

POTTERY IN SIAM.

At a meeting of the Siam Society held on the evening of the 29th March the President, Mr. W. A. Graham, read a paper on "Pottery in Siam". The lecturer had before him a long table on which were arranged numerous earthenware and porcelain objects, which he exhibited to illustrate his remarks.

Mr. J. Crosby, C. I. E., who was in the Chair, having made an introductory statement, Mr. Graham read his paper and subsequently an informal discussion took place, the audience examining the exhibits and discussing them with considerable interest.

Mr. W. Blankwaardt referred to allusions made by the lecturer to the National Museum and suggested that the Siam Society might approach the Authorities with a view to an alteration of the hours during which the Museum is open, the present arrangement being ill adapted to the public convenience. To this the President replied that the Society would do what it could in the matter, and it is interesting to note that by the kindness of H. E. the Director General of the Royal Fine Arts Department more suitable arrangements have since been made.

Mr. Graham's paper was as follows :—

I

The word *Keramic* includes in its meaning anything pertaining to pottery, and *Keramics* is a general term for the study of the art of pottery.

Pottery in its broad sense, includes all objects made from clay and then hardened by fire, from the roughest earthenware to the most refined and delicate porcelain, and it is to a consideration of such objects, either made in, or peculiar to, Siam, that I now invite attention.

The first thing that strikes one on approaching the subject is the evidence of the extreme antiquity of man's knowledge of the

use and value of burnt clay. How he first came by that knowledge there is, of course, no direct evidence of any sort, and all we can do is to surmise that somewhere about the period when the discovery of the uses of fire caused him to leave off being a raw flesh and berry eating creature, he may have begun to feel a want for something in the shape of a receptacle for the storage of the food he was learning to accumulate; in fact the beginnings of a larder. For this he may at first have used a simple hole or depression excavated in the ground, and finding that unsatisfactory because he couldn't carry it about, he may have taken a lump of damp clay from the nearest river-bank and flattened it or squeezed it into some sort of shape and so have obtained, when it dried and hardened, a portable receptacle of a kind, in which he could carry his cooked food when hunting his prey or running away from his enemies. The next development would probably be an unintentional scorching or baking of some such dried mud receptacle, and the consequent accidental production of a "pot", a strong, hard object, impervious to water and of a cheerful red colour, pleasing to the sight and, by increasing his mobility, of the greatest assistance to man in his struggle for existence with the sabre-toothed tiger, the hairy mammoth and other monsters that made human life precarious and exciting in the later Paleolithic age.

Whether or not such surmise is anywhere near the truth as to the origin of pottery, will never probably be known, but it is known that the very earliest dawn of historical times found the art of making pottery in a highly developed condition, and long established as an ancient practice amongst the most diverse and widely separated races of man.

The question arises. How came it that the virtues of burnt clay were known, and made use of by methods of extraordinary similarity, by groups of men separated from each other by vast distances of land or water and utterly unaware of the very existence of each other?

In the days when it was believed that man first appeared upon the earth some seven or eight thousand years ago, in a state of complete development, the presence everywhere of the primitive arts

such as stitching, cooking, archery, fire-making, pottery, etc., was accounted for by the theory that they were discovered by individuals when man was still in the "cradle of his race", wherever that may be supposed to have been, and made part of his outfit when he set forth from home to people the world.

But modern science now teaches that man's existence is not a matter of a few thousands of years, but of an unknown number of hundreds of thousands, and that he was already firmly planted in most parts of the world long before he had reached the high development implied by the possession of any implements, tools or arts at all. This makes the theory of discoveries or inventions by individuals, and subsequent distribution all over the world, practically untenable; for imagine a rather superior monkey in some Asiatic jungle, stumbling across a new way of cracking nuts, or the skulls of his rivals; what means are there by which such a great discovery could be communicated to, and adopted by monkeys in the forests of South America? The idea seems absurd! Yet man, when he first began to be man, was not far removed from a superior monkey or ape of to-day.

Modern Science meets this difficulty with the pronouncement that the theory of individual discovery is, in fact, exploded, and that it is now generally believed by the wise, that groups or communities of mankind were gradually and more or less simultaneously evolved all over the world from their pre-human ancestors, and that the course of that evolution included the simultaneous discovery of the uses of, and the means to make, the primitive implements that are now to be found lying about on, or just below, the earth's surface in every country. But these implements, wherever found, are not only rather alike but are *exactly* alike. Paleolithic remains of man's handiwork found in America, Europe, Asia, and Africa are entirely similar in every respect, and Neolithic weapons, tools and implements, including pottery, collected from America, the Mediterranean shores and Madras are absolutely identical. Now one can conceive of the possibility that men in similar states of development and living under similar conditions might, quite independently of each other, invent implements having a considerable degree of resemblance; but that they should make

entirely similar objects in many places at one and the same time, and that these objects should continue identical through countless centuries, as improvements were thought of or circumstances compelled change, it is difficult to believe heartily. In fact, to many, this idea may seem almost as absurd as the other.

However, the things are there and must have had a beginning, and judging by the evidence that we have, Neolithic man must have been busy making, improving upon, and breaking, the pottery invented by his Paleolithic forebears, for some twenty thousand years or so before the earliest historical time.

It has, I believe, been established that Neolithic man inhabited Siam. And Neolithic man made pottery. In fact, Neolithic implements and remains of pottery have been found together in Kambodia. Hence we may with some confidence believe that pottery has been made in this country for a great if indefinite number of centuries.

There seems to be a tendency in this part of the world, when in doubt as to the origin of any art, legend, industry, agricultural product, &c, to say that it came from China, or if not, then from India; and in a monograph on pottery produced under Government auspices in Burma, the point is gravely discussed as to whether the art of making pottery was brought there from India or China, the verdict going finally in favour of China. One may acknowledge readily that many good things have come out of China and that, owing to the early advance of that country in arts and industries, the countries near her owe her a good deal of their enlightenment; but there appears to be no necessity for a belief that she had at any time a monopoly of primitive Neolithic crafts. I think we are amply justified in believing that the successive races that have occupied this country, at least since the first incursion of the tribes from which the Mon, Khmen, L'wa, &c, are descended, all brought an already ancient knowledge of pottery with them when they came here, and that they found an equally ancient knowledge existing amongst the aboriginals they displaced.

