NOTES ON SOME OLD SIAMESE GUNS.

PAPER READ AT AN ORDINARY GENERAL MEETING OF
THE SIAM SOCIETY, 14TH SEPTEMBER 1921,
BY C. A. SEYMOUR SEWELL, M. A.

In the Government Museum at Madras are four old Siamese Cannon, received some years ago from the Arsenal at Fort St. George. When I was on a visit to the Madras Presidency early in 1917 I met Dr. J. R. Henderson, then superintendent of the Museum, who, on learning that I came from Siam, asked me if I could assist him to ascertain the meaning of certain inscriptions on these cannon which he understood to be in Siamese characters. I promised to do what I could in the matter, and he subsequently sent me estampages of these inscriptions with a covering letter stating that these guns were taken at Mandalay in 1885 and that from Burmese inscriptions upon them it appeared that they had been captured previously by the Burmese at Dwarawati (Ayutthia) in 1128 (A.D. 1766) by Sinbynyin, King of Burma. Dr. Henderson hoped that the Siamese inscriptions would carry their history still further back.

Each gun bears one or more inscriptions in Siamese showing to which division of the army it belonged. The engraving is rough.

No. 1. has the words “๑ู๑ึ” Inner Guard left wing.

No. 2. do. “๑ู๑ึ” Main Guard left wing.

No. 3. do. “๑ู๑ึ” Inner Guard right wing.

No. 4. do. “๑ู๑ึ” Inner Guard right wing.

These are subdivisions of the Krom Phra Tamruet (กษัตริย์ พระ ทั้มรุ่ง) which in the Ayutthia period was divided into three portions ิน, ใหญ่ and นอก, the inner Guard, Main Guard, and outer Guard.
each composed of two wings, right and left. The force still survives in the present Tamruet Guard or Body Guard of Gentlemen at Arms.

In addition to these inscriptions No. 1 has the words นพดล (In the Royal Host) followed by another word which cannot be deciphered with certainty but may be กำลัง (a body of troops) or ฝ่าย ฝ่าย. There is a similar inscription on one of the cannon at the Ministry of War in Bangkok, and I find the same difficulty in reading it. (Vid. No. 56).

Cannon No. 2 has two other marks meaning respectively ๖ ปาห์ (baht) and ๖½ ถง (chang):

$$\text{๖ ปาห์} = 6 \text{ baht} \quad \text{๖½ ถง} = 6\frac{1}{2} \text{ chang}$$

(approx. 15 Grammes) \hspace{1cm} \text{(approx. 1.2 Kg.)}

I have been unable to obtain any satisfactory explanation of these. Phya Boran Rajatanin, replying to an enquiry of mine, suggested that they might possibly denote the weights of powder used for priming and charging respectively, but asked for further details as to the dimensions of the weapon. When these were sent to him he came to the conclusion that his suggestion was not the correct solution, for a charge of 1½ catties only would have sufficed for a gun of this calibre, 5 inches. "However," he writes, "the meaning of the weight mark is not yet clearly understood."

Nos. 1, 3, and 4 have Burmese inscriptions. Those on 1 and 4 are identical and mean "Captured at Dwarawati in 1128" (A.D. 1766).

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* Preserved in the National Library is an old MS. entitled "แม่บ้านบ้าน". The text of this, with a preface by Prince Damrong, was printed under the amended title "คดราชการ เสาชีวิต อนุกรม" (A treatise on the Court Officials of the Ayuthia period), by order of H. R. H. The Prince of Chainad for distribution at the cremation of the late Phya Nava-balanyuk, (Rong Binh Thai, Rong Muang Road, Bangkok, B. E. 2450). This work contains a chapter on the duties of the Tamruet, in which the same are defined and the appropriate habits to be worn and weapons to be carried upon various occasions are set forth. Incidentally considerable light is cast upon the customs and pastimes of the court of those days. Among the latter musket practice is mentioned as one in which both sovereign and officials were wont to indulge, it being the duty of the Tamruet to set up the targets and to keep the score. Another form of amusement was the baiting of tigers, which appear to have been kept in cages at the end of the Lake— นงนก. I mention this last and quote the Siamese text because it has a bearing on a point which will be raised in the course of this paper.
That on No. 3 is longer and has been translated by Mr. C. Duroiselle, Government Epigraphist for Burma, as follows:

"Captured at Dwarawati after 9 o'clock in the night on Tuesday the 9th day of the increasing moon of the month Tagu 1128. (Tuesday 18th March A.D. 1766).

This date is almost exactly a year prior to the final conquest of the city which took place in April 1767, so these guns must have been taken at the fall of some of the outer works or in one or more of the numerous sorties from the city.

Nos. 1, 2 and 4 are old European cannons, Nos. 1 and 4 having the coat of arms of the House of Orange and the motto in relief. No. 1 has the motto in full:

JE MAINTIENDRAY
and is dated 1602;

on No. 4 the motto is blundered thus:

JE MAINJNIVW EF

Cannon No. 3 bears a semi-circular inscription in Siamese characters which establishes the fact that it was made in Siam. It runs as follows:

 Certain characters at the end of lines 2 and 4 are much obliterated and the readings given are the conjecture of M. Coedès. If that in line 2—somapibhip— is correct, the final date 1090 is correct also, for there are only two years Chulasakaraj—viz. 1030 and 1090. Calculation shows that the first of these is inadmissible, but that the second agrees with the other data given in the inscription. Reference to the chronological tables fixes this date as the 10th April A.D. 1728,
The meaning of the inscription is:

"Ku commenced to cast on Wednesday the 13th day of the waxing moon of the sixth month in the year of the Monkey, the last of the small cycle, at two hours thirty-six minutes after sunrise, Chulasakaraj 1090."

The reigning monarch at that time was King Thai Sra—พระเจ้าพระยา, circ. 1068-1094 (A.D. 1706-1732). At first I was of opinion that the word "n" was a pronoun and referred to him. If that were so, this piece would seem to have been cast upon some special occasion at which the sovereign presided in person and, on that account, to have been held in particular esteem. When it fell into the hands of the Burmese it would have been regarded as a particularly fine trophy; hence the more detailed Burmese inscription of which it was considered worthy. But though this pronoun was used by the kings in earlier days, it had fallen into disuse by the end of the seventeenth century. It seems more probable, therefore, that the word "n" is the name of the person who cast the weapon.

At my request Dr. Henderson sent me the following measurements of these old cannon:

<table>
<thead>
<tr>
<th>No. of cannon</th>
<th>Total length</th>
<th>Length of barrel</th>
<th>Diameter of bore</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Arms of Orange</td>
<td>8 ft. 6 3/4 in.</td>
<td>7 ft. 11 3/4 in.</td>
<td>2 3/8 in.</td>
</tr>
<tr>
<td>(2) European</td>
<td>8 ft. 5 1/2 in.</td>
<td>6 ft. 11 3/4 in.</td>
<td>5 in.</td>
</tr>
<tr>
<td>(3) Siamese</td>
<td>9 ft. 6 3/4 in.</td>
<td>7 ft. 3 in.</td>
<td>4 1/4 in.</td>
</tr>
<tr>
<td>(4) Arms of Orange</td>
<td>7 ft. 7 in.</td>
<td>5 ft. 4 1/2 in.</td>
<td>3 3/8 in.</td>
</tr>
</tbody>
</table>

From these figures it may be deduced that:
No. 1 is a nine, or possibly twelve pounder,
No. 2 a sixty pounder,
No. 3 a forty pounder,
No. 4 a fifteen, or possibly eighteen pounder.
No notes upon Siamese cannon in other countries would be complete without reference to those that played a part in the storming of the Bastille on 14th July 1789, a pair sent by King Phra Narai to Louis XIV., of which mention is made by Thomas Carlyle in his book “The French Revolution” (Book V. Chap. VI.) as follows:—“See Georget, of the Marine Service, fresh from Brest, ply the King of Siam’s cannon. Singular (if we were not used to the like): Georget lay, last night, taking his ease at his inn; the King of Siam’s cannon also lay, knowing nothing of him, for a hundred years. Yet now, at the right instant, they have got together, and discourse eloquent music. For, hearing what was toward, Georget sprang from the Brest Diligence, and ran. Gardes Françaises also will be here, with real artillery: were not the walls so thick!”

These guns are described by de Chaumont* as “two pieces of cannon six feet long made of malleable iron, beaten while cooling (de fonte, battuès à froid), inlaid with silver, mounted on carriages also inlaid with silver, and made in Siam.”

My interest in old Siamese cannon having been aroused, it was with great pleasure that I was enabled to visit the collection arranged in front of the Ministry of War in Bangkok with M. Coedès, thanks to the courtesy of H. R. H. the late Prince Bisnulok.

