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ทำนานเครื่องมโหริ่บี่พาทย**์** พระนิพนธ์

สมเด็จพระเจ้าบรมวงศเซอ กรมพระยาดำรงราชานุภาพ ฉะบับชำระใหม่ ทูลเกล้า กลาย

พระบาทสมเด็จพระเจ้าอยู่หัว ทรงพระกรุณาโปรคเกล้า ๆ ให้พื้มพ์พระราชทาน ในงานพระราชทานเพล็งศพ คุณหญิงมโนปกรณ์นิติธาดา ตจ. รัตน ปปร ๒ เมื่อปี่มะเมื่อ พ.ศ. ๒๙๗๓

Siamese Musical Instruments

H. R. H. Prince Damrong Rajanubhab.

With English translation.

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SIAMESE MUSICAL INSTRUMENTS

BY

H. R. H. PRINCE DAMRONG RAJANUBHAB.

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

PREFACE.

The Royal Institute has been commanded by the King to select a book to be printed for distribution at the cremation of Lady Manopakorn, Lady-in-waiting to the Queen, who died while in attendance upon Their Majesties during the royal visit to French Indo-China last year; whose cremation is an official function by the gracious command of the King. It is evident to me, on whom has fallen the task of finding a suitable book, that attendance at the cremation will be large, for the deceased lady and her husband have been fortunate in the possession of a wide circle of friends, both Siamese and foreigners. The King's command that the cremation be an official function is widely appreciated as a token of His Majesty's recognition of the sterling character of the lady, and it will have the effect of increasing further the number of those attending the ceremony. The book selected for the occasion should, consequently, be one which is acceptable not only to Siamese readers, but also to those whose knowledge of the language of the country does not extend to the reading of books. It occurred to me in my search that perhaps my brochure on Siamese musical instruments, which was published about two years ago, would be suitable, for it imparts information on an interesting subject. After its: publication in Siamese, the book was translated into French (Extrême-Asie, September 1928) and Dutch (Nederlandsch-Indië, Oud & Nieuw, July 1929), but the text as printed in the first edition is somewhat incomplete, nor are the illustrations as good as they might be. If the book were revised and enlarged, its illustrations improved, and an English translation provided, a new edition might prove acceptable. The choice having been submitted to His Majesty, the present (second) edition of "Siamese Musical Instruments" is issued with the approval of the King.

The text of the book has been revised throughout and an English translation, the work of the staff of the Royal Institute, has been added. The illustrations are entirely new, and have been prepared with the co-operation of Chao Phya Varabongs, Minister of the Royal Household, by whose order the artistes of the Royal Orchestra assembled before the camera, with Mr. E. Groote behind it. In the case of musical instruments which are not available elsewhere, exhibits of the National Museum have been used. The Royal Institute tenders its thanks to all who kindly gave their help.

Damrong.

The Royal Institute, Wednesday, 11th. February, 1931.

> สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

A Biographical Note on Lady Manopakorn Nitidhata.

Lady Manopakorn (Niti) was a daughter of Phya Visütra Koshā (Fak Sanasen) and Lady Visütra Koshā (Sombun Sanasen).

Born on the 16th, October 1888

1900-1 went to Europe for her education.

1912-3 Returned home after completing her studies.

12th. February 1913 Married Phya Manopakorn.

11th. November 1919 was made a companion of the Most.

illustrious Order of Chula Chour Klao

(Third class).

28th. March 1928 First appointment to the post of Lady-

in-waiting (Nang Sanong Phra Ostha)

for the first time.

9th, November 1928 Received the "Royal Cypher Medal"

(4th. class) of the present reign.

20th. March 1930 Re-appointed Lady-in-waiting after the

first period of service.

14th. May 1930 Died aged 43 years.

Siamese Musical Instruments.

The majority of Siamese musical instruments are modelled after those of Ancient India, which also provided prototypes for the instruments of Cambodia, Pegu, Burma, Java and Malaya. That the people of the above countries have copied the musical instruments of Ancient India may be seen from the similarity of their instruments to-day.