The belief in the, so to speak, indigenous nature of the pottery industry in Siam is encouraged by the extraordinary prevalence of

pieces of broken pot in practically all parts of the country. You have doubtless noticed, whenever you dig a hole in your garden, or whenever excavations are made for the building of a new house, bits of pot are turned up out of the earth. That is, of course, quite accountable, and to be expected in or near a great city like Bangkok, where a large population has been unceasingly occupied during the last hundred and forty years or so, in throwing away pieces of broken pot. But what about the shards that are continually coming to light in places where man has apparently never lived? What about the fact that when an eight- or ten-metre high river-bank caves in, revealing alluvial beds untold centuries old, pieces of pottery are frequently found sticking in even the lowest strata uncovered? What about the discoveries of railway constructors; miners and others, whose business it often is to dig in the ground in the wild and unfrequented parts of the country? The fact is that we walk about upon a surface-soil of which it may almost be said that quite an appreciable percentage is composed of fragments of pottery: fragments that may be twenty days or twenty centuries old; and when we come across those fragments in the jungle remote from man's habitation, we may feel justified in moralising upon the great age of the potter's craft. Not that we do so, however. Pieces of broken pot are so thickly sown over the earth's surface, we are so accustomed to seeing them, and one chip of earthenware is so very like another, that a fragment unearthed even in the most unlikely place, usually passes unnoticed, or at best raises no more than a vague speculation as to where the deuce it may have come from.

It is when specimens of pottery are found more or less entire, or bearing characteristics which may serve as some sort of indication as to their date, place of origin and the purpose to which they were put, that they begin to be of some interest, and such specimens must naturally be of comparatively recent origin. Probably the most ancient pottery known in Siam is that which has been found in the neighbourhood of the ancient Khmen ruins that are dotted about the Monthons of Korat and Ubon. From time to time people living near those ruins, dig up in their fields, jars of coarse earthenware, covered with a brown glaze and shaped with some attention to ornamentation as well as usefulness. These, being quite unlike the

pottery used by the people, and of entirely unknown origin, are naturally looked upon with fear and suspicion, and are usually deposited at the nearest Wat, in order that any baleful magic lurking in them may be neutralised by the sanctity prevailing there, and prevented from harming the finder or his neighbours.

A few years ago I was shown half a dozen specimens of this ware at the Wat of Ban Kampeng village, on the road from Korat to Ubon. They were all between sixteen and twenty-four inches high, of very coarse texture but adorned with ornamental lines and circles, and of rather graceful shape. The brown glaze was cracking off, apparently because the earthenware beneath was rotting, and all the specimens were more or less broken. They had been found at different times below the surface of the earth, in fields near the ruins of an ancient stone wall of unknown history. Later I saw another collection in the possession of the Governor of Surindr, very much like the first lot, and found in the earth near the town of Surindr, which stands in the middle of ancient Khmen relics of all kinds; sanctuaries, aqueducts, reservoirs and so forth. I have here a specimen of this pottery which was found near a hamlet called Ban Prasart on the site of an ancient Khmen settlement in Changwad Kukan. The piece is unfortunately broken, the whole of the lip is missing, but enough is left to indicate that it was made by a person of some artistic perception. But though graceful of shape and somewhat elaborately ornamented, it must, even when undamaged, have had a rather rough appearance, and the other pieces I have seen are much the same in this respect. As regards its age there is no reason of which I am aware why it should not be coeval with the stone ruins near which it was found. I take it to be a relic of the ancient Khmen civilization, and therefore anything between 1000 and 1600 years old!

The period of Khmen culture passed away long ago and during succeeding centuries the darkness of poverty and ignorance gradually closed down on the people whom it had once enlightened. But its influences, long submerged, were, apparently never absolutely destroyed, at least on the plateau of Eastern Siam, for, under the modern encouragement of a paternal Government, the potter's art now re-



Ancient Khmer glazed earthenware.



Ancient tile, Phra-Pim, and terra-cotta votive offerings.
Also modern earthenware from Chiengmai.

appears, and the remote posterity of those who made this ancient earthenware, find means to express their artistic instinct in the peculiar whitish clay pottery, of Ubon. (Here was exhibited a terra-cotta statuette of a shepherd boy, the pedestal arranged as a cigar-ash tray and match-box holder!) One can perceive at a glance the extreme modernity of this latter work that I am able to give you the privilege of inspecting!

As I have suggested there is every reason to presume that at the period of this Khmen earthenware, and before, pottery of sorts was being made all over Siam. But unfortunately very little ware that can even vaguely be assigned to those early times has come to light. Here and there amongst the ruined cities of the North, the terra-cotta pedestal of a sacred image has been found, such as that described by Holt Hallett as seen by him near Penyow, south-east of Chiengmai, and now and again an old Phrachedi collapses and delivers up *Phra Pim* and other earthenware objects placed in it when it was built. Such things as these last, having been preserved from the action of the elements, may sometimes be dated (approximately) but of course the great mass of old earthenware has totally disappeared or has become mere unrecognisable fragments.

The impressed clay tablets known as *Phra Pim* deserve attention because amongst them very old specimens can be more or less identified. From early Buddhist times it was the custom for the pious to make offerings, at Phrachedi and other sacred spots, of these tablets, either baked into terra-cotta, or raw (green, is I believe, the potter's term), impressed with an effigy of the Buddha. Some years ago a large number of the unbaked kind was found on the floor of a cave at a place called Mat Harn in the Puket Monthon, and these, on being examined by experts, were pronounced, by virtue of certain characters stamped on them, to be not less than 900 years old. They had lain in the cave beneath a thick layer of dust and dirt and when found were quite fresh and even soft, but they soon cracked and crumbled after exposure to the air. There are, or were until lately, some of these tablets in the Museum at the Mahatai and a few are preserved in the British Museum. You are probably aware that the limestone hills of the Peninsula are full of caves, and many of them,

some even in the heart of what is now Malay and Mohamedan country, contain large and very ancient effigies of the Buddha. These caves were doubtless visited by countless pilgrims in ancient days, and votive tablets probably lie concealed in most of them.

Twenty five years ago when Archæology and antiquarian research were almost unknown in Siam, terra-cotta *Phra Pim* were quite common objects amongst the bricks and other débris of old and abandoned Wat. Most of them have now been picked up and placed in museums or in the custody of modern Wat, or are kept by the people as charms or in collections of antiquities. Fournereau in "Le Siam Ancien" gives several illustrations of these, (Part I PL XXIII) and says that the smaller ones when found are worn as amulets.

When railway construction began in Siam, and for some years afterwards, it was the custom to demolish Phrachedi and Phra Prang near the line and to use the bricks as ballast. Some of the *Phra Pim* found in pagodas thus destroyed at Phra Pa Don near Nakon Patom, are quite possibly 1400 or 1500 years old. Fournereau's specimens, which came from Sawankalok and Sukotai, may be 700 or 800 years old.

Amongst the few *Phra Pim* that I have here, one is of ascertainable date as it was found at Ayuthia inside a Phrachedi that fell down a few years ago, this being one of the original constructions of the reign of Phra Chao U Thong; that is to say of the middle of the 14th century A. D. The specimen is well executed, the details having been carefully worked out. Evidently it was gilded when new. Moulds or dies from which *Phra Pim* were made have occasionally been found. Small quite modern *Phra Pim* made to order in China of variously coloured clays and imported for wear as amulets, can usually be bought in the bazaars.