The majority of the guns appear to be of native workmanship, and bear distinctive names, taken in many instances from Hindu Mythology, traced along the barrels in old Siamese characters, together with marks denoting their calibre and the quantity of powder required for the charge. A considerable number, however, are of European origin, and some of those, too, bear names in Siamese characters. A metrical list of the names of ninety-one guns is to be found in a Siamese work entitled น ้ าม าป ย า (Royal Names given to Royal Palaces, Residences, Gates, Forts, Ships, Elephants, Horses, etc.), with a preface by H. R. H. Prince Damrong Rajanubhab, B. E. 2457, published by the Charoenphol Printing Press, New Road, Bangkok ( ไน พิมพ์ ราชภัฏ ). I have been told that these names

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* Relation de L’Ambassade de M. le Chevalier de Chaumont à la Cour du Roy de SIAM. MDCCLXXVI. Memoire des Presents du Roy de SIAM au Roy de FRANCE.
were given and the list compiled by the late King Phra Nang Klao; but this cannot be correct, for a MS. in the National Library records the dates of ceremonies at which the names of many of the pieces were conferred or inscribed. These dates are all in the years 1155 and 1156, i.e., between A. D. 1793 and 1795, during the first reign. The MS. also contains a list of names in the same order as that in the work referred to, but somewhat shorter. Probably King Phra Nang Klao made additions to this already existing list. The names of the cannon standing outside the Ministry of War are, with a few exceptions, included in it; but the list itself is no guide to the disposition of the pieces, so I have made a plan of their positions, numbered in the order in which we visited them, and have compiled a list of their names in the same rotation.

THE GUNS.

In the following description the mark 0 placed opposite the name of a gun signifies:—Mentioned in the old MS.

The dates on which ceremonies of inscription were held are shown thus:—

|| = Saturday the second day of the waxing moon of the third month, 1155
§ = Tuesday the eleventh day of the waning moon of the seventh month, 1155
z = Saturday the fifth day of the waxing moon of the sixth month, 1156
† = Saturday the tenth day of the waxing moon of the seventh month, 1156
× = Saturday the fourteenth day of the waning moon of the eighth month, 1156

The numerals in brackets are the numbers of the guns in the List of Royal Names.

The collection comprises some sixty odd pieces. Twenty-nine of these fall into three definite classes; the remainder form a miscellaneous collection, so miscellaneous indeed that it has seemed hopeless to try to classify them, and I have therefore decided to take them more or less in the order followed by Professor Cœdès and
Plan showing positions of the guns September, 1921.
myself, a method which will enable this paper to be used as a guide by any one who may be sufficiently interested to visit the collection. They form but a small portion of the guns which are to be found in Bangkok. Scores, if not hundreds, lie half buried in and around the Grand Palace, their butt ends forming posts on which the chains bounding the paths are hung. There are two pieces outside the Museum and others are be seen on the West Bank of the river. They must have helped to make history in their day and would doubtless tell many a thrilling tale, if only they could speak. It is in the hope that others, more capable than myself, may be tempted to try to bring to light a little more of the buried past that I have compiled these notes.

Nos. 1 and 5 are a pair (with handles) bearing the arms of the Dutch East India Company—a three masted ship in full sail—and their monogram

\[ \text{Vereenigde Oostindische Compagnie} \]

Above the monogram is the letter A, signifying Amsterdam, and on the butt end the date

\[ \text{ANNO 1641} \]

In addition they bear in Siamese Characters the respective names

\[ \text{ฟันเมืองชิ้น (84),} \]
\[ \text{แก้วมรกต (83),} \]

"The Might of Java" and "The Gem of Malaya" followed by the inscription:

\[ \text{กระฉุน ท่า นั้น ที่นั้น} \]

which means that the calibre of the weapon was 5\(\frac{1}{2}\) niw and that the amount of powder required for the charge was 2 chang and 10 tamlung in weight, or 2\(\frac{1}{2}\) catties.
Johan and Cornelius Oudorogge were probably descendants of Cornelius Ovwerogge carrying on an old established business. The spelling of the family name may have altered somewhat during two or three generations.

There seems to be no record of the acquisition of these Dutch guns or any others in the collection. How they found their way to Siam, then, must be matter for conjecture, and in this connection it is interesting to refer to Jeremias van Vliet's "Description of the Kingdom of Siam", a translation of which by L. F. van Ravenswaay was published in Vol. VII. Part I. of the Journal of the Siam Society. The preface to this work tells us that "in 1602 the Dutch East India Company established a factory in Patani, and the next year Daniel van der Leck, the chief of that station, paid a visit to Siam with the result that in 1604 he sent Cornelius Speex to establish a depot at Ayuthia." One of the old Dutch guns now in the Madras Museum bears the date 1602. One wonders whether by any chance it was sent out to Patani, accompanied van der Leck on his Mission to Siam, and was presented by him to the reigning monarch.

Referring to the position of the Nederlands Company in Siam van Vliet says "the company entered into great friendship with the Kings............. . Various letters from the illustrious princes of Orange, as Mauritius of Nassouw, his princely grace's brother Frederic Hendrik of Nassouw, and the noble generals of Nederlands India, have been sent to the Siamese Kings, who in their turn replied to these letters. In this way the friendship was maintained and even strengthened." It was customary for such letters, which were frequently inscribed upon tablets of gold, to be accompanied by gifts,* and it is by no means impossible that these three Dutch Guns in our collection, together with those now in Madras, found their way to Siam in such a manner. On the other hand they may have been purchased from the Company by the Siamese, or have formed part of the armament of the Dutch factory at Ayuthia when it was consumed in the general conflagration of 8th April, 1767. In his recently published paper on the Dutch East India Company's Factory in

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This sign was used to denote sums of money under the old currency, and would apply equally well for weights.

Similar signs showing varying amounts according to the dimensions of the weapons are found on most of the other Guns.

No. 6. タルプitus take pad (21) กะรัณ 6 นิ้ว ดิน สัก —

"Asuraphat who leads the army" Calibre 6 niw
Charge 2\(\frac{1}{2}\) catties.

also has the monogram of the Dutch East India Company, surmounted by the letter R, standing for Rotterdam, together with the date 1628 and the inscription:

CORNELIVS OVWEROGGE FECIT EN D. I. O. ROTTERDAM.

In connection with this inscription, M. Huber very kindly made inquiries at Batavia, and as a result of these tells me that he has "been informed that Johan and Cornelius Ouderogge (sic) were about the year 1700 founders of guns at Rotterdam. From 1704 till 1724 they were master founders at the gunfoundry at The Hague, which was established there in 1665 according to a decree of the States......of Holland and West Frisia." His correspondent cannot tell the meaning of the letters E N D. I. O. With regard to these a suggestion has reached me from another source (Father Chorin), viz. that EN is sometimes employed for IN and that we should read them:

IN DEFENSIONEM INDIARUM ORIENTALIUM.

Other Guns in the collection bear inscriptions stating the various purposes for which they were severally cast; a circumstance which supports this interpretation.
Siam, a translation of which appeared in the Siam Observer, of July 26 last, Mr. Blankwaardt mentions these very guns and says “they come, without doubt, from Ayuthia, and if not from the factory itself, were presented or sold to Siamese Kings.”

Nos. 2 and 3 belong to a class of gun of which there are ten specimens in the collection, the others being Nos. 24, 33, 35, 37, 46, 48, 50, and 59. They bear the names of various nations and I have accordingly named this “the Nations Class.”

<table>
<thead>
<tr>
<th>No.</th>
<th>Name (Language)</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 o x</td>
<td>ลาวี่เล่นแผนดัก</td>
<td>The Lao who plays Polo.</td>
</tr>
<tr>
<td>3 o x</td>
<td>ชาววั้ง ทุบ</td>
<td>The Javanese who performs the kriss dance.</td>
</tr>
<tr>
<td>24 o x</td>
<td>ญวน จ่า จัน</td>
<td>The Annamite who wields the spear.</td>
</tr>
<tr>
<td>33 o x</td>
<td>ไทยไทยเล่นหน้า</td>
<td>The Shan who plays in the forefront.</td>
</tr>
<tr>
<td>35 o x</td>
<td>ชรน จำด ติ่ง</td>
<td>The Khom who dives into the earth.</td>
</tr>
<tr>
<td>37 o x</td>
<td>เจี้ยง วัยนิ่น แม่น</td>
<td>The fierce Farang, who shoots straight.</td>
</tr>
<tr>
<td>46 o x</td>
<td>จิอ สาห ใส</td>
<td>The Chinaman who disembowels.</td>
</tr>
<tr>
<td>48 o x</td>
<td>แม่น แท่ง ทอน</td>
<td>The Burman who thrusts with the lance.</td>
</tr>
<tr>
<td>50 o x</td>
<td>มักซัน แท็ก คาย</td>
<td>The Macassan who destroys the camp.</td>
</tr>
<tr>
<td>59 o x</td>
<td>มุจิท เหลือง ฮัน</td>
<td>The man of Bugis (Mu ngit) who runs amok.</td>
</tr>
</tbody>
</table>

The ceremony of inscribing these guns was held on Saturday the 14th day of the waning moon of the 8th month in the
No. 4 "Narai the Slayer.

