; Jean II, 1350-64; and Philippe VI de Valois, 1328-50). I do not suggest that the Siamese mark is intended to represent the ‘Fleur de Lys’, but it is a curious coincidence all the same.

It is impossible to conjecture what No. 7 represents.

As will be seen, a few marks of common animals are found, such as the hare and the ox. The use of these is probably accounted for by the fact that the T’ai have always used the Chinese cycle of years for reckoning ages, which is denoted by a series of twelve animals, and when we find a hare or an ox on the coin, it probably represents the year of birth of the reigning King.

Otherwise, of those that bear a clear meaning, practically all are of Indian origin, and the use of these Indian marks on the coins may be explained in this way.

The T’ai invaders of Burma and the Shan States were Buddhists from the middle of the first millenium A.D., and came early into contact with strong Indian influences. Harvey says that Buddhism came into Burma at least as early as the vth century A.D. and existed side by side with Brahminism, and that what the excavator finds in Burma is often Hindu rather than Buddhist. In some sculptures, indeed, the Buddha appears as an incarnation of Vishnu.

The T’ai immigrants into Siam were, therefore, already imbued with Indian ideas and accustomed to Indian symbols, whether Buddhist or Hindu. There is nothing surprising, therefore, in the adoption
by them of Hindu symbols on their coinage in Siam, since equally here Brahminism and Buddhism have always been in practice side by side. Naturally the Môn and Khmer influences later met with would strengthen the Indian influence enormously, but there is nothing improbable in the presumption that the early T'ai immigrants were already familiar with Indian symbols, as witnessed by the Râchasi on the 'bracelet' coinage.

The Conch-shell is a very favourite device, since it is used by the Brahmins in all Royal ceremonies, and especially to pour infernal water on the King's head at his Coronation. This custom still obtains to the present day.

The Elephant used in connection with Siam needs no explanation. The White Elephant has always been a sacred animal in this country and was in India, too.

The K'rat (Garuda) is the famous Bird of Hindu mythology, who acted as the Vehicle or Chariot of Vishnu. It is still used today as the Royal Siamese crest, and appears on all Royal Standards and motor-cars, as well as on all Government stationery.

The Lotus, used in Siam both as a single open flower and in a bunch, is a sacred flower in nearly all Eastern countries, from Egypt to China. It grows abundantly in Siam.

The Râchawat (Râjavaca), or Pyramid of Dots, is a Sanskrit word, used in Siamese to denote a fence which marks a Royal route or enclosure, signifying that the land enclosed is under the Royal dominion. Its use as a mark is of very ancient date in India, as it will be found, in conjunction with a tree and a svastika, on the flat coins of the Andhra Dynasty, which reigned in Southern and Central India from the middle of the 3rd century B.C. to the 1st century A.D.

The Râchasi is another mythological animal from India. Here in Siam it has been an emblem of Royalty from early times, as, for instance, on the 'bracelet' coinage, and even today there is said to be the skin of a Râchasi under the seat of the King's throne. It may be a memory of the Asiatic lion, though that animal is also known under the name of Sing or Sing-to.

The Wheel is, of course, the Dharmacakra or 'Wheel of the Law' of the Buddhist Faith, and it is clear that any King making use of this mark must have been an adherent of the Buddhist religion.

The Yantra represents a cabalistic sign which comes from India and which is still in common use in this country to keep out evil spirits. The person drawing the Yantra must say a prayer at the same
time. He must not withdraw the pen or pencil from the paper in
drawing the figure, and the end of the prayer must coincide with the
completion of the drawing. Otherwise bad and not good luck will
result.

The use of the Anchor mark is unusual, as the Tai were a con-
tinental people, and until the xvth century can have had very little
contact with shipping, as opposed to river-craft.

The meaning of the circles of 6, 7 or 8 dots surrounding a central
dot is difficult to determine. Some say it is an attempt at a Yantra
others that it is meant to symbolize the Wheel. Many of the old
Northern (small) ‘bullet’ coins have six dots in a circle upon them,
and I am inclined to think that it may be a stylised ‘Lotus’ flower, but
am not very sure on the point. But, whatever these may signify,
I feel that M. de la Loubère need not have been so unduly pessimistic
on the score of the marks in general. A little patient examination
would not, I submit, have been unfruitful of positive results.
II

THE BÊT (TICAL) COINAGE OF AYUDHYA

It is manifestly an impossible task to attempt an ascription of the coins of Ayudhya to their respective reigns according to their marks, with the one exception of that of King Narai, already referred to. I have thought it best, therefore, after due thought, to give, first of all, a list of the Kings of Suk'ôt'ai and Ayudhya, as recorded in Wood's *History of Siam*, which may be regarded as being as nearly correct as it is ever likely to be, and then to show by illustration all the standard bêt coins with different marks which have been discovered up to the present time, grouping them, as far as seems likely, in their order of issue. At the same time I give a list of these coins with their distinctive features. By this means we can arrive, I believe, at a tentative arrangement of groups of coins as belonging to different periods.

But here I must interpose a line of thought which has been suggested to me by H. R. H. Prince Damrong. There is always, of course, the possibility to consider that a particular King may have changed his personal mark or used a second mark during his reign for some special occasion, but Prince Damrong also puts forward the suggestion that the change of mark may not represent a change of King at all, *but a new period of minting*, irrespective of the change of reign. If we take the Bangkok dynasty as an analogy, this would not be so, as it is known that each King adopted his own personal mark; but it is a possibility, and as such I mention it.

The reason given by Prince Damrong for his suggestion is that the number of different marks known is much less than the number of Kings who could have issued them, but, as will be seen later, this reason is based on a misconception, for the number of marks known is actually greater than the number of Kings of Ayudhya who are likely to have issued new coinage.

I propose, therefore, to keep to a normal classification under reigns until there is clear evidence to the contrary. The probability is that the Kings of Bangkok followed some well-established tradition. Moreover, in the case of the animal marks, for instance, these must be personal to particular Kings. Therefore, the idea of a personal mark existed in early days, and if the animal marks were personal, why not the others?

I give now a full list of the Kings of Suk'ôt'ai and Ayudhya.
List of Kings of Sukhothai and Ayudhya.

**Sukhothai**

<table>
<thead>
<tr>
<th>No.</th>
<th>King</th>
<th>Reigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Si Indrātīt</td>
<td>about 1250–1270</td>
</tr>
<tr>
<td>2.</td>
<td>Rām Mu'ang</td>
<td>1270–1275</td>
</tr>
<tr>
<td>3.</td>
<td>Rām K'amheng</td>
<td>1275–1317</td>
</tr>
<tr>
<td>4.</td>
<td>Lo' T'ai</td>
<td>1317–1354 (1347) (1)</td>
</tr>
<tr>
<td>5.</td>
<td>Tammarat Lu' T'ai</td>
<td>1354–1370</td>
</tr>
<tr>
<td>6.</td>
<td>Sai Lu' T'ai (Tammarat II)</td>
<td>1370–1378 (Independent)</td>
</tr>
</tbody>
</table>

**Ayudhya**

<table>
<thead>
<tr>
<th>No.</th>
<th>King</th>
<th>Reigns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rāmati'bodi I</td>
<td>(died) 1350–1369</td>
</tr>
<tr>
<td>2.</td>
<td>Rāmesuen</td>
<td>(abdicated) 1369–1370</td>
</tr>
<tr>
<td>3.</td>
<td>Boromarāchā I</td>
<td>(died) 1370–1388</td>
</tr>
<tr>
<td>4.</td>
<td>T'ong Lān</td>
<td>(killed) 1388 (7 days)</td>
</tr>
<tr>
<td>5.</td>
<td>Rāmesuen (2nd time)</td>
<td>(died) 1388–1395</td>
</tr>
<tr>
<td>6.</td>
<td>Rām Kāchātirāt</td>
<td>(deposed) 1395–1408</td>
</tr>
<tr>
<td>7.</td>
<td>Indrarāchā</td>
<td>(died) 1408–1424</td>
</tr>
<tr>
<td>8.</td>
<td>Boromarāchā II</td>
<td>(died) 1424–1448</td>
</tr>
<tr>
<td>9.</td>
<td>Trailokanat</td>
<td>(died) 1448–1488</td>
</tr>
<tr>
<td>10.</td>
<td>Boromarāchā III</td>
<td>(died) 1488–1491</td>
</tr>
<tr>
<td>11.</td>
<td>Rāmati'bodi II</td>
<td>(died) 1491–1529 First European Treaty</td>
</tr>
<tr>
<td>12.</td>
<td>Boromarāchā IV</td>
<td>(died) 1529–1534</td>
</tr>
<tr>
<td>13.</td>
<td>Ratsadā (aged 5)</td>
<td>(killed) 1534 (5 months)</td>
</tr>
<tr>
<td>14.</td>
<td>P'ra Chai</td>
<td>(died) 1534–1546</td>
</tr>
<tr>
<td>15.</td>
<td>Keo Fā</td>
<td>(killed) 1546–1548 (Mother Regent)</td>
</tr>
<tr>
<td>16.</td>
<td>K'un Wora Wong</td>
<td>(killed) 1548–1549 (Lover of Queen Regent)</td>
</tr>
<tr>
<td>17.</td>
<td>Chakrap'at</td>
<td>(abdicated) 1549–1565</td>
</tr>
<tr>
<td>18.</td>
<td>Prince Mahin</td>
<td>(Regent) 1565–1568</td>
</tr>
</tbody>
</table>

(1) On one page Wood gives the date as 1347; on another as 1354.
In drawing up this list of the Kings of Suk'ot'ai and Ayudhya, I have indicated in parenthesis how each died, whether a natural or a violent death, as this may help to enliven an otherwise dry table and also to explain why a good proportion of the Kings had no time to issue new coinage before 'shuffling off this mortal coil'. As far as is known, all the early Kings of Suk'ot'ai died a natural death, but in any case all, except perhaps No. 2, reigned long enough to have issued new coinage.