Though it is the general impression that in old times the great majority of Siamese houses were roofed with grass, palm leaves or nippa (*charuk*), yet the making of earthenware tiles must have been a considerable industry for, not only were palaces and Wat all roofed with tiles, but we learn from Van Vliet who described the

Ayuthia of 1630, that the houses of the official and better classes generally, were tiled, while "the common or poor people live very poorly in reed and bamboo houses, the roofs covered with *cocos* leaves or bad tiles." Hence it would seem that, in the capital at any rate, the demand for tiles must have been considerable.

According to Fournereau, "Les tuiles etaient de differentes sortes: plates et rectangulaires avec crochet, plates et arrondies a la partie inferieure, enfin concaves et convexes comme chez les Romains." He might have added "et comme chez les Chinois aussi," for concave and convex tiles, laid alternately, are a feature of the most ancient Chinese buildings. Many old Wat with concave and convex tiles are still to be seen in Siam and here and there can be found specimens of the peculiar and effective ornamentation arrived at by turning up the end of the lowest convex tile of a course, and impressing on that end the figure of a *Dévada*, angel or other design. I am fortunately able to show you a specimen of such earthenware, which entitles the otherwise humble tile to some slight consideration amongst the artistic productions of the potter.

Fournereau goes on to say that the old time tile was usually covered with yellow, green, blue, grey or white glaze, but here I think the learned gentleman has been led away by the beautiful coloured tiles he saw in Bangkok, has jumped to a conclusion, and taken a fall. For I can find no reference to any coloured tiles being used for the buildings of old Ayuthia or earlier. I have never seen any such on really old buildings, and my Siamese friends tell me they are, in fact, modern. Old Van Vliet, who mentioned tiles no less than seven times in his account of Ayuthia, says that the rooves of all palaces, Wat and tiled houses were red, that is, simply the colour of burnt clay. The variegated tiles which beautify so many buildings in Bangkok, were apparently an innovation of the early 19th century and came from China. They are now made in Bangkok by a Chinese Syndicate on the west side of the river at Bang Chark.

Writing of Pattani in 1744 Alex: Hamilton says "At the present day it carries on a small trade with Bangkok, Singapore and neighbouring States, the exports being tin, lead, gutta, fish, tiles and earthenware."

The tiles referred to here would doubtless be those curious, thin, light little squares known here to-day as *Krabuang Sóngkla*, or tiles of Singora which, at least until the arrival of the modern cement tile, were imported into Bangkok regularly.

Once upon a time a Government ship was despatched down the peninsular coast on a delicate mission not unconnected with the Malay Dependencies. There was a strong body of stout marines on board and also a Subtle Emissary with a persuasive tongue and guileful heart. (This was, of course, a long time ago). In due course the mission was successfully accomplished and the ship prepared to return. It happened that a high official connected with the expedition was building a new house in Bangkok at the time and, as it seemed to him unsafe for a fine Government ship to be going about practically empty, he arranged to have her ballasted with Singora tiles. (This was, I say, a very long time ago). The ship set out crammed simply *full* of ballast, met with rough weather and, though this was a very, very long time ago, neither ship nor stout marines nor guileful emissary have ever been heard of since!

In the museum at Ayuthia where, under the fostering care of H. E. Phaya Boran Rajdhanindr, one of the most learned archæologists of Siam, a very valuable collection of old pottery has been got together, there are many specimens of common earthenware of variable quality and design, that have been found amongst the ruins of that city and in the neighbourhood, and that are all at least 150 years old. Some are very rough in texture and workmanship, and others are of fine clay, carefully executed and of graceful design. None of the articles are quite similar to the earthenware pots of to-day though the differences are in many instances small.

In the Museums of Bangkok and Ayuthia are preserved specimens of the large earthenware pipes made by Faulkon to conduct the water from the sacred lake, Chub Sorn, to the Palace at Lopburi.

The Bangkok and Ayuthia Museums also contain good examples of the large jars for which Nakhon Sawan was at one time locally famous, jars with a small mouth, a pronounced lip, very wide and

rather squat body and narrow foot; of content about four times that of the large water jars now made at Pakret, with which everybody in Bangkok is familiar. The specimen at Ayuthia has a thin glaze which, however, covers only the upper half of the jar. Those in Bangkok have a much thicker and more complete glaze and are in fact very remarkable pieces of earthenware. These large Nakon Sawan jars are not made now though pottery works persist there.

Concerning the alms-bowl of the mendicant Buddhist monk, called "Bhatr", (from the Sanscrit "Patra", a plate or cup). My youth was spent in a part of Burma where alms-bowls are made of hard pottery, turned a shining black by a coating of sessamum oil applied before firing in the kiln. When therefore, I began this paper, I went to that part of Bangkok that is called "Ban Bhatr" because alms-bowls are made there, to study the local process. I was told then that these articles are made here of iron, and it shocked me to realise that for twenty-five years I have been going about in blind ignorance of that fact. However, a man, seeing my concern, produced an old alms-bowl of pottery, and I went away thinking that these iron bowls might be a mere modern innovation. But, on looking up De La Loubère who wrote of things in Siam about 1680, I read; "When they (the monks) go in search of food they carry a bowl of iron in which to receive whatever may be given them": I have, however, seen several old pottery alms bowls at Ayuthia, and so may perhaps conclude that "Bhatr" may be of either material. I am told that in the Chieng Mai neighbourhood also, where fine black pottery is made, the "Bhatr" is usually of iron but that many old earthenware bowls are preserved in Wat, and that once upon a time they were all of this material. (A black terra-cotta alms bowl was exhibited).

All over the country amongst the paper, plaster and wooden, votive offerings made at San Chao and similar shrines, the curious will find small baked clay images of one sort or another that have been presented by the pious in search of, or in acknowledgement of, spiritual assistance. These scraps of pottery are, some of them, quite interesting, though almost always of very rough material and careless execution. They are about on the same level as the little earthenware toys that are common and can be seen on sale in most

bazaars. I once picked up two of them near a ruined shrine at Sawankalok, and I like to think these may be of extreme antiquity, though probably they are not so at all. One represents an elephant in the attitude of adoration and the other is apparently a child with mumps, wearing anklets and a top-knot and holding a bantam cock in its lap. Perhaps some-body can explain any significance there may be about the latter. The mumps may be a potter's accident but the other things are apparently intentional.

Of the innumerable places where pottery of sorts is made in Siam to-day, the most noteworthy, after Bangkok, are Chieng Mai and neighbourhood, Nakon Sawan, Ayuthia, Bang Bua Tong Pakret, Pattani, Ubon and Chantabun. In all these places one may see potters working by the methods, and with the implements, that are common to the business all over the world. The kneading and mixing of the clay, a laborious and important process, the throwing on the wheel, the beating of the green pot to the required thinness and shape, the impressing of the ornamental pattern, the fringing and the final rubbing, scraping, and polishing off; all these operations are performed in a manner practically identical with those of the potters of Europe, America, everywhere.