Design on No. 8.

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resembling a drum; on the right a breast piece, a shield, a coronet (similar to that on left), and a pan-pipe (?). The collar surrounds an uninscribed shield, depending from which is an intricate knot finished off in two tassels. From a rough sketch I have made a more finished drawing which gives a good idea of the design, but may not be quite correct in every detail.

There is an inscription in Chinese characters round the butt, meaning in Siamese

"An auspicious day in the fifth month of the fourteenth year of the period Cạnh-hu'ng was the day of the casting of bronze cannon, by order, to subdue the Western country."

This is certainly an Annamite gun. The fourteenth year of Cạnh-Hu'ng (Annamese pronunciation of the first two Chinese Characters, which Phra Chen of the National Library reads 環輝), is 1753 A.D.

Cạnh-hu'ng is the name of the period founded by the King of Annam Lê Hiến Tông (A. D. 1740-1786). In 1737 three princes, Lê Duy-Trác, son of Lê Hi-Tông (1675-1705), Lê Duy-Quí and Lê Duy-Mật, sons of King Lê Du-Tông (1705-1729), plotted against the mighty family of the Trinhs, whose members occupied the highest charges and had control of the State. The leader of the family, Trinh-Giang, succeeded in capturing the first two princes and put them to death. Lê Duy-Mật escaped, and, with a certain number of partisans, settled down in the province of Th'anh-Hoa. Later on, in 1740, he had to fly before Trinh-Giang's army; he went further West and took up his residence in the mountainous region of Tran-nish, where he continued to plot against the Trinhs.

In 1753 — the date on this cannon — Trinh-Dinh, a younger brother of Trinh-Giang, led an expedition against the rebel. This gun is probably one of a number of pieces cast for the purposes of that offensive, which was not altogether a success, for Lê Duy-Mật

1 The Chinese third month corresponds to the Siamese fifth month.
eluded capture. The statement that it was cast to subdue the Western country is in accordance with the facts, for Tran-nish lies west of Tonking, whence Trinh-Dinh set out.

No doubt the gun was used in the campaign for which it was cast and subsequently fell into the hands of the Siamese during one of the wars in Cambodia.

Nos. 8 A. and 16 A. A pair of small guns which were in danger of being overlooked. There is nothing to note about them except that each bears a six petalled flower in relief.

No. 9. ๘ ปืนเพาะสุมุรี (77) ดิ้น — Calibre 12 niw
Charge 6 catties.

"Uprooter of Phra Sumeru."
An unornamented gun without inscription, with four fixed handles.

Nos. 10 and 12 เจ้าพันธุ์ธนูผู้พิทักษ์ (91) เจ้าพันธุ์ธนูผู้พิทักษ์ (90)
"Follower of the true Faith” and “Lord Protector of the Faith”
each marked การลง้ 7 นิ้ว ดิ้น หนัก — Calibre 7 niw
Charge 4 catties.

A pair of iron guns, inlaid with silver, and mounted on field carriages. They are said to have been cast by order of King Phra Nang Klao.

According to Prince Damrong certain Chinese artisans came to Bangkok during the third reign and commenced to cast great iron cauldrons. This being brought to the notice of the king, His Majesty conceived the idea that iron guns also might be successfully cast, and established a factory for this purpose. Two types of gun were approved and the pair under consideration are representative of one of those types. Prior to this reign all guns cast in Siam were of bronze.

An old treatise on the casting of cannon (คำราพิทักษ์ สนราวัณ เปล่ยน กา) is to be seen exhibited in one of the cases in the National Library. It describes such essential matters as the composition of the metal and the proportions of a weapon, which are illustrated by a diagram. The methods of loading and firing are explained and there are drawings of the rods used for ramming home the charge and for cleaning, as well as a design for a gun mounting. All this infor-
mation, the book states, was furnished by a Dutchman to a Governor of Sokhodhaya.

No. 11. ๐ เมื่อน้ำมันแช่ (37) หิน Calibre 5 niw
Charge 2 catties.

"Sai Asuni, The Dispeller of Darkness" bears a circular design enclosing an inscription in Arabic characters. These are but lightly cut and are partially obliterated. Malays who were shown a rubbing could make nothing of it, but a Pathan was more successful and thought he would have been able to translate it, if the rubbing had been more perfect. I greatly regret that I have failed to get this inscription deciphered, as I have an idea it would prove extremely interesting.

No. 13. ๐ เมื่อน้ำมันแช่ (54) หิน ๖๐ คิว
Charge 2½ catties.

"The fierce leaping Tiger"

an unornamented Gun with the following inscription roughly engraved:

The number (600) may relate to the proportions of the gun. The word (Ku) is possibly the maker's name. This gun and gun No. 3 at Madras may have been made by the same man.

The meaning of the second part of the inscription is obscure. It may be an order that the weapon is to be sunk in the Lake (นนก) — doubtless to avoid capture by the Burmese; but the words ใช้ นนก are the same as those used in the book ใช้ นนก 里面的 นนก นั้น describing the position of the caged beasts, in which connection they refer to a well-known area of the palace grounds at Ayuthia — the Lake Quarter. Probably, therefore, the inscription denotes that this gun was intended for the defence of that position.*

* The King who succeeded Phra Narai, not wishing to dwell in the palace of his predecessor, built himself a new residence on an island in the lake at the rear of the old palace, thereby making the back the front and the front the back. The foundations of that palace are in existence to-day. The cages of the wild beasts were in its near neighbourhood.
No. 9. "Uprooter of Mt. Phra Sumeru."


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This is another gun with curved horn ornamentation, like No. 4. It has four big rings and is decorated on the axle with the figure of a Rajasi beautifully engraved. It is the biggest in the collection. The diameter of the muzzle is 9½ inches, the metal being 4 inches thick, and its total length is 22 ft. 7 in.

The name Phya Tani is a shortened form of Phya Pattani. A paper by Phya Vijiengiri, published by the Royal Historical Research Society in Part III of the collection of Histories (ประวัติภูมิปัญญาภิริยาภิวัฒน์ ภาค 3) B. E. 2457 and dealing with the history of Pattani, gives an account of the casting there of three great cannon some time in the latter half of the eighteenth century prior to the year 1775. Phya Vijiengiri's narrative is so interesting that I give it. He says:—

"In former days, when the Malay country was still the one State of Pattani, there lived a Sultan and his wife, whose names are not known. It is said that they had but one son, who was still a child when his father died; so his mother acted as regent, being known as Nang Phya Pattani. Sri Tuan, chief of the people in the Pattani territory, was subject to her authority and conducted himself in the same orderly fashion as he had done while her husband was yet alive."

"This lady caused three large bronze cannon to be cast, and the building where the casting took place was on the outskirts of Ban Kasé. It was constructed of brick in the shape of a temple (ปราสาท). Under one roof were three rooms, and a verandah ran round the building. To-day the superstructure and floor are in ruins; only the walls are left standing. The Malays calls the place 'Sabkhet', and it is still known to all the inhabitants of Pattani as the cannon foundry."
"The chief artificer who cast these guns was a Hokkien Chinaman of the family of Lim, one Khiem by name, who came from China, built himself a house, and married a Malay woman. Moreover he embraced the religious faith of the Malays and was known to them as Lim Toh Khiem. After residing in Pattani for many years he was visited by his sister Kao Niew, who urged him to return to China but was met by a firm refusal. She was so disappointed that she hanged herself."

"The first two guns were successfully cast, but in the case of the third the molten metal refused to flow into the mould. Lim Toh Khiem thereupon offered up sacrifices, but still the metal did not flow. Finally he made a vow that if at the next attempt the casting were successful, he would sacrifice his own life to the gun. The third attempt was a complete success, and after the final polish had been given to all three guns and he himself had fired the testing charges of the first two with all due ceremony, he took his stand before the mouth of the third, and, after relating the nature of his vow and stating his determination to abide by it, gave orders for it to be fired and, this being done, was seen no more."

"The name of the first gun was 'Nang Pattani' (นั้ง ปัตตานี), of the second 'Sri Nakhri' (ศรี น้ำริ), and of the third 'Maha Hla Hlo' (มหาราห์ลอง)"

"At the death of Phya Pattani's widow a relative became Sultan, whom the Malays called Ratu Pakalan. He was known as a wise and powerful ruler and was feared by his neighbours. During the reign of King Phra Buddha Yot Fa, in the year Chulasakaraj 1147 (A. D. 1785-1786), Kron Phra Rajawangbuan Satan Mongkhol (the second King) led an expedition against the Burmese as far as the western province (เมือง ตะวันตก ตะวันตก). On the arrival of this force at Songkhla news was received of a disturbance in Pattani. Measures for its suppression were immediately taken. Phya Kalahom, Phya Senhabhuthorn, Phya Patalung, Luang Suvarngiri and Palat Jana were in command of columns. The forces of Ratu Pakalan, encountered in the neighbourhood of Jering, broke and fled"
in the direction of Raman. Phya Kalahom ordered Palat Jana, who was acquainted with the route, to pursue them with a force composed of men from Patalung and Songkhla. Palat Jana overtook the fugitives on the borders of Perak, where another engagement was fought in which Ratu Pakalan was slain by a musket ball. His head was brought back by the column commanders to Krom Phra Rajawangbuan Satan Mongkhol, who had meanwhile brought his fleet into the Bay of Pattani. He ordered them to bring two large cannon which had been captured, and place them on boats for removal to the capital and presentation to the King. This was done; but the vessel carrying the second of the two, named ‘Srinakri,’ foundered in a gale and the gun was lost. The first, named ‘Nang Pattani,’ which had been placed on board the Royal vessel, reached the capital in safety.” It is the Phya Tani of this collection.