The Sangitaratnakara (a Sanskrit work) divides the Indian prototypes into four different groups, viz.,

- 1. Tata.....Stringed instruments.
- 3. Avanaddha......Instruments covered with skin.
- 4. Ghana.....Instruments clapped together to produce sound.

The Sangitratnākara explains the use of these instruments as follows:—

Instruments belonging to the 'Tata' group (stringed instruments) and those belonging to the 'Sushira' group (wind instruments) are used for playing the melody; those of the 'Avanaddha' group (instruments covered with skin) are used for accompanying, and those of the 'Ghana' group (instruments clapped together) are used for marking time.

Each group contains a large variety of instruments. For instance, amongst the Stringed instruments the monochord lute (or gourd lute, examples of which exist in this country) represents the oldest type. Later on, several strings were added to the instrument and we have lutes with two, three, seven, nine, and even twenty-one strings, all bearing different names. But all these lutes of different kinds are used to accompany songs, the singer accompanying himself. Thus in the Story of Kāki the Gandharva who makes fun of the King of Birds is represented as singing and playing on the lute at the same time. As the number of strings on the lute increased the instrument naturally increased in size and weight. In some cases it became impossible to hold it; and in order to play it it was necessary to place it on the floor (hence the instruments of the 'Chakhe' type),

or hold it upright like the contra-bass. But these various instruments originate from the primitive lute, and are grouped by the Sangitarat-nākara under the 'Tata' category which the Siamese call 'Khruaug Dit Si' (stringed instruments "pinched" or "scraped," see plates I and II).

Instruments belonging to the 'Sushira' group or wind instruments are also numerous and comprise flute, hautboy, hamboo organ, trumpet, conch-shell and all the pipes or horns which one blows (see plate VII).

Instruments coming under the 'Avanaddha' group comprise the different varieties of drums: those which have only one face which the Siamese call 'Thap' (or 'Thon'), 'Rammanā', and 'Klong yao'; those which are covered on both sides with skins held together by means of bands (straps) such as the 'Bandoh'; the 'Thon' (or 'Taphon'); the 'Poeng Mang', the 'Klong Chana', Malay and Javanese tom-toms; and finally those which are covered on both sides with skins nailed down like the tom-tom used in 'Khon' and 'Lakhon' (see plate VI).

Instruments belonging to the 'Ghana' group proceed from the clapping of hands for marking time to instruments which are made of metal and are very varied: there are alto cymbals, basso cymbals, small bells, hand bells, and gongs. Those which are made of wood, such as castanets for instance, are also to be classed under the group 'Chana', because they too mark time (see plate It seems that several instruments which play the melody are developed from those used for marking time. For instance, the 'Khong Vong', or a set of gongs, seems to have been evolved from a single gong: first the single gong became a pair of gongs of different notes called 'Khong Khū' (which figures in the Nora orchestra); then we had the 'Three-gongs' (which figures in the 'Rabeng Olapho'), then other gongs were added producing seven different notes which led finally to a set of sixteen gongs, which is really an instrument capable of playing the melody. The 'Ranat' or xylophone must have undergone a similar evolution beginning with All these instruments existed in Ancient India. (See the castanets. plates IV and V).

The composition of the various orchestras and their use in any given occasion is of Indian origin. The system was brought over to Indo-China by the Indians during the period of the Khmer supremacy. When the Tai succeeded the Khmer they introduced various modifications which finally resulted in the present system.

Siamese musical instruments of Indian origin may, from the method of their use in the orchestra, be divided into two groups:

- 1. The group 'Dontri' or collection of stringed instruments, which has become the 'Mahori' orchestra.
- 2. The group 'Turiya' or collection of wind instruments and instruments of percussion which has become the 'Pī Pāt' orchestra.

These two groups have different uses. 'Dontri' instruments have a soft sound and usually serve to accompany singing indoors. 'Turiya' instruments have a loud sound and are generally used to accompany dances in the open air.

Such is the origin of the 'Mahori' and the 'Pi Pat'.

MAHORI.