It will be seen from the list that there were six independent Kings of Suk'ot'ai before that state became vassal to Ayudhya, and that the full sequence of Ayudhyan Kings reaches a total of thirty-six.

Supposing that all the independent Kings of Suk'ot'ai, except No. 2, issued separate coinage, we have then to consider how many of the Kings of Ayudhya may have done the same. After due consideration I have eliminated the fourteen following:

+ Can be eliminated as far as the issue of new coinage is concerned; fourteen in all.
No. 2. Rāmesuken, abdicated;  
4. Tong Län, killed;  
10. Boromarāchā III, died after 3 years;  
13. Ratsadū, killed;  
15. Kao Fū, killed;  
16. Kūn Wōrawong, killed;  
18. Prince Mahin, Regent;  
19. Chakrap'at, abdicated;  
20. Mahin, died;  
25. Chett'a, killed;  
26. Adityawong, killed;  
28. Chai, killed;  
29. Sī Sut'ammarat, killed;  
35. Ukump'on, abdicated.

This process of elimination reduces the list of 'probables' to twenty-two for Ayudhya, and if we add the five for Suk'ōt'ai, we arrive at an aggregate of twenty-seven reigns which may have issued their own separate distinctive coinage, always presuming that each King did change the marks on the coinage to commemorate his own reign.

Now, if we turn to the list, which follows, of all the standard bāt coins with different marks known at present, we shall see that it reaches a total of twenty-four, which is remarkably close to our total of twenty-seven Kings.

There are, indeed, four further coins (of which two are shown on Plate V, fig. 2, and the mark on the third is illustrated by Block No. 1), but they are all well under the weight of the standard bāt coin, and I have therefore not included them in my list. Some or all may, of course, belong to the Suk'ōt'ai period, early and primitive as they are.

The list given has been drawn up from coins in my own collection and in that of the National Museum, as well as from the book of photographs mentioned in the Introduction under No. 3. As will be seen, six marks on the list have been recorded from photographs alone, but it has been possible from experience to recognise these as probably genuine coins, although I have seen no actual specimens.

There are also photographs of two other marks, one of which (a couch-shells, set up vertically) in particular is popularly attributed to

(1) The mark on the fourth is so worn as to be indistinguishable, and the coin itself weighs only 147 grains.
the first reign of Ayudhya (1350 A. D.), but they both look doubtful to me, and I have accordingly not included them in the list. On the other hand, if they are both genuine, this would bring our list of marks up to twenty-six, still nearer to the total of the list of Kings. They are shown under Blocks 44 and 45.
LIST OF AYUDHYAN (AND POSSIBLY EARLIER) BAṬ COINS

<table>
<thead>
<tr>
<th>Marks</th>
<th>Shape</th>
<th>Ends of Coin</th>
<th>Cuts</th>
<th>Hole in Centre</th>
<th>Weight</th>
</tr>
</thead>
</table>
| 1 Bunch of Ṛtur Flowers below, and Circle of 6 Dots with one in centre above.  
*Plate VII, 1. Blocks 2 and 3.* | Broad, with rounded sides | meet | Two, very small | Triangular, large | 217 | 14.16 |

*N.B. A smaller coin with the same mark, style and shape is known (Plate VII, 2).*  
| 2 Bunch of Lotus below, and Wheel of Law above (6 spokes).  
*Plate VII, 3. Blocks 4 and 5.* | Broad, with rounded sides | meet | Two, deep | Triangular, medium size | 224 | 14.56 |

| 3 Bunch of Lotus below, and Wheel of Law above (6 spokes).  
*Plate VII, 4. Blocks 6 and 5.* | Broad, with short, narrow hammer-marks | meet | Two, small | Triangular, medium size | 243 | 15.80 |

| 4 Bunch of Flowers below, and Wheel of Law above (6 spokes).  
*Plate VII, 5. Blocks 7 and 8.* | Broad, with long, narrow hammer-marks | meet | Two, very deep and wide | Triangular, large | 222 | 14.43 |

| 5 Bunch of Lotus below, and Wheel of Law above (6 spokes).  
*Plate VII, 6. Blocks 9 and 8.* | Broad, with long, narrow hammer-marks | almost meet | Two, deep | Oval | 215 | 13.98 |

| 6 Inverted Anchor with 1 Dot above and 3 Dots below, and Circle of 6 + 1 Dots above, as in No. 1.  
*Blocks 9 and 8.*  
*N.B. This is from a photograph.* | Broad, with (? sides | ? | Two, small | ? | ? |
LIST OF AYUDHYAN (AND POSSIBLY EARLIER) BAT COINS (continued).

<table>
<thead>
<tr>
<th>MARKS</th>
<th>SHAPE</th>
<th>ENDS OF COIN</th>
<th>CUTS</th>
<th>HOLE IN CENTRE</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Rachawat below, Rachawat in centre, and Wheel of Law on other side.</td>
<td>(a) Broad, with long, narrow hammer-marks.</td>
<td>almost meet</td>
<td>Two, small</td>
<td>small</td>
<td>219 14.24</td>
</tr>
<tr>
<td>Plate VIII, 1 and 2. Blocks 10, 11, 12.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Round, with round hammer-marks.</td>
<td>part</td>
<td>Two, long, narrow</td>
<td>none</td>
<td></td>
<td>475 30.88</td>
</tr>
<tr>
<td>8 Bunch of Flowers below, and Ox above.</td>
<td>Broad, with long hammer-marks</td>
<td>almost meet</td>
<td>Two, medium size (through mark below)</td>
<td>medium size</td>
<td>232 15.08</td>
</tr>
<tr>
<td>9 Rachawat below, and Elephant above.</td>
<td>Broad, with long hammer-marks</td>
<td>part</td>
<td>Two, medium size, and two below, as well</td>
<td>none</td>
<td>230 14.95</td>
</tr>
<tr>
<td>Plate VIII, 4. Blocks 15 and 16.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Bunch of Lotus below, and Wheel of Law above.</td>
<td>Broad, with long hammer-marks</td>
<td>part</td>
<td>Two, medium size</td>
<td>none</td>
<td>225 14.62</td>
</tr>
<tr>
<td>Plate VIII, 5. Blocks 17 and 18.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N.B. There is another type with these marks (Plate VIII, 6), which corresponds in every detail with those which follow and which are of the standard Ayudhyan shape. The standardization appears to have taken place in the reign of the King who issued this coin.

11 Anchor in frame below, and 8+1 dots in small inner circle, with rosette outer frame above.  
Plate IX, 1 and 2. Blocks 19 and 20.  
Part of female torso from hips downwards. Round, with clear, round hammer-marks.  
Part | none but many coins have a small nick called Met Kiao San (Padi-seed) | none | ? | ? |

12 Bunch of Lotus in frame below, and 7+1 dots in double circle above.  
Plate IX, 3 and 4. Blocks 21 and 22.  
Part | do. | do. | none | ? | ? |
<table>
<thead>
<tr>
<th>Marks</th>
<th>Shape</th>
<th>Ends of Coin</th>
<th>Cuts</th>
<th>Hole in Centre</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Elephant below, and Wheel of Law with outer circle above. Plate IX, 5 and 6. Blocks 23 and 18.</td>
<td>Part of female torso from hips downwards. Round, with clear, round hammer-marks</td>
<td>none but many coins have a small nick called Mel K'to San (Padi-seed)</td>
<td>none</td>
<td>?</td>
</tr>
<tr>
<td>14</td>
<td>Conch-shell below, and 8 + 1 dots in small inner circle, with rosette outer frame, above. Plate IX, 7 and 8. Blocks 24 and 20.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>?</td>
</tr>
<tr>
<td>15</td>
<td>Conch-shell with 4 pearls below, and 7 + 1 dots in single circle above. Plate IX, 9 and 10. Blocks 25 and 26.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>?</td>
</tr>
</tbody>
</table>

N. B. The above five coins (Nos. 11 to 15) are taken from photographs.

<table>
<thead>
<tr>
<th>Marks</th>
<th>Shape</th>
<th>Ends of Coin</th>
<th>Cuts</th>
<th>Hole in Centre</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Bunch of Lotus (no inner frame) below, and 8 + 1 dots in double circle above. Plate X, 1 and 2. Blocks 27 and 28.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>218 14.17</td>
</tr>
<tr>
<td>17</td>
<td>Bunch of Lotus (no inner frame) below, and 8 + 1 dots in 4-sided rosettes, inner and outer. Plate X, 3 and 4. Blocks 29 and 30.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>226 14.69</td>
</tr>
</tbody>
</table>
### LIST OF AYUDHYAN (AND POSSIBLY EARLIER) BAT COINS (continued).