Such is Phya Vichien’s account of the campaign in which this gun was captured, but H. R. H. Prince Damrong tells me that the correct version is as follows:—

In the third year of the first King of the present dynasty the Burmese again invaded Siam by three routes, North, West, and South. The King of Siam, abandoning the South for the moment and despatching a small detaining force to Paknampo, concentrated the bulk of his available forces against the King of Burma, who had entered the country via Kanburi, and gained a complete victory over him in the battle of Lat Ya. The King of Burma then retired; and the King of Siam thereupon divided his forces, himself advancing to meet the invaders coming from the North, while his brother opposed those advancing from the south. Both were successful. The Malay States of Kedah and Pattani, which had resumed their independence after the fall of Ayuthia, were then summoned to renew their payment of tribute. Pattani refused and was therefore attacked and subdued. Kedah, seeing her neighbour’s plight, submitted; and Trengganu, of which Kelantan was then a part, voluntarily accepted Siam’s suzerainty and sent tribute for the first time.

No. 15. นารายณ์ กินดิน จักรี กษัตริย์ ที่ นั้น กินดิน ———

"Naryan (Rama) swallower of the Chakra" (Earth). Calibre 5 niw

Charge 2 catties.
No. 16. ตรานิกาย กระสุน สาม นิ้ว หิน หิน หิน คัน Calibre 3½ niw
"Tanikai"  Charge 1½ catties.
bears the Siamese inscription ไทย, and is a relic of Ayuthia. These two are noticeable for their ornamentation and the curious octagonal shape of their barrels.

No. 16 A. A pair with 8 A.

No. 17. Another European gun, one of a class of which there are eight pieces in the collection, the others being Nos. 18, 25, 32, 38, 41, 51 and 58. Each bears the inscription:

A DOUAY PAR J. BERENGER,
its name, and the date of its casting.
The earliest piece is LE CAMELEON, No. 41, dated 24. 7 BRE. 1767
No. 17 is next in order: it is named
LE DUC DE ROCHEFOUCAULD and dated 21. MAY. 1768

No. 18. LE LIONCEAU 2. JUILLET. 1768
The five other guns of this class all bear the same name and date, viz.,
LE SANGUINAIRE 12. 9 BRE. 1768

The last two, Nos. 51 and 58, have the number 12 on the butt end. In addition to an ornate design surmounted by a crown these guns have a decorative design of fleur-de-lis around the butt, a small human head at the touch-hole and two handles apiece, all identical with those which adorn the guns of the Nations class. This cannot be due to accident, and there must therefore be some connection between the two classes. Either they were both made at the same foundry in Douai, or else the Nations class was copied here in Siam from the Berenger type. It appears to have been the practice of European gun founders to place their names or marks upon their
weapons, but if the Nations class was made after an existing pattern to the order of the Siamese Government, the absence of such marks would be perfectly intelligible. Again, if the guns were made in Siam after the Berenger model, French names and inscriptions would certainly have been omitted. For these reasons I believe that the date of the Berenger guns is slightly anterior to that of the Nations class. That date is significant. Ayuthia fell in April 1767. We have here a gun, the first of a class, cast only seven months later, and possibly not originally intended for Siam. What is more likely than that the purchase of artillery was among the first steps taken by the Dhonburi Government to free the country from the lingering Burmese, and to defend the new Capital? It would be interesting to learn whether anything is known in Douai to-day of the gun founder J. Berenger, and whether any documents relating to these weapons are in existence either in Siam or France.

No. 19. โอ -Conqueror of three worlds."

Calibre 7 niw
Charge 4 catties

a perfectly plain gun. The axle bears a conventional lotus pattern which is also to be seen on Nos. 7 and 9.

No. 20. ฉะ-"The flame that lightens the darkness."

No. 21. ฉุ-"Ongkhot who leaps and smites."

No. 22. ฉ่วย-"The Earth Shaker."

Calibre 5 niw
Charge 2 catties.

each marked

The first three of an interesting class comprising eleven pieces, the others being Nos. 33, 34, 43, 44, 49, 60, 61 and 63. These guns are highly ornamented and have at the butt end a design which seems to be intended to represent the sun shining through clouds—one singularly appropriate to the date of casting, for the first King
of the present dynasty had been on the throne for 10 years, and the country had in large measure recovered from the disasters of the Burmese invasion. Each piece bears the inscription:

L. BANCHONG ROTCHANA ANNO 1792 5 LIVRO

‘Luang Banchong Rotchana’ is a Siamese title conferred upon one of the King’s draughtsmen. It is curious that a Siamese nobleman should cause his name to be inscribed in Roman characters, and this fact inclines me to the belief that the founder of these guns was a European. Prince Damrong concurs in this view. Who then was this man? In the absence of any evidence I would hazard the guess that he was the head of the firm of Berenger. The Luang Banchong guns bear a strong resemblance to those of the Berenger class and may well have come from the same foundry. By supplying the Siamese with artillery at a critical period in their history the Douai firm did the Government a good service and there would be nothing unusual in the sovereign conferring a title of nobility upon the head of the firm as a mark of appreciation. Mon. J. Berenger and Luang Banchong Rotchana may well be one and the same person. The closeness of the dates—1768 and 1793—would warrant this supposition. The guns of the Nations class were very possibly cast between those two years. The title ‘Luang Banchong Rotchana’ occurs in an old Treatise on the casting of Buddhas, printed last year, in a metrical list of revered teachers of the art who lived before or during the 3rd reign of the present dynasty. The bearer of the title was one Sa (ช่) by name and it may be that he was the founder of the guns of this class: but, if so, why did he inscribe his weapons with Roman characters?

No. 23. ไห่ งาระ ระสิปป์ นีน ดีน หนัก ลิว

“Shaker of the Ocean”

Calibre 8 niw
Charge 8 catties.

Not mentioned in the list of royal names or in the old MS.

No. 24. คาระ จ่า จันขุ (9)

“The Annamite who wields the spear.”

One of the Nations Class,
No. 25. พระมหาราชปุระมหาราช (14)

"Rama's arrow that slew the giant."

Calibre 6 niw
Charge 2½ catties.

By Berenger vid : No. 17.

This gun belonged to the Wang Luang—the first King's palace.

Nos. 26 and 31. A pair of small guns bearing the device:—
Three Siamese Royal Umbrellas, and the letters and date
S. P. B. P. M. M.
1862.

The letters stand for the words "Somdet Phra Baranindr Phra Maha Mongkut." They were made in Europe to the order of
King Mongkut.

No. 27. upy ราชพุทธวัน (26) กันธูณ 6 นิ้ว ตีน

"Waiyarab who smashes the Royal carriage." Calibre 5 niw
Charge 2½ catties.

and

No. 28. นิลอน แห่ง เรน (22) กันธูณ 5 นิ้ว ตีน

"Nilanon who thrusts with a spear" Calibre 6 niw
Charge 2½ catties.

These two guns bear identical inscriptions in Chinese, which
mean in Siamese,

เหลือวันที่ณเดือนสิบต่อไปถึงปีสองคั่น

The Chinese tenth month corresponds to the Siamese twelfth
month (เดือนยี่สิบ), so the inscription may be rendered into English:—
"Cast on the eleventh day of the waxing moon of the month of
November in the year of the dog, the 7th of the decade."

Unfortunately the year cannot be reckoned with certainty
for want of the name of the day of the week. It is probably A.D.
1839 (Chulasakaraj 1200). They are almost certainly Annamite
weapons and trophies of war. A conventional lotus design ornaments
the touch hole.
No. 29. o (Siamese) วัตถุ ริน แอนท์ (63) Calibre 19 niw.

"A Hundred thousand measures of rain."

(Phra Phirun is the Rain God).

A large and highly ornamented gun with rajasi on axle and four rings. A pair with No. 55.