In Siam the original composition of String-bands was of two kinds, known as 'Banleng Pin' and 'Khap Mai' respectively. In the mode 'Banleng Pin' only the 'gourd-lute' was used and the singer accompanied himself on it (see plate 1X). Few players can perform on the instrument now and it is not much used, being replaced by the 'Saw' (fiddle).

The 'Khap Mai' is played by three musicians: a singer, a three-string-fiddle-player who accompanies the singing, and a player of 'Bandoh' drum who marks time (see plate X). This kind of music obtains nowadays only in certain royal ceremonies, such as those which mark the Coronation anniversaries. The 'Banleng Pin' and the 'Khap Mai' are played exclusively by men.

The 'Mahori' seems to have been invented by the ancient Khmers. The Tai adopted and elaborated it. It was originally played by men, but when this form of orchestra became popular, men of position who had large households caused the 'Mahori' to be performed by women, and it became composed of women from the Ayudhya period onwards. Originally the 'Mahori' consisted of four musicians: a singer who keeps her own time by using the castanets ('Krap Phuang'), a Krachappi player, a violinist executing the melody, and a player of 'Thap' or drum with one face serving to accompany and mark the rhythm (see plate XI). We see that the composition of this orchestra consists simply in the fusion of 'Bauleug Pin' and 'Khap Mai', except for the 'Krachappi' replacing the gourd-lute and the 'Thap' drum replacing the 'Bandoh' drum, and the addition of the castanets 'Krap Phuang' to emphasize the rhythm.

It seems that since its inception the women's 'Mahori' was greatly in vogue. Instruments which were added to this orchestra during the time of Ayudhya were (from what may be inferred from an examination of pictures of that period) the 'Rammanā' intended to assist the 'Thap' drum, and the flute ('Khlui') for strengthening the melody. Thus it became an orchestra of six musicians.

After the foundation of Bangkok, various other instruments came to be added, coming for the most part from the 'Pi Pāt' but of reduced size suitable for women. It is said that during the reign of the first Sovereign of the Dynasty (A. C. 1783-1809) the xylophone ('Ranat Mai') and the carillon ('Ranat Keo') were added and the 'Pi Pat' then formed an orchestra of eight musicians. During the reign of the next Sovereign (A. C. 1810-1824) 'Ranat Keo' was replaced by a set of gongs known as the 'Khong Vong' and the lute 'Chakhe' was added and thus the orchestra become one of nine musicians, During the third Reign (A. C. 1825-1851) the basso xylophone ('Ranat Thum') and a set of smaller gongs were introduced into the 'Pi Pat', and the 'Mahori'. A pair of alto cymbals ('Chhing') replaced the castanets to cope with the increased sound. Lastly a pair of basso cymbals ('Chhap') were introduced, and the 'Mahori' now became an orchestra of twelve musicians. During the reign of King Mongkut (A. C. 1852-1868), 'Ranat Thong' (brass xylophone) and 'Ranat Lek' (iron xylophone) were introduced into the 'Pi Pat' and they were also being added to the 'Mahori', which thus consists of fourteen players, that is to say, almost as

many as the 'Pi Pat'. The only differences between these two are that the 'Mahori', having stringed instruments in it, does not contain drums and it is composed of women whereas the 'Pi Pāt' consists of men. During the Fifth Reign the 'Krachappi' lute and the basso cymbals ceased to be used in the 'Mahori.' So there remained only twelve musicians (see plate XII).

During the reign of King Mongkut changes occurred in connection with the dramatic stage which had effect upon the 'Mahori.' During the period of Ayudhya women were not permitted to act on the stage outside royal service. Princes, noblemen and others with large households consequently trained their women solely for the 'Mahori', leaving play-acting and the 'Pi Pāt' to their men, King Mongkut removed the prohibition, and permitted women to be trained as actresses. The result was that the practice of employing women for the 'Mahori' gave place to the practice of training them for the stage. Women players were popular, and the stage claimed them almost to the exclusion of the 'Mahori'.