<table>
<thead>
<tr>
<th>Marks</th>
<th>SHAPES</th>
<th>ENDS OF COIN</th>
<th>CUTS</th>
<th>HOLE IN CENTRE</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Bunch of Lotus (no inner frame) below, and Wheel of Law with outer circle above. Plate X, 5 and 6. Blocks 31 and 18.</td>
<td>Part of female torso from hips downwards. Round, with clear, round hammer-marks</td>
<td>PART</td>
<td>none but many coins have a small nick called Met K’ao Sūn (Pudi-seed)</td>
<td>none</td>
<td>222</td>
</tr>
<tr>
<td>19 Bunch of Lotus with scroll and inner frame below, and Wheel of Law with outer circle above. Plate X, 7 and 8. Blocks 32 and 18.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>222</td>
</tr>
<tr>
<td>20 K’rat (Garuda) with inner frame below. (Plate XI, 1). Block 33. Above</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>226</td>
</tr>
<tr>
<td>(a) 8+1 dots in small inner circle and rosette outer circle.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>225</td>
</tr>
<tr>
<td>(b) Open Lotus-Flower.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>226</td>
</tr>
<tr>
<td>(c) Open Lotus-Flower. Plate XI, 2, 3 and 4. Blocks 34, 35 and 36.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>226</td>
</tr>
<tr>
<td>21 (a) Bunch of Lotus with inner frame below, and 8+1 dots in small inner circle and 2 outer circles above. Plate XI, 5 and 7. Blocks 37 and 28.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>222</td>
</tr>
<tr>
<td>Marks</td>
<td>Shape</td>
<td>Ends of Coin</td>
<td>Cuts</td>
<td>Hole in Centre</td>
<td>Weight</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>--------------</td>
<td>------</td>
<td>---------------</td>
<td>--------</td>
</tr>
<tr>
<td>(b) Bunch of Lotus with inner frame below, and 8+1 dots in small inner circle and 2 outer circles above. <em>Plate XI, 6 and 7.</em> Blocks 88 and 28.</td>
<td>Part of female torso from hips downwards. Round, with clear round hammer-marks</td>
<td>part</td>
<td>none but many coins have a small nick called <em>Mei K'ao Sân</em> (Padi-seed)</td>
<td>none</td>
<td>Representative Specimen: 226 grains 14.69 grammes</td>
</tr>
<tr>
<td>22 Lotus with inner frame below. <em>Plate XII, 1.</em> Block 39. Above</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>226 14.69</td>
</tr>
<tr>
<td>(a) Yantra. <em>Plate XII, 2.</em> Block 40.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>229 14.88</td>
</tr>
<tr>
<td>(b) 8+1 dots in rosette frame. <em>Plate XII, 3.</em> Block 41.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Ut'unp'on (Fig) with inner frame below, and 8+1 dots in small inner circle and 2 outer circles above. <em>Plate XII, 4 and 5.</em> Blocks 42 and 28.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>225 14.62</td>
</tr>
<tr>
<td>24 Račhacat with inner frame below, and Wheel of Law in outer circle above. <em>Plate XII, 6 and 7.</em> Blocks 43 and 18.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>do.</td>
<td>229 14.88</td>
</tr>
</tbody>
</table>
Now what conclusions, if any, can we draw from these lists of coins and Kings?

If we look at the list of coins first, we shall see that, including No. 10, of which two forms are known (old and new), there are fifteen coins with different personal marks which are all of the standard Ayudhyan shape. By standard shape I mean a shape that, once it was definitely formed, never changed again. It is reasonable, I think, to conclude from this, (1) that all these fifteen coins may be assigned to the same group, and (2) that they represent the middle and later periods of the Ayudhyan dynasty rather than the earlier.

Now, if we turn to the list of Kings of the Ayudhyan dynasty and count back to the fifteenth King who is likely to have issued new coinage, we arrive at No. 11, Rāmātībodi II, who reigned from 1491 to 1529 A.D. It was during the reign of this King that Europeans first visited the Court of Siam, and that an actual Treaty was signed between Siam and Portugal. From, say, 1500 to 1767, when Ayudhya was finally sacked by the Burmese and the Dynasty fell, is a period of over 260 years.

The question is: are we justified in assuming that these fifteen different marks belong to the last fifteen reigns of Ayudhya? It is certainly a very tempting conclusion to draw, and it is equally certainly a curious coincidence that we are taken back to the first European Treaty. Taking all the circumstances into consideration, I am inclined to think that there is some justification for doing so; or, perhaps, it would be more accurate to say that the circumstantial evidence available, such as it is, tends to point in that direction.

First of all, it must surely be of some significance that it was during the reign of Rāmātībodi II that Europeans first visited the Court of Siam, as far as is known, and that an actual Treaty was signed between Siam and Portugal in 1511, renewed again in 1516, giving the Portuguese the right to reside and carry on trade at Ayudhya, Tenasserim, Mergui, Pattani, and Nak'on Sit'ammarat. From this we may, I think, assume that Siam at that time was becoming more settled and more in contact with the outside world. The significance of this is strengthened by further argument and evidence which will appear later when dealing with the question of the 'cuts' on the coins (cf. Plates V, VII & VIII).

Secondly, we have the superficial evidence that the marks shown on Plate VIII, 5 & 6 (Blocks 17 & 18) appear on both the old and the new shapes. It is highly likely that this change took place during
PLATE VIII.
a long reign, and the only two long reigns in the xvth and early xvi th centuries were those of Trailôkanôt (1448-1488) which was far from being a peaceful one, and Râmañêbodi II (1491-1529).

Thirdly, I have been hunting in Siam for distinctive marks on 'bullet' coins of the Ayudhya period for nearly twenty years, and cannot discover any marks on coins of the standard shape other than those shown in this volume. It is probable then that, except perhaps for some extremely rare coins of certain reigns which have been eliminated but which may have issued new coinage, I have exhausted the possibilities of the chase.

Fourthly, of all those discovered, the Bunch of Lotus on Plate XI, Nos. 6 & 7 (Blocks 38 & 28) is the only mark of which it can be said that the coin in question had been issued by a certain reign, namely, that of King Narai (1656-1688), because M. de la Loubère drew a picture of this mark in his book. Even in this case it cannot be definitely claimed that No. 6 was the personal mark of King Narai; it may have been that of an earlier King. Indeed, local tradition to-day has it that the Keoù (Garuda) mark (Plate XI, 1) was the personal mark of King Narai, because Garuda was the demi-god Vehicle of Narayana (Vishtaya); but the chances are that No. 6 was the mark of the reigning King, since M. de la Loubère visited Siam at the very end of a long reign of thirty-two years, and the predominant coin would probably be that of the existing reign. But whether this mark was that of King Narai or of one of his forefathers, its appearance on a standard coin shows conclusively that the standard shape was 'well set' by the time of his reign.

Bearing all these points in mind, there seems, therefore, to me a reasonable possibility that the fifteen marks known on standard coins belong to the last fifteen reigns of Ayudhya, and that the standard shape itself was set up in the first of these reigns, namely, Râmañêbodi II. One cannot say more.

As I have said, perhaps too often already, it is an impossible task to ascribe each coin to its reign. The only indication I can give as to its probable date is the frequency with which each is found to-day.

By far the commonest coin nowadays is the Bua Yantra, or Lotus (Block 39) with Yantra, of which two distinct forms are known (Blocks 40 and 41). This mark can still be found in considerable quantities in the market by the collector.

Next in frequency comes the Rûchawa and Wheel of the Law (Blocks 43 and 18), which is also a common coin.
After these two, and a good way behind, comes a group of three, composed of Ulumphôn (Block 42), K'ruit or Garuda (Block 33), which is known with three different marks on top (Blocks 34, 35 and 36), and the Bunch of Lotus (King Narai), of which there are two varieties (Blocks 37 and 38). These are not difficult to find, but cannot be called common.

Another group of three, the Bundles of Lotus (Blocks 17, 31 and 32) are of medium rarity, but can be found with diligent search.

The two Bundles of Lotus (Blocks 27 and 29), on the other hand, are distinctly rare and usually have to be purchased from a collector-dealer, though I have found several specimens in the ordinary silver pawn-shops.

This leaves us with the five coins shown in pairs on Plate IX (Blocks 19, 21, 23, 24, and 25). I have never actually seen genuine bat coins bearing these marks, though forgeries of the Elephant on Block 23 are of fairly frequent occurrence, and all the marks shown are, as stated, taken from photographs. From their general appearance, however, I believe that all these coins are authentic, in spite of their rarity.

This completes the tale of the fifteen different standard bat coins, and I can only leave it to the reader to speculate on the particular ascription of each. The two lists, of Kings and marks, are at his disposal. It might form an interesting jigsaw puzzle, but I am not going to attempt a solution here. Popular tradition does ascribe many of these marks to particular reigns, but without any evidence or authority except that of Nai Kulûb, and it would be idle to give them here, as it seems to me that it would only confuse the issue.

Having dealt with the standard bat, we may turn backwards to look at the coins shown on Plates VII & VIII (Blocks 2 & 3; 4, 5, & 6; 7 & 8; 10, 11, 12; 13 & 14; and 15 & 16).