The name of this gun recalls that of the famous weapon which Constantine Phaulcon succeeded in weighing, to the discomfiture of the wise men of his day. The story, which is related in the Annals of Ayuthia is as follows:—

"King Phra Narai was one day minded to give to his courtiers an exhibition of the cleverness of Chao Phya Wichayen (Constantine Phaulcon); so he commanded them to bring forth the great gun named Phra Phirun and weigh it, that he might know how many 'hap' it weighed. Then all the nobles took counsel together how they might fulfil the King's command; and they made mighty scales with iron chains and attempted to weigh the gun with these, but could not. So being at their wits end they drew near and prostrated themselves, and confessed that they were unable to weigh it."

"Then the King summoned Chao Phya Wichayen and bade him weigh the gun, that he might know the weight thereof. So Chao Phya Wichayen went out; and having taken counsel within himself how he might do this thing, he caused several barges (rua nang pet) to be brought to the river landing, and having chosen one he had the gun placed therein, and marked how deep she lay in water. Then he bade them take out the gun and bring broken bricks and stones, and weigh them, and load the barge with them, until she sank to the line he had marked. Then knew he the weight of the gun. So he went and told the King, who praised the cleverness of Chao Phya Wichayen and promoted him above all the other nobles."

When the fall of Ayuthia was imminent, that gun was cast into the waters of the lake in the Palace precincts in the hope that it might elude capture. The Burmese, however, would seem to have discovered its whereabouts, for it is said that they conveyed it to
Wat Khema and there blew it up, taking the remains away with them.

The present Phra Phirun was cast by Phya Tak Sin's command to be an emblem that the kingdom had recovered from its reverse and had regained its former greatness. The casting took place in the Suan Mongkhut (Mangosteen garden), the site of the present Wang Lang Hospital, on Friday the 1st day of the waxing moon of the 4th month in the year 1139 (A. D. 1777).*

No. 30. เลือกนั้นหยาบที่ถูกบุกฉันในวันที่ยินดี

"The Tiger that endureth hunger." Calibre 8 niw
Charge 2 catties.

This gun bears the inscription ไทย ชัย and therefore belonged to the King's guard in the days of Ayuthia.

Its name is not included in the List of Royal Names, nor in the MS.

No. 31. A pair with No. 26 (q. v.).

No. 32. ราช ณ ประจาย กลับ (16)

"The Wind that destroyeth the Earth." Calibre 6 niw
Charge 2½ catties.

LE SANGUINAI RE
by Berenger vid. No. 17
It belonged to the Wang Luang—the first King's Palace.

No. 33. ราช ณ ไพจิตร เข้าหน้า (3)

"The Shan who plays in the fore front." Calibre 4 niw
Charge 2½ catties.

One of the Nations Class.

No. 34. ราช ณ ศรีจิตร เข้าหน้า (30)

"The Demon that rends and devours." Calibre 5 niw
Charge 2 catties.

by Luang Banchong, vid. No. 22.

*Vol. 2 History of Siam from the reign of Phya Tak Sin, appendix to the Annals of Ayuthia.
No. 35. o. x. ทอม ด่าน ติ้น (1) ติ้น ๒๐

"The Khom who dives into the Earth." Calibre 4 niw Charge 2½ catties.

I am told that this is the nickname of the famous Khom general, Okya Decho ( ฮอง ยา เดชโอ ) who was able to inflict severe injuries on his enemies by the secrecy and rapidity of his movements. No matter what precautions they might take, they never were aware of his presence until too late; and he disappeared from one place and reappeared in another with such facility that he was given this name.

No. 36. o. z. พระสวามีปรับซึ่งพระวาด (59) ติ้น

"Phra Isuen, conqueror of the Universe." Calibre 8 niw Charge 8 catties.

A large plain gun with the design at the touch-hole similar to that of the Nations Class, and a figure resembling a Harpy on the axle.

No. 37. o. x. ใหญ่ รูป หิน แม่น (7) ติ้น

"The fierce Farang who shoots straight." Calibre 4 niw Charge 2½ catties.

vid: No. 2. Nations Class.

No. 38. o. ภ. คน ทรงนั้น แก่ง ฤทธิ์ (49)

"Khon Tarn who exhibiteth power."

Another Berenger Gun. vid: No. 17.

It belonged to the Wang Na, the second King's palace. This name does not appear in the list of Royal names, which however contains one rather similar ซึ่ง ราชนา แก่ง ฤทธิ์ (49).

Nos. 39. ผักนิปุ่ม กระดนุ้น ไม้ ถิ่น ติ้น

and "Akhanirut." Calibre 4½ niw Charge 1½ catties.

40. (No name)

Charge 1½ catties.
A pair of European guns each bearing two coats of arms. The first of these is barry of six horizontally, with supporters, an angel's wings. Above it is a coronet with five leaves, and this again is surmounted by an eight pointed star.

The second coat of arms is that of the Kingdom of Leon and Castile (Spain), which at first sight seems to prove that the weapons are of Spanish origin.*

I have been unable to identify the first coat. Sir Hercules Reed of the British Museum very kindly instituted inquiries at Madrid, but without success.

Above the arms No. 39 has the inscription

BERNADINO D. E. A. N. D. 1624

and between them the name S. MAIEO

No. 40 has a fuller inscription

ALEXO DE TEXEDA 1625

and the name S. MICVEL

The cyphers after the name BERNADINO on the earlier of the two guns must be an abbreviation for DE TEXEDA. The makers were doubtless near relations, father and son, or possibly brothers.

The year 1624 was the forty-third of the sixty years captivity of Portugal, Philip II of Spain having been crowned King of Portugal in 1581. It is just possible, therefore, that these guns may be of Portuguese origin, although they bear the arms of Spain. When they were cast Philip the IV. was on the throne, having succeeded his father in 1621 at the age of sixteen.

It must have been a time of considerable activity in the arsenals of Spain, for the 30 years' war had commenced in 1618 and it would seem probable that the two cannon S. Maieo and S. Miguel were originally intended for use against the forces of the Protestants.

* Spanish pieces of eight bearing the arms of Spain and inscriptions

Ferdinand VI, 1791.
Carolus III, 1795.

were recently found in the Malay Peninsula by Mr. R. Adee Moore.

The relations of the Spaniards with this part of the world are, I believe, somewhat obscure.
No. 41. เบื้อง หน้า (88) กิริณ ๒ นิว ตัน —
“Conqueror of Hongsa.” —- Calibre 6 niw
Charge 2 1/2 catties.

L E (CAMELEON,) by Berenger, vid: No. 17.
The Siamese name suggests that this gun was cast to take part in
a victorious campaign against the Burmese. Phya Chakkri invaded
Tenasserim and made himself master of Tavoy in 1792. As this
gun is dated 24th September 1767 it probably accompanied his
forces. The name may have been conferred after the event.

Nos. 42 and 45. A pair of British guns each bearing two
heraldic devices:

(1), On the fore part of the gun, an earl's coronet sur-
mounting a ribbon in which is inscribed the motto
PROVIDENTIAE MEMOR.
Enclosed within the ribbon is a crest, three arrows in pale. Depending
from the ribbon is the Star of the Royal Guelphic Order of
Hanover. The motto is that of the Order of the Rue Crown of
Saxony.

(2) On the after end of the gun, an earl's coronet, below
which appear the arms, with supporters and motto, VIRTUTI
NON ARMIS FIDO, of the Earl of Wilton.

Reference to an old copy of Burke shows that Thomas
Grosvenor, born 1799, second son of Robert, 1st Marquis of West-
minster, succeeded to the Earldom and Viscounty of Wilton through
his maternal grand-father, Sir Thomas Egerton (died 1814), whose
surname and arms he assumed in 1821. He was a Knight Grand
Cross of the Guelphic Order of Hanover (G. C. H.) and a Knight
of the Order of the Rue Crown of Saxony.

Without doubt these two guns were connected in some way
with that nobleman and were cast in the first part of the 19th century.
I have not been able to discover how they found their way
to Siam. Inquiries addressed to the present Earl have, as yet,
met with no response, but as the second Earl was Commodore of the Royal Yacht Squadron, it is not impossible that he visited this country in his yacht and presented them to the reigning monarch. Another English nobleman, the Duke of Sutherland, came here in the R. Y. S. "Sans Peur" in 1888 and an account of that visit is given by Mrs. Florence Caddy in her book "To Siam and Malaya" published by Hurst and Blackett in 1889. She speaks of the armament of the vessel and mentions "three shining revolvers at the head of each sofa (in the deckhouse) "... a frieze of nine Winchester rifles, which fire 15 charges each without reloading, and a magazine of ammunition in a cupboard handy by. All this, with the brass cannon on the deck, is for defence against possible pirates in the China Seas." If the seas were so unsafe in the late eighties, a vessel of similar type visiting these waters half a century or so earlier would undoubtedly have mounted some useful guns.

Another, and perhaps more probable, explanation of the presence in Siam of these British Guns is to be found in the History of the third reign of the present dynasty (พระมหากษัตริย์ศิริโรจน์) where it is on record that at the conclusion of the first Burmese war the British presented two bronze cannon (ปืนใหญ่ อย่าง ปืน นิว สอง), calibre 5 niw, to the King in return for assistance rendered by the Siamese.