I don't want to take you back to the beginning of time,—of which you have already had enough,—but really! The Potter's Wheel!! One must look back for a moment to consider that stupendous fact. It is a matter of record that in Egypt 3500 years ago and in China 4000 years ago, clay was being spun on wheels in all respects identical with those that may be seen to-day in any pottery-works of Stafford-shire, beside the Seine, the Rhine and the Tiber, and on the banks of the Menam Chao Phaya. Drawings of potters at work have been preserved for us from the ancient civilization of Egypt, which might almost have been copied from 20th century workers in Siam. There is the wheel in the shape of an inverted cone, turned with the foot as by Chinese potters at Bang Chark in Bangkok, or with the hands as by the Siamese at Pakret and elsewhere. It is a wonderful phenomenon!

Right here in Bangkok one may watch the wet clay rise on the wheel under the deft fingers of the operator, who passes it to

another by whom it is whacked and thumped to the required thinness and smoothness before being fired; and one will not forget that 800 years ago a bibulous old tent-maker of Khorassan stopped by the way to watch that very same operation and wove the incident into an immortal quatrain.

The potteries of Chieng Mai are extensive and peculiar. In addition to the places where the ordinary rice-pots, water-jars and bowls of daily use are made, there is quite an industry concerned with the making of a fine porous terra-cotta ware, examples of which, in the shape of water—bottles, small jars, filters and so forth are now-a-days distributed all over the country by means of the railways. There is also a long-established factory which turns out a special grey-green earthenware of roughish clay, burnt very hard and covered with a green glaze. This institution is situated not far from the Pradoo Chang Peuak and is owned by a Shan family in whose hands it has been for some generations. The clay is dug from a deep hole right on the spot. The owner is an affable person who takes pleasure in showing his premises, but on the subject of his glaze he maintains a silence as of one who holds a secret that nothing shall induce him to reveal. In Scotts' Upper Burma Gazetteer we may read, however, of a substance used for glazing pottery in the Southern Shan States; a substance, yellow in colour and containing 90·8 per cent of a lead compound, which, mixed with rice-water to a viscid fluid consistency, and smeared, with a little blue-stone added, over earthenware, gives, on firing, a vitreous green glaze. After reading this, it scarcely seems necessary to worry the Shan potter of Chieng Mai about his ancestral secret. This pottery is fired at a fairly high temperature and the glaze is certainly much the best being produced anywhere in Siam at the present day.

Small terra-cotta bottles or vases of many degrees of fineness, are another production of Chieng Mai. I once asked two or three friends from the north what these were for, and they replied that they are generally used for containing the water required for the mixing of gin and bitters! I found it difficult to believe that the short-drink vice had reached such proportions in the north, the evidence of my European informants notwithstanding, and I preferred to believe that they are really intended for use as flower hold-



Red earthenware cooking apparatus (Bang Bua Tong).



Red earthenware water-pot (Ban Tanao Si).

ers and for the ordinary innocuous requirements of the Lao household.

The potteries at Nakon Sawan and Ayuthia produce nothing in these times that is particularly worthy of special notice, though they turn out plenty of ordinary ware. Those of Ayuthia are situated at the suburban village of Sa: Bua where they flourished during the palmy days of the old capital, and it is interesting to note that many families of the present colonies of potters at Pakret and at Ban Tanao Sri on the river a few miles north of Bangkok, emigrated from Sa: Bua about 130 years ago, presumably in order to supply pots for the new capital.

The ware of Pakret and neighbourhood is too well known to need description. It consists largely of the big water-jars in which before the days of condensers, artesian wells and water-works, we used to store water collected in the wet season for use during the dry. I remember about a hundred of them standing in the space under the British Legation! Also in those unsophisticated times, one of them, with a ladle or dipper, formed the sole appliance for the bath.

The Pakret pottery being usually thick, requires more firing than most and, to make the utmost of the heat, oval topped kilns are used, whereas for ordinary pottery the kilns are square and quite open at the top.

At Bang Bua Tong in the South of Monthon Ayuthia, west of the river, where the clay is good, there are several villages devoted to the making of pottery. Here are two enlarged photographs from a factory there belonging to H. E. Phya Sukkum, who specialises in the ordinary cooking pot. I ask you to admire the ordinary cooking pot:—Simple, elegant, thumped to the *n*th degree of hardness and thinness, it is rather a wonderful production; but it is so cheap and common that it is never noticed. Besides its legitimate purpose which is to cook rice, it is put to many household uses. Half a dozen unused pots stand on a shelf in every house and serve as money-box, larder, wardro'e and a cache for odds and ends, and, when smallpox and cholera are about, an old pot makes an excellent boggle to frighten away the wicked, "phi," from the housedoor. (Here was shown a fire-blackened pot with

a grotesque face drawn upon its bottom with white lime). The Siamese potters of Ban Tanao Sri, Bang Bua Tong and elsewhere are always ready to undertake special orders in addition to their regular business and, under guidance, are capable of quite artistic work.

The pottery of the peninsular districts is neither very good nor remarkable. There is here a specimen curry pot obtained in the far interior of Pattani from a small and very primitive factory. Pots of similar shape are to be found at Ayuthia and elsewhere but they are all of better make and material. Such pots are not thrown on a wheel but are laboriously worked by hand. There is much sand in the clay and the firing is poor.

In Bangkok of late years a good deal of pottery making has been undertaken by Chinese. The largest factory at Bang Chark on the west bank of the river has already been mentioned. Here many sorts of flower-pots and stands, bowls, tiles and other objects intended to be ornamental, are made, but few ordinary household utensils. Other Chinese factories are smaller and are usually devoted to the making of one particular thing. The earth is brought from various places, chiefly from Bang Bua Tong, whence also supplies are carried to many distant Siamese potteries. A good clay is brought all the way from Lampang for special uses and a remarkably fine dark clay, the origin of which is kept secret, is also used. Many productions are glazed and coloured with material that is all imported from China. Coloured tiles, a specialty, have been noticed.

The potter's trade in Siam is not very lucrative. The wholesale prices obtained are very small, from 3 to 5 ticals per 100 for rice pots, and Tcs. 6/- per 100 for larger pots used for collecting palm-sugar juice and so forth, being usual. The large water jars of Pakret are sold wholesale at 45-50 stgs.

Nevertheless Siamese potters seem able to make a profit which, when eked out with a garden or a little rice-land, provides them with an income sufficient to induce them to continue working contentedly at the business. As for the Chinese potters of Bangkok; when they are asked How is business? They, of course, always reply "*Kat Thun*" which, in this, connection, means "Rotten."