Now I would like to draw the reader’s attention to what has proved to me a very interesting discovery. It will be seen, on a close examination, that all the coins shown (except the one of small value) have ‘cuts’ in them on either shoulder, while, if the reader will look again at Plates IX, X, XI & XII, he will see that no coin has any ‘cut’ upon it at all.

The significance of these ‘cuts’ is not easy to determine. K’un Vichitr thinks that the T'ai adopted the form of the ‘bullet’ coin from the Chinese ‘sycee’ lumps of silver, from which extractions were made by cuts for trading purposes. He suggests, therefore,
that when the T'ai transformed the Chinese silver into their own coinage, these 'cuts' were perpetuated by tradition. I do not, however, agree with this origin of the 'bullet' type of coin, and the explanation does not satisfy me entirely. In time, as has been seen, the cuts grow smaller and smaller and finally disappear, and in later Ayudyan times their place is often taken by a small elliptical nick, called in Siamese Met K'ao Sîn (or 'padi-seed') from the shape, which will be found on one side or other low down on the 'thigh' of the coin.

An interesting point has come to light as a result of a close examination of the two types shown on Plate VIII, Nos. 5 & 6. Both types, (a) and (b), not only have 'cuts' on either side (in the case of (b) reduced to a minimum), but also show distinct traces of a 'nick' of a rather primitive form.

The explanation usually given for this 'nick' is that it was made by the Chinese, when the coins were sent to China for trading purposes, to test the quality of the silver, which in the genuine coins was invariably good. There is good reason for believing this to be the true explanation of the 'nick.' The question arises, did the 'cuts' serve the same purpose?

It is reasonably certain that all the 'cuts' on the 'bullet' coins were, from their very nature, made in Siam, as distinct from the 'nick' made in China, and, as they are so uniform on each coin, probably by authority but after the coin had been stamped. It is interesting, in this connection, to note that the 'bracelet' coins sometimes have one single cut in the centre or two deep cuts near together, one on either side; while the Kô K'îm coin, in addition to the deep cut cleaving the centre, invariably has one shallow cut near the centre on the left hand side. It is probable then that the 'bullet' coins, and the Kô K'îm coins as well, followed an old tradition set by the 'bracelet' coinage; and I have come to the conclusion that these particular cuts can only have been made before issue to 'lay the body bare' to a suspicious world. I cannot think of any other explanation for them.

This gives rise to an interesting reflection. As already stated, the coins on Plate VII (except No. 2) and on Plate VIII, 1 to 4, all show 'cuts' but no 'padi-seed' nick. Nos. 5 & 6 on Plate VIII show at times both 'cuts' and 'padi-seed.' Those on Plates IX, XI, XII very often show the 'padi-seed' but never a 'cut.'

(1) In one case only have I come across a coin (Plate X, No. 5) with minute cuts as well as the 'padi-seed' nick.
If, as may well be true, the 'padi-seed' nick was made in China to test the genuineness of the coin (cf., later, M. de la Loubére, who, while admitting that Siam in 1688 had a true standard coinage, wistfully adds that there were many false coins about), and, if as I firmly believe, all the 'cuts' were made in Siam, this must indicate a change, or an opening, of trade conditions with China.

It is curious how different things are linked together. I have several times been asked by Museum Authorities to give my opinion as to the approximate date of the closing of the Sawankalok porcelain kilns, and in my essay on "A Visit to Sawankalok", published in the Journal of the Siam Society (Vol. XIX, Pt. 2, 1925), I gave my reasons for surmising that the indigenous kilns must have been more or less moribund round about 1500 A. D., chiefly on account of the presence of quantities of rough Chinese early Ming porcelain still to be found in the Bangkok market to day, imported for domestic and not ornamental use. I could see no reason why Siam should import, at possibly greater expense, quantities of Chinese porcelain if her own kilns were still turning out supplies in sufficient quantities. Equally, if China began to ship supplies of porcelain to Siam at cheaper prices than those at which the home-made article could be produced, this would also account for the decay of the Sawankalok kilns. I assume that 'safe-guarding' was not known in those days!

Now we have before us one type of coinage which, I believe, never went to China, and another type, whose beginnings I have tentatively placed for quite other reasons at the beginning of the xvth century, which was constantly being used as a medium of exchange with China. It certainly looks as if a sea-borne trade between Siam and China began to spring up at the close of the xvth century, and as if this may have been due to the fact that the first Treaty with a European Power (Portugal) was signed during the reign of Rāmātībodi II.

Thus, by approaching the problem from two entirely different angles, we have, I think, arrived at a point where we may at least provisionally conclude that the first nine different coin-marks shown in the List of Marks belong to a period anterior to that of Rāmātībodi, i.e. before the xvth century.

If we now turn once more to the List of Kings of Ayudhya, we find only seven Kings (or eight at the very most, if we include Boromarachā III, 1488-1491) who are at all likely to have issued their own distinctive coinage, and therefore, if our previous conclusions have
any weight, we must go further back to the Suk'ot'ai dynasty to
find the author of the earliest of these coins. It has always been a
popular assumption that the Kings of Suk'ot'ai did issue 'bullet'
coins, but until this assumption received some support from the
evidence of the coins themselves, I was frankly rather sceptical on
the point. I now consider it a reasonable conclusion at which to arrive.

Here again it is obviously impossible to attempt an ascription of
each of the nine marks to its particular reign. All one can say is
that, judging from the shapes of the coins on Plates VII and VIII
and other criteria, No. 1 on Plate VII is older than any of the others;
and that No. 3 is earlier than Nos. 4, 5 and 6, as it has no hammer-
marks. As regards those on Plate VIII, I incline to think that they
are all later than those on Plate VII, indeed almost certainly so.
No. 1 (with No. 2 which has the same marks as No. 1) is, I should
judge, older than No. 3, and No. 3 older than No. 4, which is ap-
 proaching the standard type.

It appears to me to be just possible that Nos. 1 & 3 on Plate VII, (with
Nos. 1 & 3 on Plate V,) belong to the pre-Ayudhyan period, while Nos.
3, 4, 5 & 6 on Plate VII as well as Nos. 1 & 2, 3, & 4 on Plate VIII,
may belong to the Ayudhyan period. If this were so, it would account
for all the seven Kings who reigned prior to Rāmāṭ'ibodi II; and, as
we have already discovered fifteen different marks on standard coins,
\textit{i.e.} from Nos. 5 & 6 on Plate VIII onwards, this would seem to
account for all the twenty-two Kings of Ayudhya who are likely to
have issued new coinage of their own. I dare not speculate further.
As it is, I may be wide of the mark and post-dating some of the
marks on Plates VII & VIII.

There are two other marks, which are not illustrated on actual
coins, but which are shown on Blocks 1 and 9. I have seen a speci-
men of Block 1, and am satisfied of its authenticity, but the coin is not
of the bāt weight and belongs to a very early period. Of Block 9 I
have only seen a photograph, but from the similarity of its second
mark to that on No. 1 on Plate VII (Block 3), and from the general
appearance of the coin, I believe this also to be genuine. I cannot
say whether it is of the bāt weight or not.

This must complete my attempt to classify and date the standard
bāt coinage of Ayudhya. Whether it will ever be possible to arrive
at a more satisfactory conclusion I must leave for the future to
decide. It is, however, only right to say that, when I first took up
the apparently hopeless task of studying the early coinage of Siam,
I never thought it would be possible to reach even the stage at which I may claim to have arrived to-day.

There is one other subject which may be briefly touched upon here. From the time of the coming of the Portuguese in the xvth century until the xviiiith century all kinds of money began to find their way into Siam. If one studies, for instance, "The Records of Relations with Foreign Countries in the xvth century," published by the National Library, it will be found that Japanese gold and silver 'plate,' English pounds sterling, Spanish rials of eight, and all kinds of other dollars were imported into Siam for trading purposes. It is often said that the later Ayudhyan bāt were usually made of dollar silver and this may well be true. Many of these dollars still survive, and I have discovered only recently in the market Belgian Confederation coins of 1814 A.D., Holy Roman dollars of 1719, and German Episcopal dollars of 1760. With all this profusion, or rather confusion, of monies, it must have been difficult for the accountants to keep their books exactly, and it would be interesting to know how the exchange rates were fixed. As far as one can gather, it was entirely a question of individual bargaining, within limits.

In January 1616 Edmund Sayers of the English East India Company says that he was offered by the King's representative one 'cattie' of Siamese money (80 bāt) for 40 rials of eight. He counteroffered 48 rials, but it was not accepted, and finally he had to give 48½ rials.

In December 1615 Richard Cocks in Fīando, Japan, sent a cargo to Siam containing 'six hundred pounds sterling in money,' which he said was equal to '2,400 Japanese taels;' and as, according to Edmund Sayers, 'one cattie of Siamese money equals 20 ts. Siamese and 40 ts. Japanese,' we can calculate that at that time one pound sterling was equal to 2 Siamese tael or 8 bāt, i.e. that the exchange value of the bāt was 2 shillings and 6 pence.