No. 43. o. ผิงหมายถกล (34) ติน “Fire, the great Destroyer”. Calibre 5 niw

and

No. 44. o. ผิงชิง ตีน หัก คอ เสือ (28)

"Plong Tan (the hunter) who breaks the Tiger's neck."

A pair by Luang Banchong, vid : No. 20

No. 45. A pair with No. 42,
No. 46. o. x. จืน สาร ใฝ
"The Chinaman who disembowels."
vid: No. 2, Nations class.

No. 47. o. z. พระ กาล สนธิญ ไชยย (60) ทิน
"Phra Kan, destroyer of the Earth."
Calibre 8 niw
Charge 8 catties.

A large Siamese gun: a pair with No. 36. (q.v.)

No. 48. o. x. แม่น แทง ทัน (8)
"The Burman who thrusts with the Lance."
vid: No. 2, Nations Class

No. 49. o. † คัลป์ นารายณ์ (36) ทิน
"The Arrow of Narayan."
by Luang Banchong. Vid: No. 20.

No. 50. o. x. แม่ สาม แทง ซ้าย (6)
"The Macassar who Destroys the Camp."
Nations class vid: No. 2.

A large colony of Macassars were settled in Siam at the end of the seventeenth century. Those at Ayuthia made insurrection on 14th September 1686 and, but for the disclosure of their conspiracy a few hours before the rising was timed to begin, might have succeeded in gaining possession of the country. It seems that they were expecting assistance from their compatriots abroad, for a fleet of forty Malay vessels was sighted off the bar about the time of the rising. The suppression of this was a bloody affair. Their habitations were fired, and women and children perished in the flames. All who survived were made prisoners.

The district of Bangkok known as "Maccasan" takes its name from these people.

A full account of the insurrection is given in John Anderson's "English intercourse with Siam in the seventeenth century."
No. 47 "Phra Kan, Destroyer of the Earth."

Crown and inscription on No. 54.

To face page 29.
No. 51. ปรากฏ พิษณุ (87) กระสุน 6 นิว ดิ่ง ด้าน

“Subduer of Angwa.”

LE SANGUINAIRE

by Berenger vid: No. 17.

This gun also was probably with Phya Chakkri on his expedition against Burma in 1792.

Nos. 52 and 57. a pair of small cannon bearing in relief a crown and the date 1860.

No. 53. มั่งคั่น ใจ ก้๊ก (85) กระสุน ที่้นิว ดิ่ง

“The brave Dragon.”

and

Calibre 5 niw

Charge 2 catties.

No. 54. เทวะ ใจ รุ่ง (86)

“The fierce Crocodile.”

are a pair bearing a crown and two inscriptions, one in Chinese characters, the other in Portuguese, which latter establishes the fact that the weapons were made in Indo-China in the year 1667 and 1670 respectively by one Íoão da Crus.

A sketch of the design of the crown and a copy of the Portuguese inscription were sent by Professor Coedès to the Rev. Father Cadière at Hué, who sent in reply some very interesting notes, of which I give a translation.

The first of these is an extract from a memoir written in 1747, probably by M. de Verthomme, in connection with the visit of Monseigneur de Coricée, and preserved in the archives of the Foreign Missions in Paris. This memoir exists in duplicate in the archives of the Jesuit Printing Press in Hongkong, from whence comes the copy in Father Cadière’s possession. The extract, which throws some light upon the identity of Íoão da Crus, the founder of these two Guns, runs as follows:—

“It is useless to object that the Jesuits had a residence there (at Thô-Dúc) before the French. As a matter of fact this is what
happened:—A Portuguese or Spanish half-breed, a founder of cannons, came and offered his services to the King; the offer was accepted and he was installed at Tho-Duc where all the gun founders were accustomed to live. This Catholic half-breed persuaded the King that he had need of a Priest of his own religion to help him by his prayers to success in his work. The King sent to him a Jesuit, who lived for some time in the house of a Christian woman, and died and was buried in the garden of the gun founder. Are we to conclude from this circumstance that the Jesuits had a residence at Tho-Duc this being the only one of them who, up to that date, had lived in that village, and he, not in his own residence, but in the house of a stranger?"

"It is true that the persecution being somewhat abated, the Jesuits obtained the positions of Mathematicians to the King: then this prince assigned to them for their abode a garden in the village wherein this Father built a house but did not dwell long on account of thieves."

The second note is by one Father Renault who died in 1898. He copied the memoir at Hongkong. This priest played an important part at Hue in the events of 1885 and knew the citadel perfectly. It runs thus:—

"From other documents (seen by Father Renault in the archives of the Foreign Missions at Hongkong) he (the half-breed) was called 'Jean de la Croix.' This name was to be seen in the Portuguese inscriptions upon numerous pieces of cannon which were broken up and sold by the French in 1888, 1889 and 1890, bearing dates of 1600 odd."

"I believe I have myself seen, may be in a document, perhaps upon a piece of artillery, the signature of this founder spelt thus:—

'João da +.'"

The third note concerns the date. It is an extract from a memoir presented to Cardinal de Bernis on the 29th July, 1770, by M. Boiret, on the occasion of the visit of Monseigneur de Coricée. (This memoir is preserved in Paris in the archives of the Foreign Missions, and in duplicate at the Printing Press of the Society at Hongkong, whence comes the unregistered copy of Father Cadière.)
"In the year 1664 M. de Bérythe, Vicar Apostolic of Cochin China, sent thither M. Louis Chevreuil in the capacity of Vicar General. This missionary arrived there on the 26th July of the same year and found there three Portuguese Jesuit Fathers... Two of these Jesuits were at Fai Foo......, the third was at the Court as chaplain of the founder of the King's cannon, called Jean de la Croix, a Portuguese from India...... (M. Chevreuil) was then obliged to abandon everything, to take to flight, and to go and request from this Jean de la Croix an asylum which he did not deign to grant him."

"In 1664, then, Jean de la Croix was at Hué, in Thô-Dúc."

This brings us very near to the date of the earlier of the two cannon, 1667.

The name of the Place.

"In the 17th and 18th centuries the town of Hué and the surrounding country were called by the old administrative name of the province, Thuận Hoá, and this name was spelt by the Portuguese and Dutch SENUOA, SENUA, SENO, SINGOA. We can perhaps recognise the first part of this name in in the letters SEN which precede the date 1670. We should then have after the name of the Kingdom and that of the maker, and before the date, the name of the town where the cannon was cast, Hué."

"Only the letters AE E remain unexplained, for the word E C R A S° would probably be a Portuguese word meaning L'accroissement"—the expansion. The whole inscription then would mean:

FOR THE KING AND THE EXPANSION OF COCHIN CHINA, CHAMPA, AND CAMBOJA, BY IOÃO DA CRUS AT HUE, 1670.

The Chinese inscription, translated into Siamese reads

"In the year of the horse, the first of the cycle, His Majesty led an army to subdue the Southern region with whom were joined the Flags."
The events to which the inscription in Chinese characters alludes are probably the revolt of the Tây-sơn, and the date should be read 1774 A.D.

"The Tây-sơn family was called after the village of Tây-sơn in the province of Bình-Dinh, where their ancestors were established. The revolt was started by Nguyễn-van-Nhác, who, after gathering pirates and deserters, was strong enough to take in 1773 the citadel of Qui-Nho'n. A first expedition, sent by the court of Huế, was routed. This success induced a considerable number of Chinese pirates (probably the fl, i.e. "Flags," of the inscription) under the leadership of two Chinese, Tập Dình and Li Tai, to join Nguyễn-van-Nhác, and during the latter part of 1773, the rebels occupied the Southern portion of Annam, from Quang-Ngai to Phanrang."

"During the last months of 1774, the court of Huế sent fresh troops against them, under the command of Prince Nghiem. Prince Nghiem being recalled to Huế to face an invasion of Tonkinese (who took the capital during the first months of 1775), Nguyễn-cu'u-Dạt took the command, but was finally defeated in April 1775."

That expedition of 1774 directed by a prince against rebels in the South seems to agree with all the terms of the inscription.

John Crawford describing his visit to the arsenal at Huế in September 1822 says:—"the art of casting good brass cannon, under the direction of Europeans, appears to have been long known in this part of the world, for among the cannon in the arsenal were a good number of very well founded ordnance, apparently of the size of long nine-pounders, as old as the years 1664 and 1665. These had inscriptions in the Portuguese language importing that they were cast in Cochin China or Kamboja, and bearing the dates in question with the name of the artist. Although very inferior indeed to those recently cast under the direction of the French, still they were very good specimens of workmanship."

No. 55. นพดลพลีน ฟ้าบ (46) Calibre 18 niw
"Upsetter of the Earth."

This is a twin brother of Phra Phirun. Vide No. 29.

No. 56. นพดลพลีน ฟ้าบ (38) ปืน ———
"The Eagle that swalloweth the Elephant."