II

I pass now to the consideration of what is usually called the higher form of the potter's art, namely of the vitrified clays, the highest development of which is porcelain; but before doing so, it appears desirable to consider very shortly the development of Ceramics in China, whence vitrified clays and porcelain came to Siam.

According to Bushell, a well-known authority, to Burton and to others, the Chinese were the first potters in the world to discover the art of glazing pottery with powdered felspathic rock and limestone, under the influence of very high temperature. This was during the Han dynasty and consequently some time between 206 B. C. and 220 A. D. From this discovery porcelain resulted, the productions of the industry passing, during centuries of unremitting experiment in the mixing, refining and firing of various clays and powdered stone, from simple terra-cotta, through many stages of more or less vitrified stoneware, with glazes of ever-increasing refinement of substance and colour, to a highly vitrified, translucent, white ware covered by a white glaze, which made its first appearance in the 12th century A. D., or near the end of the Sung dynasty.

The word porcelain, it may be remarked, is not derived from Chinese but from the Portuguese word "porcellana", which literally means, "of, or pertaining to, a little pig." Cowrie shells were called "Porcella" or "little pigs" because of a fancied likeness of their polished surface to the round back of a piglet; the resemblance between white China-ware and cowrie shell struck the European mind at once and hence the name for the latter was extended to the former. In Chinese, earthenware is "Yao" and porcelain, "Tchéki", according to Père Entrecolles. (*Lettres Edifiantes et Curieuses des Missions Etrangères*. Vol. 18, page 236).

The earliest attempts to colour porcelain by painting as distinguished from the fine colours obtained in the glaze, were made in the 14th century A.D., when blue and red under the glaze were first produced, and it was not until near the end of the 16th century that the use of enamel colours fired over the glaze was introduced.

Sawankalok and Sukhotai were once the alternate capitals of old Siam, and in the neighbourhood of the ruins of both these cities

there are situated the very numerous remains of ancient Pottery works, which were, once upon a time, devoted to the manufacture of a pottery quite unlike the ordinary earthenware to be found elsewhere in the country. These remains have been described by Prince Damrong, by Gerini, Lyle and others, and referred to by the learned Dr. Hansen in a recent paper read before this Society, and have doubtless been seen by many of you, and therefore a minute description of their present appearance is unnecessary now. Suffice it to say that they consist of an immense number of small kilns surrounded by heaps of broken or mis-shapen pots, bowls, bottles, dishes, etc., of peculiar shape and material, evidently the accumulation of failures thrown away on opening the kilns after firing.

On examining this débris it is found to contain pieces of a ware made of exceedingly fine clay, very pale grey or almost white, burnt to the consistency of stoneware, that is, slightly vitrified, and overlaid with a thick, transparent greenish, blueish, greyish or brownish glaze. Parts of the clay that have been exposed to the firing uncovered by the applied glaze, are usually light brown and slightly glazed by vitrification of the clay itself. The Kilns are lined with bricks, the surfaces of which are found to be highly glazed by fusion of the sand contained in them. In fact, it is plain that here are the remains of potteries where much ware has been made by the very-high-temperature method; indeed, a kind of primitive porcelain.

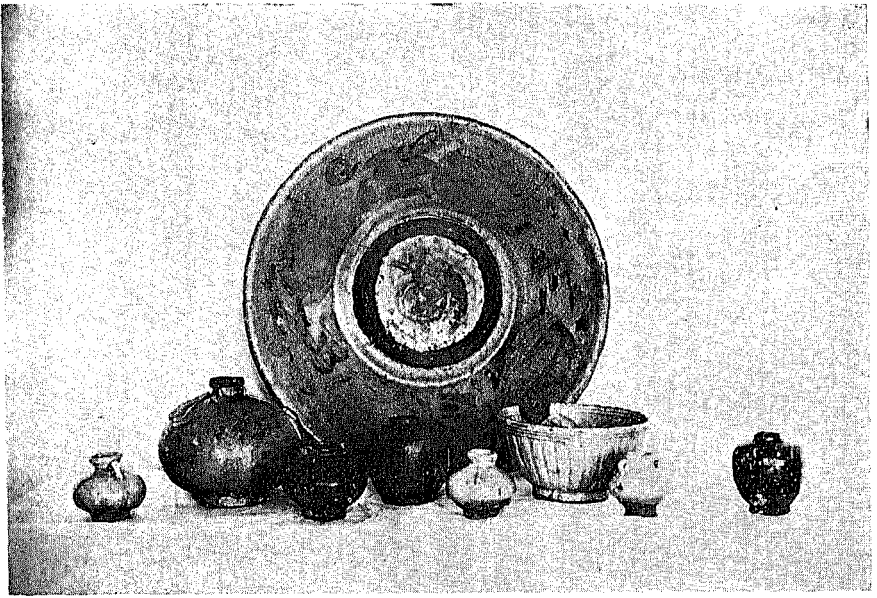
In the "Pongsawadan Muang Nua", or Annals of the North, there is an account of an expedition of the Siamese King Phra Ruang to the Court of China, (the details of which are evidently mythical), ending with a reference to certain Chinese potters brought thence on the return journey and installed near Sawankalok to make pottery. Whether or not there is a substratum of truth in this legend, there appears no room for doubt that in the palmy days of Sawankalok and Sukhotai there were people there who made pottery by the Chinese method, and who were in all probability Chinese themselves. Moreover, there is nothing repugnant in the idea that such Chinese potters may really have been placed there by Phra Ruang, who seems to have been the

greatest, proudest, most ambitious and, as one might say, most swanky king of the Sawankalok era and therefore might be expected to feel that, as the Emperors of China had their royal pottery factories at Pien-Chow and Hang-Chow, so he (Phra Ruang) must have his own at or near his capital.