It would be entertaining to continue this discussion of the monetary difficulties of our forefathers in the Far East, but it is outside the scope of this survey and would need a monograph to itself to do it justice, intimately bound up as it is with the trade of that time.
III THE SMALLER COINAGE OF AYUDHYA

I must now deal briefly with the marks found on coins of lesser value than the bāt, namely, the half-bāt, the salw'ng (½ bāt), the fūngh (¼ bāt) and the sŏng p'ai (1/16 bāt), of the marks on which I show fifteen different blocks, and two Plates, XIII & XIV, of twelve coins each. These illustrate all the different marks that I have been able to discover.

M. de la Loubère states that the marks on the smaller coinage are the same as those on the bāt. They may, or presumably must have been the same in his time, although I have never seen any small values with the marks he describes in his work; but to me the odd thing is that those discoverable to-day correspond very little with the known marks on the bāt coins, as will be seen from the Plates.

Coin No. 1 (½ bāt) on Plate XIII, which has no mark at all and which is undoubtedly the oldest of the series shown, is a smaller edition of No. 2 on Plate V.

Nos. 3 & 8 (½ & ¼ bāt) show a bare mark (Blocks 48 & 46), which I have never seen on a bāt coin. The second mark on No. 2 is a circle of dots, but No. 8 has the mark shown on Block 54, the inside of a conch-shell.

No. 3 (½ bāt) has the same marks as No. 4 on Plate VII (Blocks 5 & 6).

No. 4 (½ bāt) shows the Rāhasi in a circle; this is almost a flat coin.

Nos. 5 & 6 (¼ & ½ bāt) show a small elephant (Block 50), but the side mark is a conch-shell, which combination is unknown on a bāt coin.

No. 7 (½ bāt) shows a circle of 6 dots surrounding a central one, but the side mark is not distinguishable.

No. 9 (¼ bāt) shows a large elephant (Block 49) with an undecipherable mark on the side, and is a long, flattish coin.

Nos. 10, 11 & 12 (¼, ½ & ½ bāt) all show a conch-shell on the side (Block 58), but no mark at all on the top.

If we turn to Plate XIV, Nos. 1 & 2 (¼ bāt) again have an elephant (Block 51) of a primitive type and a conch-shell (Block 60). No. 2 is of bronze, a coin very seldom seen; it may of course be a forgery, from which the silver coating has disappeared.
No. 3 (¼ bāt) has again an elephant on the top with an undecipherable mark on the side.

No. 5 (⅛ bāt), I feel pretty sure, belongs to the bāt coin, No. 5 on Plate VIII (Block 17); and No. 4, ¼ bāt (Block 52) may belong to No. 1 on Plate X (Block 27), though I do not feel at all certain about this.

No. 6 (½ bāt) is a bronze coin, also rare, and shows an elephant, though it is very indistinct.

Nos. 7 to 12 all show different forms of the conch-shell which are never seen on a bāt coin. Nos. 8 (Block 56), 10 (Block 55) & 11 are all ¼ bāt. No. 7 (Block 57) and No. 9 (Block 59) are ⅛ bāt. No. 13 is 1/16 bāt.

Block 47 (¼ bāt) shows a Rāchasi, and Block 53 (¼ bāt) an Ox, presumably of the same reign as the bāt, No. 3 on Plate VIII (Blocks 13 & 14), but these are both taken from photographs, and I have not seen the actual coins.

Taken altogether, the small coinage of Ayudhya is very puzzling and difficult to place. A few of the coins shown on the Plates have 'cuts' in them and are presumably older than the others, but even here, except for No. 1 on Plate XIII, I do not feel certain about the relative periods of any of them. As far as I am concerned, they must remain 'wrote in mystery.' I would like to think that numbers of the small coinage with well-known Ayudhyian marks still remain to be discovered by the earnest collector, but I must have examined literally tens of thousands of small coins during the last fifteen years (a miserable way of spending one's leisure hours), and I feel that the hope is a forlorn one.
PLATE XIII.
IV

Weights and Values

There remain then the Weights and Values of the coinage, which it will be convenient to consider together.

Of Northern coinage, the three types of 'bracelet' coinage illustrated on Plate III (5, 6 & 7) are 921 (the smallest), 954, and 1885 grains, respectively, in weight. Reckoning the bāt at 230-235 grains, this works out at 4 bāt, 4½ bāt, and 8½ bāt, respectively, that is to say, as near as may be, the Tai tambu'ng (tael) and double tambu'ng. These specimens are naturally not sufficient in number to allow of any definite conclusions being drawn, but I must admit I find the circumstance rather odd, as it seems to point to the fixing of the Tai tael at a settled weight of its own at an earlier period than I should have expected. The weights of the above coins may, of course, be purely coincidental. If not, then it looks as if the Northern Tai came early into commercial contact with the Khmer, from whom the tambu'ng (tael) was borrowed, as will be seen later in this chapter.

Among ten k'ā k'im coins in my possession, not of the same but of various principalities, the weight varies from 939 to 987 grains, that is, from just over 4 bāt to 4½ bāt. Allowing for differences in time and place, these variations may, it is suggested, be set aside, and the coin accepted as representing the Tai tael, with a little weight thrown in for luck, unlike the retail dealer's custom of to-day. As it is certain that these coins date from a period round about 1300 A. D. onwards, it is clear that the weight of the Tai tael was well fixed by that date, at any rate in the North of Siam.

The half tael is also known, and the two smaller coins shown on Plate III, 2 & 3, weigh 150 grs. and 34 grs., respectively.

As concerns Central Siam, our principal witness is M. de la Loubère, who, after discoursing at some little length on the various measures in use in Siam which he deplores as 'si peu justes', says that

"Their pieces of money are the truest, and almost the only (true), things that they use, although even so coins are often found which are false or light in weight........................

(1) Author's translation from the French.
The same names apply equally to their weights as to their money.

Their silver money is all of the same shape and struck with the same marks; only some pieces are smaller than others. They are of the shape of a small cylinder or bar, very short and wholly bent about the middle, so that the two ends of the bar meet together.

The ratio of their money to ours is that their Tical, which only weighs a half-œun, is worth, however, 37½ sols.

They have no gold or copper money. Gold is a commodity with the Siamese and is worth 12 times as much as silver, presuming that the fineness of the two metals is equal.

At the end of the second volume of his work, M. de la Loubère, in giving the actual weights and pieces of money in circulation, makes the following statement:

Now these are the names of the values of the weights and the coinage all together. It is true that some of these names do not represent pieces of money, but only values or sums of money, just as in France the word 'livre' does not signify money but the value of one pound weight of copper, which makes a sum of 20 sols.

1. The pie is worth 50 cati.
2. The cati is worth 20 teils.
3. The teil is worth 4 ticots.
4. The ticot is a piece of silver money, and is worth 4 maysons (sailing).

1. The mayon is a piece of silver money and is worth 2 fouang.
2. The fouang is also a piece of silver money and is worth 4 pages.
3. The page is not a piece of money, but is worth 2 clam.

1. The song-page, i. e. 2 pages, is a piece of silver money and is worth half a fouang.
2. The clam, too, is not a piece of money, but it is reckoned to weigh 12 grains of rice, as I have been told.

(1) "It is of the weight of half an ounce, whereby we can reckon that the kati weighs 2½ pounds".

N. B. This is also part of the quotation, but has been relegated to a footnote for convenience sake.
"On this basis the tical would weigh 768 grains of rice, which fact I have not tested."

"I do not know to what language the word pic belongs, but in Siam it has a weight of 125 pounds of 16 ounces each. The cati is Chinese and is called schang in Siamese. The Chinese cati weighs twice the Siamese cati. (1) Teit or tael is also a Chinese word, which is called taalming in Siamese, but the Siamese cati only weighs 8 Chinese taels, (1) against 20 Siamese taels as stated above.

"Tical and mayon are words whose origin I do not know, but the Siamese call them baut and saling. Fowang, page, and clam are Siamese words."

It is interesting to know that all the above weights and values of coins were still in general use in Siam when I first came to this country in 1908, two hundred and twenty years after M. de la Loubère, with the exception of the clam which had been replaced by the cat.

M. de la Loubère has, however, become confused in stating that the Chinese kati weighs twice as much as the Siamese kati, since in fact the reverse is the case. On his own showing, the Siamese kati weighs 2 2/3 pounds of 16 ounces, and 50 kati (or 125 lbs.) weigh one picul.

Actually the Siamese kati weighs 2 2/3 lbs., and the picul 133 1/3 lbs. (and not 125 lbs.), but this is a detail, and I pass on to an extract from the Journal Asiatique, (2) in which particulars are given by M. Ferrand of all kinds of Eastern weights and moneys taken from old writers. In speaking of China, it is stated that:

\[
\begin{align*}
16 \text{ tael} & = 1 \text{ kati} \\
100 \text{ kati} & = 1 \text{ picul} \\
1 \text{ picul} & = 133 \frac{1}{3} \text{ lbs.}
\end{align*}
\]

From this it is clear that a Chinese kati weighs 1 1/3 lbs., as it still does to-day, and is equal to half a Siamese kati.

Thus it is also clear that one Chinese kati weighs 40 Siamese bāt (a Siamese kati weighs 80 bāt), and that, therefore, a Chinese tael weighs 2 2/3 bāt, as against the Siamese tael, which weighs 4 bāt.