Another large Siamese weapon. It is without ornamentation and bears the inscriptions:

which signify that the gun belonged to the left wing of the Main Guard of the Tamruet, mentioning a date,—the 13th day of the waxing moon in the year of the Tiger, the sixth of the decade—but unfortunately failing to record the month. It also seems to be stated that a circle* has been described: by whom or of what nature is not recorded.

The date referred to may be in A.D. 1794 (Chulasakaraj 1156)

No. 58. ปืน ซ้าย ฟ้าบ (19) ปืน ———
"The biting Chakra."

LE SANGUINAIRE
by Berenger, vid. No. 17. It belonged to the Wang Na.

No. 59. ปืน ซ้าย ฟ้าบ (5) ปืน ———
"The Man of Bugis who runs amok."

Nations Class vid. No. 2.

The Bugis (or Bughis) are "a people of Malayan stock, originally occupying the Kingdom of Boni in the south-western peninsula

* (cf. Gun No. 1. at Madras, p. 2).
of the island of Celebes. From this district they spread over the whole island and founded settlements throughout the whole Malay Archipelago. In disposition they are brave, haughty and fierce, and are said to be more predisposed towards 'running amuck' than any other Malayans". (Encyclopedia Britannica). The name of the gun exactly fits this description. In the Siam Repository, 1869, on p. 58 it is recorded that a colony of Bugis under Dain Mangali settled in Siam in the middle of the seventeenth century.

No. 60. o. มร. กแชปปาลิ (35) ติน

"The Giant of Krabin."
By Luang Banchong.
vid. No. 20.

No. 61. o. ป้ือ เลื้อ ดุ้ป เลื้อก (29) ติน

"The Vampire who sucks blood."
By Luang Banchong.
vid. No. 20.

No. 62. o มร. ปั้นล่ำ (46). ติน

"The destroying Giant."
Calibre 8 niw
Charge 8 catties.

This gun and No. 4 are named after guns of the Ayuthia period. No. 62 is highly ornamented and ends in a horn. The touch-hole is furnished with a hinged cover and there are four large rings for lifting. Its total length is 201 in. This gun and No. 4, were cast, so I have been told, in the first reign.

No. 63. o ป้ือ ปิ้นกั้น ศิริ แก้ว แก้ว แก้ว (31) ติน

"Phra In, who hurls the crystal chakra."
Calibre 5 niw
Charge 2 catties.
by Luang Banchong. vid. No. 20.

GUN MOUNTINGS.

Of the foregoing weapons only those of the Nations class and the two silver inlaid pieces (Nos. 10 and 12) are mounted on
No. 55. "Uprooter of the Earth."

No. 62. "The Destroying Giant."
the Ayuthia period.

in the Vajirənana Library.}

in Action.

in the Vajirənana Library.}
Gun carriages of
(From a book-case in

Artillery
(From a book-case
carriages of a modern pattern. The remainder are supported upon wooden truck-carriages with or without wheels. It is possible, however, to have some idea of what their old mountings were like. A certain book-case in the National Library has a design in black and gold representing the four arms of the army of ancient days, horse, elephants, chariots, and foot. With the last are portrayed several pieces of artillery, very closely resembling certain of the guns in the collection (Nos. 9, 36 & 55), a circumstance which should satisfy any sceptic that the drawing of the carriages is correct.

Another book-case in the same building gives a very spirited representation of artillery in action, and illustrates the method in vogue of securing the required elevation by means of a timber tripod and trestle.

In compiling these notes there has been little to go upon but the evidence afforded by the weapons themselves. No record concerning them was forthcoming until quite recently when I was shown the old MS. already mentioned. This records the dates of ceremonies held in connection with certain of the guns, but not the dates of casting. I think, however, that we may take it for granted that, where not otherwise determined, practically all those mentioned in that document were cast by command of Phya Tak Sin or his successor.

There are several European pieces for whose presence in Siam one would like to be able to account. Many a ship's captain bartered a portion of his armament in the old days, but there are certain weapons in the collection bearing royal or noble coats-of-arms and one with an inscription in Arabic characters (No. 11) which one suspects found their way here in other fashion.

The EARLY USE OF FIRE-ARMS in SIAM.

Before concluding my paper I should like to say a few words about the early use of fire-arms in Siam. The subject has been dealt with in a book entitled "The Art of War, Military Organisation, Weapons and Political Maxims of the ancient Hindus," compiled, enlarged and translated into Siamese by G. E. Gerini, with original remarks on the introduction and early use of fire-arms in Siam, and
comparative notes on Siamese and Hindu military usages, ceremonies and festivals; published by the Vajarindr Printing Press, Bangkok, 1894. Being in the Siamese language this very interesting work can be but little known except to Siamese, and coming from the pen of such a scholar it deserves attention.

Gerini says that gunpowder was invented in India before the birth of Buddha and mentions the existence in the Ramayana of a passage concerning fire-arms, which supports this theory (p. 117). He states that in the writings of the Chinese and Arabs there are passages, which are to be regarded as trustworthy, claiming that these two nations used fire-arms at a date many hundreds of years before King Ramesuen, whose date he gives as 746 or A.D. 1384. He quotes one passage from the Legends of Phra Ruang (กีฏ เรือง พระ เภิรมยิ ตนเงิ้ง เรื่อง เรือง) p. 120, to prove that the people of Siam knew how to use gun-powder and guns, both great and small, many years before the people of Europe. Translated it reads:—

“When Sukhodaya was still the capital and when the Siamese Era Chulasakaraj was first established, there were big guns placed at intervals along her walls.” He admits that this work is not altogether reliable, since it contains certain glaring anachronisms proving that it was re-written during or after the reign of Phra Ramathibodi II., subsequent to the discovery of America, but he does not entirely reject the evidence on that account. He says, however, that we must not understand that these guns were of the European description, but that they were of Hindu pattern called ‘Nalika’ and ‘Sa-tak-ni’ (นาลิกา ศักตันนี), weapons which he describes upon pp. 52 and 70 respectively, where he states that the former were small and about the length of the modern English carbine, adding on p. 113 that they were made of bamboo, the latter— weapons to slay a hundred men— were made of black iron covered with iron spikes (เจียวนทาม).
mentioning fire-arms in the army of Phan Inthara-raja, the other from the Annals of Ayuthia (Vol. I., pp. 25 and 26),* where it is stated that "in the year Chulasakarat 746 (A. D. 1384-5), the year of the Rat, being the sixth year of the decade, King Phra Ramesuen led an army against Phya Kampucha, who fled by boat, whereupon the King ordered guns with cocks and triggers (ปืน ไฟ ปืน) to be fired at the powder pots (หิน ปืน) which were struck and exploded." The weapons here mentioned Gerini evidently takes to have been guns in the European sense (p. 123), and the two passages, he says, are entirely credible because cannon had been in use in Europe since A. D. 1330, some thirty years before the first of these two dates.

In searching for the latter passage in the Annals of Ayuthia, I lighted upon another (Vol. I., pp. 6 and 7) stating that in the same year, 746, when Phra Ramesuen laid siege to Chiangmai, artillery was employed to breach the wall, and that in the final assault upon the city fire-arms great and small were employed.

But how could the Thai people have obtained a knowledge of such weapons? Is it possible that there were Europeans in this country as early as the year 1358? The route to the far east via the Cape of Good Hope was not discovered for another hundred and forty years, yet Gerini must have had some satisfactory argument in support of his theory that fire-arms of the European description had been introduced into Siam by that date.

Is it not possible that the knowledge of these weapons reached this country by way of China? There was constant intercourse between Siam and that country in those days, and it was customary to send ambassadors to China on the accession of a new Emperor. Moreover during the fourteenth century "there was considerable intercourse between Europe and China. Hung Wu, who declared himself Emperor in A. D. 1368, employed numbers of adventurers from the near and middle east and even from as far west as Venice; and soldiers from all Asia to the Caucasus fought his battles in the South of China." (Encyclopaedia Britannica.

* Bradley's Edition pp. 36 and 37.
History of China). From thence to Siam is not a very far cry, and it would, therefore, seem possible that some bold spirits may have made their way to this country. Anyone with a knowledge of European fire-arms and how to make them would have been sure of a welcome.

A decree of King Trai Loka (สมเด็จพระยาใจไก่กลาง) given in the year A.D. 1454, contained in Vol. I. of the Laws of Muang Thai, (หนังสือเวียง กษัตริยา เมืองไชย published by Bradley) defining the status* (ศักดิ์ นา) of the civil and military officials mentions a corps of artillery with fire-arms great and small — กรมหันติ (หันติ), gun-founders — ช่างเหลา, powder-makers — กอง นิยม ตัน ดิน, and powder magazines, — วัตถุ ตั้ง ติณ. It seems certain, then, that the Siamese possessed a cannon foundry and artillery during his reign.