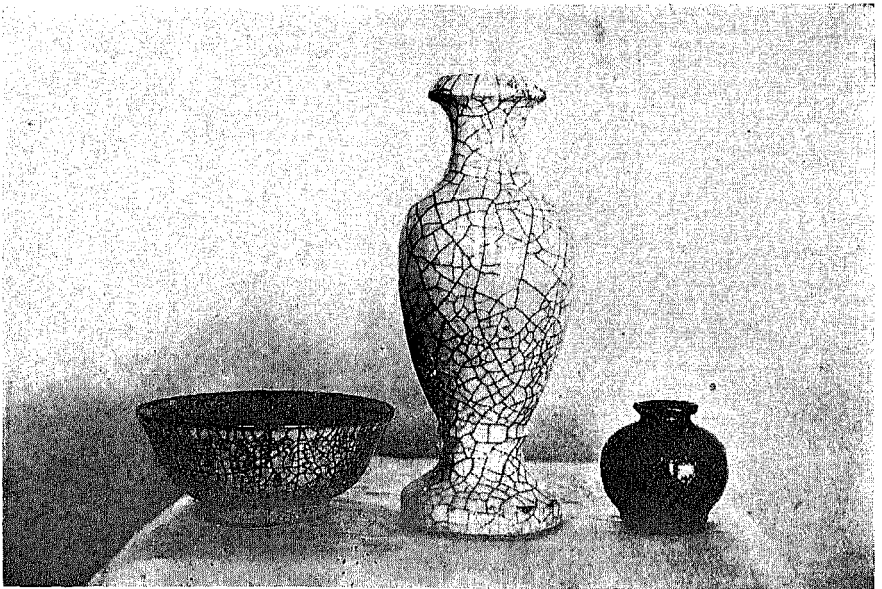
The date of Phra Ruang's reign is disputed, but must have been somewhere between the 10th and 13th centuries A. D.; or while the Sung dynasty potters of China were working through the stoneware stages towards porcelain, with single glazes of various colours but with no knowledge of painting. Looking at the spoilt remains of the Sawankalok and Sukhotai potteries that we have, I see no reason to suppose that the best these Sawankalok people could produce, was much, if at all, inferior to contemporary Sung productions in China, and I venture to express the opinion that if we could see the failures that the Pien-Chow and Hang-Chow potters threw away, we should find them very much the same sort of stuff as this.

But—It would seem that, while the multitudinous potters of China vied constantly with each other in improving their wares, the two or three potteries isolated in Siam must have got left behind. Gerini says somewhere that the glazes used at Sawankalok were probably imported from China, but evidence of this does not appear, and I see no reason to suppose either that the potters who came to Siam could not make glaze, or that they could not find the materials for it here. It seems to me probable that they knew their job and that they worked away for a few generations with such material as they found at hand, possibly improving slightly, and then, as they became more Siamese and less Chinese, falling slowly back. They never produced true porcelain because they never had the requisite pure white clay to mix with their felspathic powdered rock, whereas if they imported glazes they might equally well have imported Kao Lin and so kept abreast of the times.

About 1370 A. D. the Chinese, under the earliest Ming Emperor, were producing vastly improved pottery, and were beginning to make porcelain painted with blue under the glaze. By the end of the 14th Century this blue porcelain probably found



Sawankalok Pottery.



Chinese Crackle ! (Sawankalok Chin).

its way to Siam. Though Ayuthia had by then been founded, Sawankalok was still an important place and the potteries there would be still going fairly strong. The rough attempts to produce colour under the glaze that appear in some Sawankalok ware may perhaps be allocated to that period. There are in both the Ayuthia and Bangkok museums, plates of, I think, unmistakable Sawankalok origin, with very rough under-glaze blue painting, and there are many specimens with more or less badly executed designs in brown or black lines under the glaze. That seems to be about as far as the Sawankalok-Sukhotai potters ever got. From then on they seem to have declined gradually, falling from the status of 'Purveyors to Royalty' to that of makers of inferior cheap crockery, until, before the rising tide of imports from China, they faded away altogether; some people think in the 16th century A.D., others in the 18th.

That the ware of Sawankalok-Sukhotai ever contributed seriously to the famous export of glazed pottery and porcelain from Martaban to the Mohamedan countries of the Levant, as is claimed by some, seems to me highly improbable. That trade was most active in the 16th and 17th centuries, and if, at that time, Sawankalok could produce of ware good enough in quality and large enough in quantity to compete in that trade, we should almost certainly have had fairly numerous specimens still in existence to-day; whereas the remains of the industry are little more than mere fragments such as you see here.

The learned and indefatigable Phaya Boran has managed, during 20 years, to collect about 150 pieces of Sawankalok ware in the Ayuthia museum, a few intact but most flawed or damaged, and only one fit to compare with the celebrated Martabani ware,—and that one may be Chinese. The evidence all seems to point to the probability that Martaban, and perhaps Ayuthia, were no more than ports of transshipment for porcelain consigned from China to the West.

The collector of pottery in Bangkok may sometimes be surprised to find that a piece of grey crackled ware offered him as Sawankalok is, on further investigation defined as *Sawankalok*

Muang Chin (Chinese Sawankalok)! It seems that a few years ago anything grey, or pale green, and crackled, had to be called Sawankalok to please collectors, and from this the more ignorant persons connected with the traffic in porcelain and its semblances, both as buyers and sellers, seem to have concluded that Sawankalok was, in fact, the generic term for all crackled ware, some being Chinese Sawankalok and some Siamese Sawankalok!

I have never seen any Siamese ware that resembled Chinese Crackle in any but the most superficial way.

With the introduction of true porcelain from China it would appear that descendants of King Phra Ruang abandoned the idea of having their own Royal Potteries and took to using these superior white Chinese wares. With the development of the great King-te-Cheng works, the output of Chinese pottery increased very much, and early in the 16th century it was being exported, not only to all neighbouring countries, but to Europe. We know from the reports of early travellers, that much of this ware came to Ayuthia, and no doubt, before the century was ended, not only the Royal Court but the nobility, and possibly even the common people, habitually drank tea out of Ming cups. In the time of Wan-li, the last of the Mings, the output of Chinese porcelain was enormous and, though Ming ware is not exactly common here now, there is probably a good deal more of it in existence in this country than people think.

Anderson, in his *English Intercourse with Siam* in the 17th century, page 30, quotes Ramusio, a Portuguese writer of about 1550 A. D., as saying that the merchants of Surat traded with Tenasserim (practically the same thing as Mergui, Maulmein or Martaban) in spices, silk, benzoin and porcelain; and again William Metholl, an East India Co.'s factor, wrote in 1619 that the merchants of Golconda carried goods to Tenasserim and thence overland, 14 days, to Siam (Ayuthia), returning with all sorts of Chinese commodities, as "porcelain, satin, beniamin of Kambodia, tin, and sappan wood."

The above is evidence of the presence of Ming porcelain in Siam, and much more could be produced if time allowed and the mere recapitulation of evidence were less tedious.

To clinch the matter I exhibit a piece of Ming found in Siam. Observe the colouring and design! Obviously Ming period! See the glaze, worn dull where exposed but still bright inside! Clear evidence of great age! The article is a narghile, hukha, hubble-bubble or water-pipe: a thing not used in China but without which no orthodox Persian, Turk, Egyptian or Arab can exist. Hence an article made for the Levant trade. Detained in Siam, however, probably by some Moslem smoker, it has passed from his descendants to non-hukha smokers who have cut off the spout, plugged the hole and made the thing into a bottle.