The further statement of M. de la Loubère that the Siamese kati only weighs 8 Chinese tael is, of course, equally wrong, as this would make the Chinese tael equal to 10 bāt in weight, whereas it is in fact equal to only 2 2/3 bāt.

(1) The italics are mine in both cases.

(2) Onzième série, tome XVI (juillet-septembre 1920), p. 90.
Otherwise, however, I think that M. de la Loubère's statements may be taken as correct, and they are interesting as showing the weights and moneys in use in Siam during the latter half of the xvith century.

The statement that there was no gold or copper coinage in Siam is to all intents and purposes correct. In August 1929, however, I was honoured by an invitation from His Majesty the King to examine the Royal collection of coins which had accumulated over many reigns, and to reduce them to order as far as possible, and I was interested to find a gold Ayudhyan 'bullet' coin of the weight of one āt, stamped with the Rāchawat and Wheel of the Law. This is the only gold coin of the Ayudhyan period known to me.

The next step backwards takes us to two stone inscriptions in the T'ai language found in the region of Suk'ōt'ai, and dating from 1518 a. d. and 1536 a. d., respectively.

In the second of these inscriptions mention is made of gifts to a temple of the price (or value) of various tambu'ng, bāt, and salu'ng, and in the first inscription we find mention of silver to the weight of two chang (kati) and two tambu'ng (tael), while later on a gift is made of a ring valued at 7 bāt.

Next comes an inscription which was discovered at Angkor in Cambodia and is in the Cambodian script. It dates from 1444 a. d. and in it mention is made of a gift from one person to another of 1 damleng, 3 bāt, 1 sleng and 1 pey. Now at just about this very period the T'ai had sacked Angkor, the Khmer capital, which had then been removed to Landek on the Southern side of the Great Lake, and the question is whether the above denominations refer to Cambodian or to T'ai weights and moneys. M. Groslier is of the opinion that, in any case, they refer to weights only, but the inscription seems to me to be exactly analogous to the one quoted above, i. e., a mixture of weights and values (or moneys). The damleng, we know, was never a coin but only a weight except in the North of Siam, and, if M. de la Loubère is correct, nor in Ayudhya was the pey (or paye). Bāt and sleng, on the other hand, were and are units of T'ai coinage as well as weights. Either, then, the three last units mentioned in the inscription were borrowed by the Khmer as a result of contact with the T'ai, or they may be Khmer weights borrowed by the T'ai and used for coinage.

Tracing our steps backwards, there is an inscription from Suk'ōt'ai in the Cambodian (Khmer) script of a date round about 1361 a. d.,
of which the partial replica in Siamese has also been discovered, in which it is stated that the King of Sachanali-Sukōt'ai distributed royal gifts to the extent of '10 jyang of gold, 10 jyang of silver and 10 million cowries' (in the Khmer text), and '10,000 of gold, 10,000 of silver and 10 million cowries' (in the Siamese text). I pity the poor wretches who had to count the cowries, but perhaps they weighed them out!

Prof. Coedès, who edited and translated all the inscriptions quoted,\(^1\) states in a note that 'jyang' is an old Cambodian weight, but he cites no reference in this regard. What the meaning of '10,000 of gold and silver' in Siamese is, it is difficult to say. The actual words used in Siamese are _mu'n mu'ng_ (one _mu'n_), which nowadays is a word representing 'ten thousand,' but there is still in use a weight in the North of Siam of one _mu'n_. For instance, you buy rice or potatoes by the _mu'n_, which is equal to about 28 lbs.

Can the Siamese text refer to this _mu'n_? If it does, 28 lbs. of silver would equal roughly 900 _bat_ at 32 to the lb., and 28 lbs. of gold would be equal to 11,000 _bat_, if gold was worth, as in later times, 12 times the weight of silver. I am inclined to think this is the meaning of the text.

So far we have found no earlier evidence of weights or coinage dating from the T'ai period of ascendancy in Siam, which began about 1250 a.d., but in Volume II of Prof. Coedès' Inscriptions\(^2\) will be found a transcription in the Khmer script from the base of a statue of the Buddha. This inscription is thought to be dated 1105 of the Great Era, i.e. 1183 a.d., and in it we find mention of the words _para_, _tala_, and _tambuyng_, the first two referring to weights, i.e. of the metal used, and the last to the value. Thus we have the _tambuyng_ used as a weight by the Khmer in Siam as far back as 1183 a.d.

The strong probability is, then, that the T'ai borrowed their _tael_ (tambuyng) from the Khmer, whom they supplanted in Siam, since weights and measures well-known to the people are not so easily changed as Dynasties or Kings; but I cannot as yet discover any evidence which will provide a clue as to why the Khmer adopted a standard weight different from that of the Chinese, unless, indeed, the Chinese standard _tael_ itself has altered since those early days.

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\(^1\) Georges Coedès, _Revue des Inscriptions du Siam_, Vols. I and II.

\(^2\) No. 25, p. 44.
The origin of the būt weight is equally unknown, but it seems certain that this was not the weight of the original 'bullet' coin, and that the standard weight of the būt, as now known, was introduced by either the Suk’ot’ai or the Ayudhya dynasty. A possible explanation is that the T’ai of Suk’ot’ai or Ayudhya, having accepted the Khmer dūmly (hunlu’ny) as a weight, decided to divide it into four parts and to adopt one quarter as the unit of their silver coinage. This is, perhaps, the most reasonable conclusion at which to arrive, since it is well-known that from early times the būt itself has been divided into four salu’ny.
Manufacture of 'Bullet' Coins

During the past year the Minister of Finance has had the happy inspiration to hand over to the National Museum all the old instruments used for making 'bullet' money, or p'ot duang, as they are called in Siamese.

It is over sixty years since silver 'bullet' coins were made for currency, but they have been made in small numbers for presentation purposes during the interval, and it appeared that there was still one old man left who had been a pupil of the coin craftsmen in his youth and who still remembered how to make these coins.

Through the kindness of Prince Damrong arrangements were accordingly made for the instruments to be brought to the Royal Mint, and a demonstration was given before the Prince, the Director of the Mint, and myself by this old man and his associates. It may be that the demonstration which we witnessed is the last that will ever be given, and I feel, therefore, that a description of it will find a fitting place at this stage of my work on the Coinage of Siam.

In order to make my description the more intelligible, I have added three plates, Nos. XV, XVI and XVII, showing the instruments used, and the different stages of manufacture.

Let me say at once that the process was mediaeval, and that the setting, as it should be, was mediaeval.

We were received at the Mint by the Director and conducted through rooms and dark passages until we came to some steep steps leading to the basement. Down these we went and eventually found ourselves in what seemed to be an underground chamber (actually it was flush with the ground), where I at least imagined myself in the alchemist's den. The atmosphere for the experiment was perfect, and even the four men themselves, who were engaged in it, were perfectly dressed for the part.

They all wore the same uniform, rather baggy trousers coming down to just above the ankle, and a kind of long smock cut at the neck like a sailor suit, the whole of khaki trimmed with dark blue. You felt that anything might happen in that chamber.

In a corner of the room was an open hearth where two men crouched. One was blowing the bellows, and the other poking and sorting the
embers of his 'furnace' with a long pair of pincers. The other two squatted in silence on the floor and waited for us to take our seats.

When all was ready, one of these two weighed out the silver required on the scales—the usual type in use in the Far East, a small pan dangling from the end of a short, notched, ivory rod with a sliding weight attached—and placed it in the tiny earthenware crucible (next to the shell on Plate XVII). The man with the long pincers (seen in the foreground of Plate XV) then picked up this crucible with them and placed it in the heart of the 'furnace', covering it up carefully with embers. The man with the bellows (not the ordinary kind seen in Europe, but a double piston with a handle, which was pushed in and out of a long, narrow, wooden box) then pumped away until the silver was fused, when the crucible was removed by the man with the pincers and poured into a water-mould. To describe this, it should be said that a third man squatted on the floor with a rectangular box in front of him, full of water. In the centre of this box was placed a small wooden block with one elliptical groove in it (seen standing up on end on the left of Plate XV, behind the larger similar block). This small block was wrapped in cloth, and the whole was set below the level of the water, so that, when the silver was poured from the crucible into the small elliptical mould made by pressing the cloth into the groove, the metal was at once completely submerged. In a moment or two, by the aid of a certain amount of 'coaxing' on the part of the man in charge, the silver was smooth and set, and had taken on the shape of a short, elliptical bar, flattened on the top and rounder on the under side, where it had been pressed into the mould. It looked rather like an elongated 'burnt almond' sweet (Plate XVII, 3).

Now the craftsman took charge. He first of all took up the chisel and hammer seen on Plate XV and made two parallel, shallow cross-cuts on the flatter side of the coin near the middle, by this means bending the coin slightly, presumably to ease the strain when hammering the sides (Plate XVII, 4).

He then set the coin up on one side in one of the shallow holes in the iron anvil (of which two are seen standing up on end on the right of Plate XV) and gave the side facing him several sharp, shrewd blows with his hammer. When he had finished one side to his satisfaction, he turned it round and hammered the other side, until the coin had assumed its proper shape. He then gave it a final tap on the top, and the process was complete, except for the marking. Nos. 5 to 10 on Plate XVII show the different stages of this hammering.
The Director told me that an expert craftsman would complete all
the hammering in five blows, but our demonstrator took a good
many more than this number, as naturally he had had but very little
practice in the past.