Moreover care was evidently taken that the weapons should be used to the best advantage, for the decree goes on to speak of พัน เหมือน เป็น — European gunners, in addition to whom there were officers for the training of the troops according to European methods — เกณฑ์ อย่าง หนึ่ง.

Incidentally it may be mentioned that the decree alludes to a contingent of Japanese — อาวุธ ปั้น. Such an organisation must have taken some years to build up.

Here is evidence that eighty-six years after the accession of the Emperor Hung Wu, to whom an ambassador was sent from Siam in 1367 (Journal of Siam Society, Vol. 2, p. 11.) Europeans were in Siamese employ in connection with the use, and doubtless also the manufacture, of fire-arms. How could they have reached Siam

* In feudal times the status of the King's subjects was determined by the amount of land (ขา fields) actually or potentially held by them. This decree of King Trai Loka allocated the amount to which each official was entitled. The custom, which still survives, was to regard every official post as entitling its holder to the tenure of so much land, the amounts ranging from 100,000 to 5 fields (rai).
if not via China? For it is stated on good authority (Ency. Brit.) that "no trustworthy evidence of an explosive in India is to be found until the 21st April 1526," twenty-eight years after the Portuguese first landed on the Malabar coast.

The Annals of Ayuthia mention this decree in the account of the reign, which began, they say, in 796 (A.D. 1434-5). The version of Luang Prasert (vid. Journal of Siam Society Vol. VI. Part 3, p. 5) puts that date at 810 (A.D. 1448-9), and on the evidence of the decree itself King Trai Loka was on the throne in 1454, for the preamble mentions the day on which it was given, Sunday the 10th day of the waning moon in the year of the dog B.E. 1997, or A.D. 1454.*

It would appear, then, that there exists a claim that fire-arms were in use in this country in the last half of the fourteenth century; and that this claim is supported by the evidence contained in King Trai Loka's decree that there was in existence a complete establishment for the manufacture of cannon and small arms, together with necessary ammunition; by the end of the first half of the fifteenth century. Moreover such a claim is not lightly to be discredited, for the intercourse between Europe and China, and China and Siam during the fourteenth century was such as to render the introduction of those weapons practicable.

But, you will naturally ask, is there any evidence that fire-arms were known in China thus early? Much has been written on this subject. It is impossible, to go fully into it all, but I must mention one or two authorities and their conclusions. In his book "The Middle Kingdom (Vol. 2, p. 89) Wells Williams, referring to Mr. W. F. Mayers researches, says, "No evidence exists of the use of gun-powder as an agent of warfare until the middle of the twelfth century, nor did a knowledge of its propulsive effects come to the Chinese until the reign of Yung Loh, in the fifteenth century — a thousand years after its first employment in fire-crackers."

* The date of the decree as given in Bradley's edition, B. E. 1298, is obviously wrong, but, assuming that the figure 2 is a misprint for a 9, we obtain the date 1998 which coincides with the period of the reign. That year was not the year of the Dog, but the next after. Prince Damrong, therefore, holds that 1997, or A.D. 1454 is the correct date of the decree.

Professor Schlegel, however, in his work To'oung Pao (1902) on the invention and use of fire-arms and gunpowder in China, prior to the arrival of Europeans, says:—"We read in the History of the expedition sent by Kublai Khan in 1293 to punish the King of Java, that the army was divided into three bodies in order to attack Kalang; it was agreed that they should meet at Daha and commence the battle on hearing the sound of the p'au," a word which Schlegel insists means a cannon firing shot, and he quotes a dozen Chinese passages in support of his contention. He continues... "I maintain that not only the Mongols in 1293 had cannon, but that they were already acquainted with them in 1232," for, we read, he says, in the Pai Pien (published in 1581) that on the walls of the city of Si-nga (in Shen-si) was preserved a long time an iron cannon, called 'Heaven Shaking Thunder'; and an exact description of this weapon is given.

"Somewhat later, in A.D. 1287, Kublai Khan, during his war with Nayan, employed in a nocturnal expedition 10 soldiers, armed with guns whose sound so frightened the enemy that he fled on all sides."

"We have thus no reason to doubt that the Mongols employed fire-arms in their expedition to Java, and the Javanese probably learnt from them to employ them also."

Marsden (History of Sumatra, 3rd Edit. p. 347) equally says that fire-arms were known in Sumatra before the arrival of the Portuguese."

"In another Javanese poem, the Serat Kanda, it is told that, in the battle with an army of Siyem (Siam), Kamboja and Sokodana* two large guns were captured, to which the names of Guntur Geni and Jagur were given."......"the battle must have taken place (about) 1304, (forty odd years before the battle of Crecy). It would prove at all events that the Siamese and Cambodians made use of cannon in their war with Madjapahit, as early as the 14th century."

Gerini's theory, therefore, has the support of Schlegel's opinion.

* Sokodana is a district in S. E. Sumatra.
The only point that seems to be in doubt is whether the fire-arms used by the far-eastern peoples at this early date actually fired shot or merely discharged fire and vapours. A passage in the Annals of Ayuthia says that Prince Inthara-raja, a son of King Trailoka, in a fight against the forces of Nakhon in 809 (A.D. 1447) in which he took part mounted on an elephant, was surrounded by four hostile elephants and was shot in the forehead—ตื้น หัว โม พระ สมชายา. Now although it may be argued that the word หัว does not necessarily mean a gun, I believe that the injury thus described was a gun-shot wound. The incident occurred some sixty years before the advent of the Portuguese.

The MS. to which I have alluded as containing a list of the names of the guns at the Ministry of War, contains also a copy of a very old treatise on powder-making for the purposes of war. As a matter of fact the book opens with this treatise; the details which follow are a later addition.

This old treatise gives a number of prescriptions for mixing powder of various kinds; one for the making of incendiary rockets; another for discharging flames with which to terrify elephants, horse, and foot; others again for producing muck and darkness; and there are also directions for the shooting of men and animals by means of soft bullets when it is not intended to kill the victim. This last also goes to prove that the propulsive power of powder was known in Siam in those primitive times when the discharge of flames and a loud explosion were sometimes sufficient to scare an enemy into flight.

Before I close I wish to express my deep gratitude to the numerous friends who have aided me in the preparation of this paper, especially to H. R. H. Prince Damrong, who has given me much valuable information and done me the honour to read and correct the draft; to H. R. H. The Chief of the General Staff for permission to photograph the guns; also to those of my colleagues and pupils in the Royal Pages College who have rendered me assistance in translating Siamese passages into English; and finally to Professor Ceédès, at whose suggestion I undertook the task, and to whose active interest and constant collaboration its consummation is principally due.
At the conclusion of the paper the President, Mr. W. A. Graham, rose to move a vote of thanks to Mr. Sewell for the valuable and interesting record which he had compiled. Speaking from his own personal knowledge of the Pattani district the President mentioned that the old cannon foundry was a conspicuous object on the plain in going to Jering. According to local tradition, it never was finished, having been struck by lightning three times, and abandoned.

There was no mystery, he said, about the Spanish dollars; they did not imply any connection between Spain and the peninsula, but were simply trade dollars, used when Spain had control of the supplies of silver. When he first went to Kelantan they formed the whole of the silver currency there.

With regard to another point mentioned by Mr. Sewell, it was undoubtedly true that the captains of the sugar barques coming to Bangkok did barter many guns, some of them now to be seen along the banks of the river. They were thereby enabled to take on some private cargo, and the loss of the guns could be accounted for to the owners by the heavy storms encountered on the return voyage.

Professor Cædès explained with regard to the manuscript from the National Library that the treatise it contained on powder making etc., for the purposes of war undoubtedly dated back to 1580. The actual manuscript was, of course, a copy.

Mr. Crosby, referring to the inscription on gun No. 13, เศษ ไป ตาย ศ, said he could not attach to it the meaning "Cast into the Lake," but considered that it must be taken to mean that the weapon was to be "set up at the South end of the Lake."

As to the date of the introduction of firearms into this part of the world, he entertained a profound scepticism with regard to the claims supported by Mr. Sewell. In saying that, he was referring only to fire-arms of the western pattern, which no doubt were brought in with western trade.

Alluding to Nang Tani, Mr. Crosby said it should be remembered that in the days of the early factories, Dutch and English, the ruler of Pattani was always a woman, and one who did not marry.
Mr. Sewell replying said that the translation of the inscription to which Mr. Crosby objected was the meaning which Prince Damrong attached to it. His Royal Highness had told him that it was a fact that shortly before the fall of Ayuthia a number of guns were submerged in the lake by the Siamese, in the hope that they would thus escape capture. Mr. Crosby's meaning of the words ปราสาท was that upheld by Phya Boran Rajatanin.

With regard to the question of the date of the introduction of fire-arms into Siam, it had always been the accepted theory among Europeans that fire-arms were invented in Europe; but a few scholars were of the opinion that it was the people of Asia who first invented them. In his paper he had tried to bring forward one or two arguments in favour of that contention.