It may have been about the end of the Ming period that the Court of Siam first began to send designs, both of shapes and ornamentations, to be carried out in porcelain in China; but this is more or less conjecture on my part as there are no quite authentic specimens of such Ming ware extant, while of written evidence of the fact, I know none. Regarding the 17th century, however, one feels rather more confident, for the ruins of Ayuthia have yielded rice-bowls, covered waterpots, dishes and little cinerary urns, Siamese in design and shape, which seem to be not later than the Kang Hè (Tsing) Chinese period 1662-1722. Here, also, H.R.H. Prince Damrong comes to the rescue. His book, 'a History of Chinese Porcelain', published in 2460, i. e. about four years ago, a most excellent, learned, and comprehensive work, deals at length with Siam-Chinese ware and is a reservoir of valuable information from which, were I able to read Siamese with less trouble than is the case, I should have been happy to give you extracts.

I have been privileged to see pieces of blue under the glaze and of enamelled polychrome porcelain, undoubtedly of Siamese design, the owners of which can trace their (the porcelain's) history back beyond the 18th century, and I have compared these with companion pieces found at Ayuthia in situations that show them considerably anterior to the last Burmese invasion. I cannot show those pieces here because they are too precious to be carried about. An enamel bowl is especially remarkable for the excellence of the workmanship. The design consists of four effigies of Kinari Ram, i. e., dancing beings, half bird, half

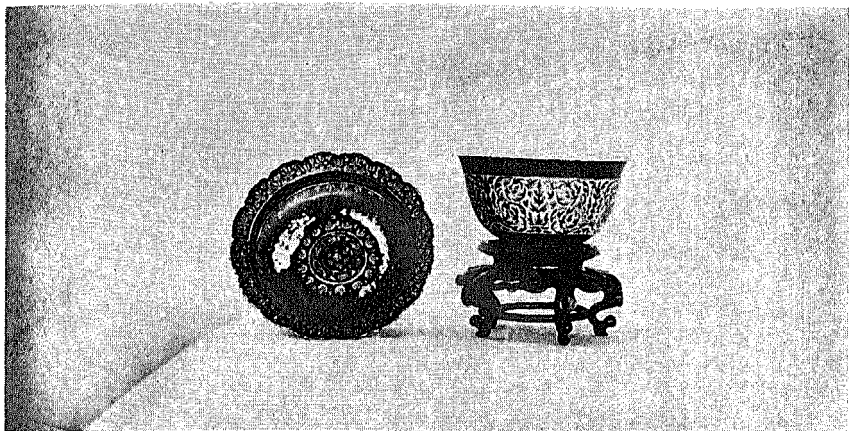
woman, of Siamese legend; surrounded by floral wreaths on a red ground, the whole outside of the bowl being covered with enamel. The inside is enamelled with diaper pattern in the same colours as the outside. A covered pot (Toh) for holding perfume is even more remarkable in that it is apparently the beautiful prototype of the not so beautiful Thépanom ware of which I will speak in one minute.

The nearest things to the above described ancient and beautiful work that I am able to produce for your inspection are, a bowl enamelled outside and on the bottom of the inside, which, I believe, can be known by its red base as belonging to the 17th century; a little dish and a saucer.

I come now to the peculiar ware distinguished by the effigies of Nora Singh, mythical beings half man half beast, and Thépanom, or praying angels surrounded by conventional clouds on a black, blue, purple or sometimes white enamel ground. The inside of the rice-bowls of this ware is green with a pink open lotus in the centre. The outside design has much in common with the ancient and celebrated *Tom* Siamese silver ware. The earliest of this porcelain apparently dates back to the last Kings of Ayuthia and it seems to have been the favourite ware down to the first reign of the present dynasty. It is said to have been painted at Canton and the very best of it is clearly in decadent imitation of the beautiful ware of which the covered pot above alluded to is one of the few surviving examples.

There must have been a very great deal of it made for, 30 years or so ago, it had almost no price and crowded the shelves of pawnshops. I myself once saw a large cratefull of these rice-bowls sold to a German for export at 3 salungs each. The ware is still fairly common in pawnshops but is now much more expensive than it used to be.

Other designs were used at the same period as the Thépanom, the colours being in accordance with the well known 'Five colour' style called in Siamese, 'Bencharong'. Lotus designs are found, bowls being painted to look like open lotus flowers or covered with



Siamo-Chinese enamelled porcelain early 18th century.



Siamo-Chinese porcelain 19th century.



Siamo-Chinese enamelled porcelain (inferior quality)
Late 18th and early 19th century.

different coloured panels each of which bears a spray of the five sacred flowers which grow in the seven lakes of Himaphan (fairy land). Apparently the best of this old ware was reserved by sumptuary laws for the use of those of royal blood; that available for the ordinary official class and the gentry being of inferior execution and somewhat different design. These last were never green inside. The peasantry and lower orders generally use imported crockery of ordinary Chinese make.

Thépanom ware gradually changed its appearance and, seemingly, after the 1st reign of the present dynasty, the best of it was no longer reserved for royalty. It continued to be made and imported, however, through all the subsequent reigns and, latterly, Japanese imitations of the oldest styles have been put on the market.

In the Second Reign the royal green tended to disappear from the best ware. This was the time of a vigorous production in China, of exceedingly beautiful porcelain, especially rice-bowls, and these last doubtless took the Siamese fancy, for a fashion set in then of patterns with birds and flowers, butterflies and flowers, or just simply flowers, and also very effective diaper and one-colour designs. This fashion amounted practically to a return to the pre-Thépanom manner and there can be no doubt that from the aesthetic point of view it was superior to that to which it succeeded. An immense quantity of such wares was made at King-Te-Cheng and imported, the sumptuary laws reserving the use of gold ornamentation for articles supplied for persons of royal blood. In the best rice-bowls the outside centre of the cover was adorned with an open lotus flower. It is curious that green-inside cuspidors seem to have appeared for the first time in this reign.

Apparently there was never much desire on the part of Siamese to have vases or other purely ornamental pieces made after their own peculiar designs. From the first the ordering of porcelain from China seems to have been simply a question of obtaining articles for daily household use, of as pleasing an appearance as possible. For ornamental purposes solely, Chinese designs were accepted.

The Third Reign synchronised with the Tao Kuang period in China, a period of continued activity in porcelain making, though the zenith as regards excellence of quality, in painting if not in the substance of the porcelain, had been passed. H. M. Phra Nang Klao, of Siam, seems to have been a true artist, and some of the porcelain imported by his orders is as good as anything of the kind to be seen. But the imports of the nobility and gentry at this time show a decline.

In the Fourth Reign the first symptoms appeared of a tendency to the use of European porcelain, and from this time the rapid decline of Siamo-Chinese porcelain may truly be dated. King Rama IV was a student of European ways and manners and was the pioneer of their introduction into his country. The Copeland and Garrett and the Wedgwood porcelain that he ordered from England instead of getting articles from China, is still preserved in various parts of the country.