The stamping of the coins we did not see, as all the dies are still
jealously guarded in the Royal Treasury, but we were told that
this was carried out on the elephant bone seen on Plate XVI, where
the whole bone is shown and also the used portion enlarged. The coin
was placed in one of the holes made in the bone, and the stamping
was done by hand, by some form of punch. It was explained that
the reason why an elephant bone was used is that it is just the right
consistency to stand the impact of the punch without splitting, as
wood, and without spreading the shape of the silver, as a hard metal
block would do.

Of the other objects shown on Plate XV, the scissors are used for
cutting the ingot silver, the shells are used for weighing it, but the
two flat, narrow objects on the left in the foreground were not
brought into play, and their use is not known to me.

It is estimated that in former days the number of 'bullet' coins
which could be turned out by expert craftsmen from a single mould
was about 240 a day, and as there were ten moulds in use in the
carey years of King Mongkut's reign, the total number coined would
be about 2,400 a day. How inadequate this number grew to be is
shown by the request of King Mongkut to Sir Robert Schomburgk,
the first British Consul to be stationed in Siam, in February 1858,
to obtain for him in England a minting press and machinery capable
of turning out about 100,000 baht a day.

This was due to the opening up of the country to foreign trade
after the signing of the Bowring Treaty in 1855, and to the acute
shortage of silver coinage which rapidly took place. Before the
machinery could be installed and the needs of the trading community
supplied, King Mongkut had been obliged to resort to the expedient of
stamping Mexican dollars with the Royal marks of a Mongkut (Crown)
and a Chakra, and of permitting their use as Siamese currency.

They were, of course, withdrawn as soon as the supply of new flat
coinage became adequate, and to-day are extremely rare. I myself
only know of three examples, one in the National Museum, one in
the private collection of the late H. S. H. Prince Piya, and one in
my own collection. There must no doubt be others, but I do not
know of them.
VI

DOUBTFUL AYUDHYAN COINS

From what has gone before it will, I am sure, be realised that, in the present state of our knowledge of Siamese coinage, it is impossible to state definitely in all cases which coins are genuine and which are false, and I have therefore included one plate, *XVIII*, showing a group of eight coins which I have acquired as genuine at various times, sometimes, alas, at considerable expense, but which I now consider to be of doubtful authenticity. Some of them, I am reasonably satisfied, are forgeries of rare coins; one of them, I believe, does not exist as a genuine coin. The others, either from their shape or weight or their marks, are all doubtful.

No. 1 can only be described as a 'fancy' shape, which, except for No. 2 on this same plate, is unknown in the annals of Siamese coinage. The marks on it are, I think, intended to be, on top, an elephant, and on the side, a couch-shell, but they are very crudely made by an unskilled hand and their form is not acceptable to the trained eye. There are distinct hammer-marks on both ends, underneath, and the 'cuts' are not at all even. Lastly, the weight is exactly 232 grains, i.e. that of a *bád*, and this is highly unlikely in a presumably very early coin. The only thing in its favour is that the silver appears to be of good quality, but this would be an essential, even in a forgery, if 'cuts' are to be made. I cannot accept it as genuine.

Nos. 2 & 3 may be considered together, as they bear the same marks. These, which are three in number, represent on one side the Bunch of Lotus (Block 17), on the other side the Wheel of the Law (Block 8), and, on the top, what appears to be a dog, a fox, or a wolf; at any rate, it is a dog-like animal with large ears and a long, bushy tail standing up on end. Here the resemblance between the two coins ends.

No. 3 weighs 228 grains, and has two small cuts, but the shape is in no way similar to *Plate, VIII, No. 1*, which it is obviously intended to imitate (since this is an undoubtedly genuine coin with three similar marks), and, to my eye, it was made in the Bangkok period. My chief reasons for saying this is that the ridge in the centre is high, and that the coin has not those single clear hammer-marks of the Ayudhyan period. Indeed, the shape is bad.
No. 2 weighs 118 grains (2 grains more than a half-bāt), which is
in itself suspicious in such an old coin, and its shape resembles that
of No. 1 on this Plate, with similar ‘cuts’ and hammer-marks. It is
clear also that the Bunch of Lotus mark, as shown in the illustration,
is incomplete; and it is very odd that, even with a magnifying
glass, there is no sign to be seen of the remainder of the mark below
where the ‘cut’ has divided it, as is seen, for instance, on Plate VII,
No. 3.

These two coins must, I fear, be both rejected.

No. 4, with its curly ends, is another strange shape, which I have
not met elsewhere. The marks on it are similar to those on Plate
VIII, Nos. 5 & 6, and the only thing against them is that neither of
them is quite complete. The ‘cuts’ also have been rather clumsily
made and are uneven, but the silver seems to be of good quality.
The weight, however, is exactly 232 grains, and this is what gives
chiefly rise to suspicion in such an old coin. I hesitate to accept this
coin, but I am not prepared to reject it definitely as yet.

No. 6, which has the same marks as No. 4, I have little hesita-
tion in pronouncing to be a forgery of Plate VIII, No. 5. Its weight,
again, is 233 grains, and the shape is undoubtedly that of a Bangkok
coin. The shape and weight are, indeed, the collector’s best weapons
against the modern forger, who nearly always makes his specimens
a full bāt weight, without any allowance for wear and tear, and has
evidently not studied carefully the differences in shape between the
Ayudhyan and Bangkok bāt.

No. 5 is also, without doubt, a forgery—of Plate IX, Nos. 5 & 6—
and for similar reasons. The weight is nearly full at 230 grains,
and the sides, which are partly rounded, have ridges made by double
hammer-marks, a feature of the Bangkok coins which is never seen
on an Ayudhyan coin.

No. 7 appears to be a forgery of the Anchor mark, seen on Plate
IX, Nos. 1 & 2, though the mark on the top is not the same, being,
apparently (for it is partly missing), a four-spoked wheel in a double
circle with dots between the spokes. The weight is plausible at 227
grains, but the shape is bad, and smells of Bangkok. The ridge in
the centre is high, and the hammer-marks, though single, have not
that clear, round appearance as in Ayudhyan times. I do not like
this coin.

No. 8 is of unusual interest. By right it should not appear here
at all, as it does not profess to be an Ayudhyan coin, whether genuine
PLATE XVIII.

1

2

3

4

5

6

7

8
or false, but as I cannot give it a whole plate to itself, I have included it in Plate XVII. The marks are, on the side, a two-pronged fork, and, on the top, five dots surrounding a central dot in a single circle. The dots are separated by shortened spokes. The weight is 236 grains.

For years I have been told that the 'Fork' mark belongs to the famous P'ya Thak, who freed his country from the Burmese yoke after the fall of Ayudhya in 1767, and who reigned as King in Touburi, opposite modern Bangkok on the west bank of the river Menam Chao P'ya, until 1782 when he unfortunately went mad and gave way to his principal general, Chao P'ya Chakkri. For years I have searched the shops in Bangkok for examples of this mark, and, although I have a number of them in my possession, they all have differences in shape and marks, and I cannot accept any of them as genuine. Here, the coin shown is obviously a forgery and a bad one at that. It is over weight at 236 grains; the shape is late Bangkok, and there are sharp, distinct ridges made by double hammer-marks on both sides of the coin. I am not at all sure that the metal is silver; at least, it does not look pure.
It is still a most difficult question to decide whether Pyä Täk ever issued any distinctive coinage of his own, and, if he did, what mark or marks he adopted.

In my previous work on the coins of the Bangkok dynasty (JSS, Vol. XVIII, Part 3, pages 164-5) I was inclined to think that both the marks popularly ascribed to the First Reign of the Bangkok dynasty, namely the Trī, commonly called Krii, (Plate XIX, 4) and the Unadom, or Bua, (Plate XIX, 5), actually belonged to Chao Pyä Chakkri, who in 1782 raised himself to the throne of Siam under the style and title of Somdet P'na Buddha Yöt Fā (His Majesty the Lord of the Highest Heaven).

The reasons which I gave for this opinion will be seen from the following extract taken from the above work:

"The question is still sometimes debated whether the "earlier of these two stamps, the Trī, should not be assigned "to the interregnum of Pyä Täk. A. Marques Pereira, in his "little work written in 1879, categorically allots the Trī mark "to Pyä Täk, though he gives no authority for doing so. "On the whole I am against this supposition and an in"clined to agree with the modern opinion that both marks "belong to Chao Pyä Chakkri. "There are many reasons in favour of this. In the first "place, after the fall of Ayudhya in 1767 at the hands of "the Burmese, constant irregular fighting went on for some "years, and Pyä Täk must have been kept busily occupied "in subduing the countryside. He had moreover no settled "capital city, and he was probably content to go on using "the Ayudhyan ticals. "Secondly, on the Trī coins appears the Chakra or "Discus for the first time (Plate I, No. 6), (1) and this mark "has remained constant through all the succeeding reigns as "the dynastic mark; and Chao Pyä Chakkri was not of the "same family as Pyä Täk. "Thirdly, there is the similarity between the name of "the King's family, and those of the two marks chosen.

(1) Here shown on Plate XIX, 3.
"It is true that the name Chakkrā is one word in Siamese, razione, a Sanskrit word meaning 'strong' or 'powerful'; whereas Chakra and Trī (or Ky) are two distinct and separate words; but the similarity between them is too striking to be a coincidence, and one must infer that the King chose the two symbols named on account of their resemblance to his own name."

After a lapse of seven years since writing these words, I have carefully considered once more the reasons given, and I must frankly admit that they still have weight with me.

At the same time, during the lapse of years, certain other evidence has come to light which needs to be recorded here.

First, there is the fact that I cannot find a genuine coin with the 'Fork' mark on it, and I am reasonably convinced that such a genuine mark does not exist.

Secondly, as previously stated, during the past year the Minister of Finance has handed over to the National Museum all the instruments still existing in the Mint for making the 'bullet' money, as well as impressions of all the stamps or dies used for making the marks. These stamps include all the main ones used during the Bangkok Dynasty (Plate XIX, 5 to 8) with the exception of the Trī (Plate XIX, 4). There may be some significance in this fact. If the instruments, which are obviously of some age, have been carefully kept, as well as the stamps, why should the Trī mark be missing?

There is a third fact, to which I alluded in my previous work, but to which perhaps I did not give sufficient attention at the time, and this concerns the hammer-marks on the coins. The earliest coins with the Trī mark have one single hammer-mark on each side, as on the Ayudhyan būt, though later ones have partly single and double, or wholly double marks. The coins themselves, however, have not that definite standard shape of the Ayudhyan tradition. Plate XIX, 1, shows the standard Ayudhyan type with the single, clear hammer-mark, while Plate XIX, 2 shows the standard Bangkok type with the double hammer-marks and the ridge in the middle.

Lastly, we have the categorical statement of A. Marques Pereira, written fifty years ago and given as an accepted fact without any need for evidence, that the Trī mark belongs to P'yā Tāk. In the light of the new evidence, this statement obviously bears more weight than it did at the time I first wrote.
Summing up all the evidence now available, it would seem as if we must arrive at one of two conclusions, either that (1) P'ýă Tăk issued no distinctive coinage of his own, or (2) the Trî mark is the mark of his reign.

In the absence of definite evidence, I prefer to leave the question there, and I do so because I still find the second reason given in my previous work, which is a positive one, a serious stumbling-block. It is hard for me to accept the fact that the new dynasty of Bangkok was willing to use the same dynastic mark as P'ýă Tăk. On the same analogy, it is easy to understand why the Tudors did not adopt the same designs as the Plantagenets in England. It is human nature.

One point of interest emerges lastly from a comparison of Ayudhya and later coins. None of the Bangkok (or possible P'ýă Tăk) coins are so well made as those of Ayudhya, and it looks as if, on the fall of that capital, the family of skilled coin-makers was dispersed and the art was lost.
During my journeys North and South in the past twenty years I have gathered a number of pieces of metal which have been represented to me as in use at some time or another, and for some purpose or other, as a medium of exchange. They are not in any way connected, as far as I know, with the Tai system of coinage as it has developed in the course of centuries, and I have not thought fit to include them in my general survey. But, in order to make this work as complete as possible, they should find a niche somewhere, and I have accordingly relegated them to an appendix with two plates of illustrations, XX and XXI.

No. 1 comes from the North of Siam and appears to be of reasonably pure silver. It is called in that region 'Pig's Mouth' money, owing to a fancied resemblance to that ill-favoured animal, but it is, in fact, a large, hollow, shell-like piece of metal, weighing 1,198 grains, or slightly more than five baht, and seems more likely to have been made in imitation of the largest type of cowrie-shell. I could not discover the use to which this particular kind of money was put in the past; it is uncommon now.

Nos. 7 & 8 can be conveniently considered next. These pieces of money, or tokens, which may be found in sets of five, also come from the North of Siam and are called Ngôn Hói (shell-money) or Ngôn Tok. The largest and the smallest of the set, which are the two shown here, range from a size of 2½ inches by 2½ inches, to a tiny piece, ½ of an inch square.

They are made of silver alloy in the shape of flat or almost flat shells. One side (that not shown) is partly hollow and partly covered with a yellowish-red substance, which I am told is the burnt yolk of a chicken's egg; the other side, which is slightly convex, is black and ribbed or corrugated, as seen in the illustration.

I understand, on reliable authority, that these tokens were, and still are, made solely for use in the ceremonies of marriage and divorce in Northern Siam. When a man marries, he will give so much weight in 'shell-money' to the parents of his bride, and if he divorces his wife, again he must pay according to his position and means.
They represent in fact the 'purchase' or 'release' money of the lady, as the case may be. The tokens shown weigh 1,064 grains and 64 grains, respectively. Others of the set in my possession weigh 563 grains, 268 grains, and 107 grains, respectively.

Nos. 2, 3, & 4 may all be considered together, as they all come from the North and have a certain affinity with the 'shell money' just described. No. 2 has a shell-like cavity on one side and is ribbed on the other; it also has a kind of handle, broken off. It seems to be made of copper with a thin coating of silver, and weighs 1,002 grains. No. 3 has no cavity, but is flat on one side with a slightly ribbed surface, and convex on the other (that shown). It appears to be made of silver alloy and also weighs 1,002 grains. No. 4 is, in essence, the same as No. 2, except for the projecting handle, and weighs 154 grains. All three are partly covered with 'chicken's egg' on one side. I am disposed to think that they are put to the same use as the Nguon Hai.

Nos. 5 & 6 also come from the North of Siam, but have not apparently been in general use; at least I have only found them in the Nanh region, on the eastern border. They are convex on the marked side, and concave on the other, as may be seen in the illustrations; and for want of a better name I call them 'leaf' money, since the marking resembles the veins of a leaf. No. 5, which is of copper or a copper alloy, weighs 555 grains; while No. 6, which appears to have an admixture of silver, weighs 874 grains.

There is no evidence to show when any of the tokens on this plate were first made, or by whom.

Plate XXI

The first five bullet-shaped pieces on this plate were sent to me from Supambur, North-West of Bangkok, but without any comment as to their period of use or their originators; nor can I discover any evidence to account for their presence.

They are not of silver or copper, but are of very light weight, and the report of Mr. H. J. Plenderleith of the British Museum, who kindly examined them, gives the following analysis:

"The Siamese coin sent me is not pure metal but is"
"composed of the native copper sulphide, 'copper glance',"
"sometimes called chalcocite. This is rather interesting,"
"and unique surely, as it must be a difficult matter casting"
"this substance owing to its tendency to burn at high"
PLATE XXI.
"temperatures. I could detect nothing further in the"
"specimen save a trace of chloride and of iron.
"Chemical results were checked by a specific gravity"
"determination, the value obtained being about 5.9. This is"
"quite in agreement with the figure required by cuprous"
"sulphide".

The weights of the coins shown are as follows: No. 1, 238 grains; No. 2, 220 grains; No. 3, 253 grains; No. 4, 121 grains; No. 5, 116 grains, though the two latter are about the size of an Ayudhyan bih, and Nos. 1, 2, & 3 are considerably larger.

The marks upon the coins are very crudely made, as indeed are the coins themselves, but they appear to represent either a flower, or an anchor, or a Mongkut (Crown). The most singular thing about these coins, however, is the presence on either side of two Cambodian characters, of which the first is but, while the second is not recognizable. The characters themselves do not seem very old. Their meaning is unknown and, as these coins mostly have small holes through them, I am inclined to think that they have been made for use as amulets and have never been used as coins for currency purposes.

The same applies to Nos. 6 & 7, which are not of chalcocite but of some heavier metal, probably bronze.

No. 8 comes from Nak'on Si Tammarat in Southern Siam, and is always said to be of great age, possibly from the first millennium A.D. Small hoards of them have been discovered at times, but, outside the National Museum, the coin may be said to be rare. It appears to be of silver, and weighs 29 grains, which is exactly a fa'wong (1/4 bih). This may be a coincidence, or it may point to a much later date for its issue than is generally supposed.

The mark on the obverse is a kind of Maltese Cross, formed by pressing out the design. The reverse is blank. There is no evidence as to its period or its value, or its use.

Nos. 9 to 14, which complete the Plate, are of a certain historical interest. They are red clay seals, stamped with the Lotus-flower (Nos. 9 & 10), the Kinarì, or Bird-woman, of Siamese mythology (No. 11), the Ruchasì (No. 12), the Hare (No. 13), or the Cock (No. 14). It is recorded in the history of Siam that during the reign of King Boromakot, in the year 1744, the supplies of cowrie-shells fell short for use as small change, and that these clay prakab, as they are called in Siamese, were issued by royal authority in their place.

They are, therefore, provisional cowrie-shells and today are suffi-
ciently rare. It is not known whether the size made any difference to the value; probably not, as the many different sizes of cowrie-shells were all of the same value.

Finally, although I personally have never seen any examples, I understand from Major Seidenfaden that the Kui (a tribe of North-Eastern Siam, in the Kompong Soai district) formerly made and used a lozenge-shaped iron money. A piece of this money seen by him was 14 cm. long, 3 cm. broad, and had a thickness of 1 cm. Its weight was 200 grammes. According to Aymonier, in 1884 ten such pieces were worth one bit, and fourteen went to one Piastre.