With the Fifth Reign the manufacture of Siamo-Chinese porcelain may be said practically to have come to an end. The royal household was now supplied chiefly from Europe and in obedience to the dictates of the royal inclination, the national taste underwent a great change. In the earlier part of the reign the country may be said to have followed after false gods in matters artistic and, hypnotised by the glamour of Western Culture, to have forgotten its highly distinctive and sometimes beautiful national productions, in a rapt contemplation of the monstrosities of middle 19th century Europe.

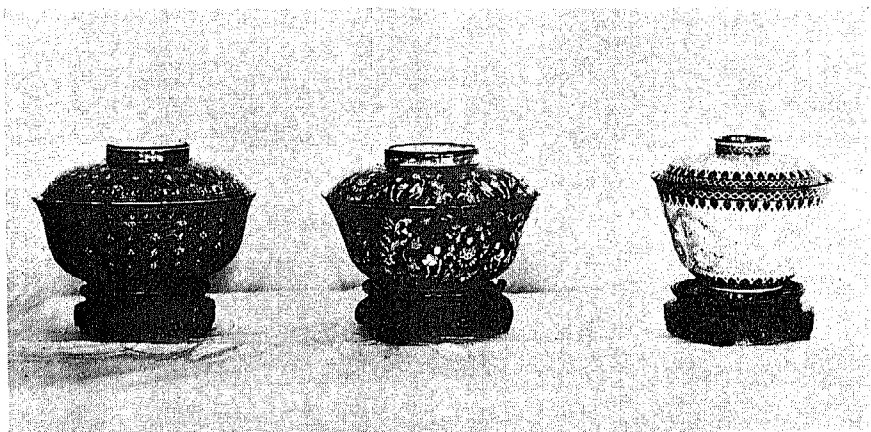
King Rama V, however, outgrew his youthful bedazzlement by the West and cultivated a fine taste in true Chinese ornamental porcelain, a fashion for which consequently set in, giving an impetus to the importation of superior Chinese ware, and resulting in the formation of several fine collections of the same. Being also at heart an ardent lover of all things Siamese, the King, in his later years, introduced the science of archaeology to the knowledge of his people and, resulting therefrom, there dawned upon their imagination the fact that Siamo-Chinese ware of the first three reigns and



Siamo-Chinese enamelled porcelain (superior quality)
Late 18th and early 19th centuries.



Siamo-Chinese enamelled porcelain Rice-bowls (left to right)
1st, 2nd and 3rd reigns of present Dynasty.



Siamo-Chinese enamelled porcelain Rice-bowls (left to right)
4th, 5th and 6th reigns of present Dynasty.

earlier, though originally made for purely utilitarian purposes, was, much of it, very interesting as well as, sometimes, beautiful. A cult of this old ware thereupon took root and grew until it became a craze. Stacks of bowls and dishes, covered with the dust of years, were produced from cupboards and odd corners where they had long stood disregarded and forgotten, and were snapped up by collectors at prices that have increased until they have become prohibitive except to the rich. There are now some very complete collections of Siamo-Chinese porcelain in Bangkok, but as articles of use in high places the ware tends to disappear; the art of making it is in course of being forgotten and the trade in it is in the throes of death.

Ever since the making of Siamo-Chinese porcelain began, there has been a constant succession of blue under the glaze articles of Siamese design supplied to the order to the Royal Family and of the nobility and, latterly at any rate, for the public market without special order.

Efforts were made during the Fifth Reign to paint porcelain in Siam, not for sale but more for amusement. There was at one time a small workshop in the Wang Na, where quite good work was done, under the auspices of the last, so-called, Second King; and the late Prince Divakorn also employed artists who produced for him some pretty little cups and saucers, bowls, &c.,. The porcelain was mostly imported from China but a little was actually made in the Wang Na. These articles are somewhat sought after now but as few were made they are not often to be found.

As of yore, the common people use today the rough cheap Chinese crockery of the period, the flow of which into the country continues unabated. Such crockery includes cuspidors (*Kratorn*) and dishes (*Cham Cheuang*) of Siamese shape.

May I draw your attention for a moment to these small articles, called "*Pi*"? They are porcelain made in China for Siam and therefore come within the scope of this paper.

A few years ago I saw in a book-sellers' list, a book advertised for sale as "*Ramsays Siamese Porcelain*"; for 5s. Being at that time

unaware that there exists no book in European writing devoted solely to the subject of Siamese porcelain, and being at the same time anxious to learn, I sent the necessary five shillings, and received, to my grave disappointment, a small publication, a simple catalogue, called "Ramsays Siamese Porcelain and other Tokens"; containing some 350 illustrations of these strange and insignificant looking little objects. I then found that quite a cult of "*Pi*" exists; that German students have raged furiously together over them and that the discovery of a new one is the signal for palpitations of the heart in certain learned circles. "*Pi*" are the tokens that the gambling farmers of former days were allowed to issue to their clients in place of coin of the realm. Originally intended for the convenience of gamblers when playing, they naturally came into use as small change in the markets and shops. They were first used about 1760 and by 1875 they had, by the abuses and misuses that accompanied them, become such a source of worry and loss to the State that they were prohibited in the latter year. And why Messrs. Haas, Hamel, Schlegel, Chevillard and Ramsay should get so excited about them, is one of those things that are so difficult for ordinary people to understand.

A few words in conclusion about the brown, purplish or reddish, polished teapots with metal mounts that are to be seen in every Siamese house. These are called *Hpan* in Siamese and they are made at a place called Sin Hoe Tek, some four days journey into the interior from Shanghai in China. They are not composed of natural clay or earth, as would at first sight appear, but of hard rock, ground into fine powder and formed into an artificial earth after the manner of porcelain clay. They are imported into Siam in great numbers in a rough unfinished condition and the polishing and mounting of them constitutes an established minor industry in Bangkok, located chiefly near the Swing (Sao Ching Cha).

The process of polishing begins with the grinding or filing of the surface of the pot with a substance composed of powdered spinel or inferior sapphire, mixed with melted sticlac and set hard. Several such files, of increasing fineness, are used in succession, until a perfectly smooth surface is obtained to which an infinitely thin covering of sticlac adheres. The grinding or filing implement is called "Khahk

Bejra" which, I believe, means "Refuse or Dust, of Gems". The words, as pronounced, sound like K-a-k P-e-t but you will of course understand that, to be consistent with the accepted system of transliteration of Siamese words, I have spelt them K-h-a-h-k B-e-j-r-a. The final polishing is done by rubbing with the hard outside surface of a bamboo.

An industrious worker can turn out a finished teapot fit for ordinary use in a day, but, for the finer specimens a week, a fortnight or even a month is not considered too long for the polishing. The making of these teapots is an ancient and cherished Chinese art and superior productions bear the marks of the Emperors in whose reign they were made, like porcelain. The collection of *Hpan* (teapots) is a favourite hobby in Bangkok and authenticated old specimens of good workmanship often change hands amongst collectors for fabulous sums.