After the decline of the women's 'Mahori'; some of the men who had been taking to Chinese stringed instruments adopted the fiddles 'Saw Duang' and 'Saw Ū' which, with the 'Chakhelute' and the oboe, they added to an existing but different kind of orchestra known as 'Klong Khek', which will be described further on in this paper. The new combination became known as the large 'Klong Khek' combination. Later the tom-tom and the oboe ('Piō') of the 'Klong Khek' were replaced by the 'Rammanā' and the reed pipe, and the name 'String Mahori' was given to this new orchestra. Some orchestras added the xylophone and a set of gongs, and thus we have men's Mahori replacing that of women (see plate XVI).

But in playing the string-band, later on the number of instruments employed was not fixed. For instance, there can be as many fiddles ("Saw Duang", "Saw U") as there are men available to play them. The aim seems to be a greater volume of sound rather than harmony. At present some string-bands use the Chinese

cymbalo (Khim Chin) and the harmonium in the place of "Saw Duang" and "Saw \overline{U} ".

There are fewer women than men who take up Mahori.

PIPAT BAND.

The 'Pi Pat' modelled upon the system of ancient India comprised five instruments:

Oboe playing the melody (Sushira);

Drum with one face (Atata);

Drum with two skins connected by means of straps (Vitata);

Two-faced drum with skins nailed down (Ativitata);

Gong marking the cadence (Ghana).

The combination is known as "The Five Instruments".

The 'Pi Pāt' of five instruments, derived from the above. has been in use from early times, and is of two distinct types: one called 'light' serves to accompany indigenous 'Lakhon' performances (still in use in the Southern provinces in the 'Norā' theatre); the other known as 'heavy' serves to accompany the 'Khon' or masked drama of men. Each of these consists of five players, but differs as follows:—

The 'Light Pi Pat' consists of an oboe playing the melody, two 'Thaps' and a 'Klong' for accompaniment, and a pair of gongs for marking the time: it corresponds exactly to the older combination, "the Five Instruments", with this difference that one of the 'Thaps' replaces the 'Thon'.

The 'Heavy Pi Pāt' consits of an oboe, a xylophone, and a set of gongs playing the melody, and a 'Klong' and a 'Thon' (Toon) which serves to play the melody and also to mark time. Where the 'Thon' is not included, the drummer strikes the alto cymbals ('Chhing') and marks time.

The difference between the 'Light Pi Pāt' and the 'Heavy Pi Pāt' is probably due to the fact that in the 'Lakhon' the singing and dialogues alternate with the playing of the band, whereas in the 'Khoa', the band executes long passages necessitating more instruments capable of playing melodies. But since the introduction of Lakhon Nai' or royal Lakhon, the 'Heavy Pi Pāt' of the 'Khon' has come into use for both, and it is this band which is now commonly employed.

The evolution of the 'Pi Pat' has probably been in the following manner:—

During the period of Ayudhya the 'Heavy Pî Pāt' consisted of an oboe, a xylophone, a set of gongs, alto cymbals (or 'Thon' used by the same player alternately), and a 'Klong', making five instruments in all. The oboe was a small one similar in size to that which is called to-day 'Pî Nok'. The "Klong" also was small, like that which figures in the 'shadow plays.'

The first modification consisted in increasing the size of the oboe and the drum for use in the 'Pi Pāt' employed in the 'Khon' and 'Lakhon Nai'. The new oboe received the name of 'Pi Nai'. As to the smaller oboe and drum, they continued to be employed in the open air 'Pi Pāt', for instance, of the shadow plays. Such is the origin of the two kinds of oboe, but it is not known whether the development dates from Ayudhya, or is posterior to the foundation of Bangkok.

During the second Reign, the King was fond both of the 'Lakhon' and the 'Sepā' (song of great length). It is said that before His Majesty's time the 'Sepā' was sung without accompaniment, and it was he who introduced the 'Pī Pāt' into the 'Sepā' (as in the case of 'Mahori'). It was probably at that time that the drum called 'Song Nā' was introduced into the 'Pī Pāt'; for its softer sound makes it more suitable for songs than the 'Thon' or 'Taphon'. This innovation leads us to suppose that the same King also in proved the 'Pī Pāt' and made it more suitable for the theatrical stage, in which case it must be again to him that we owe the introduction of the 'Pī Nai' and the larger drum. The ordinary 'Pī Pāt' however has continued to consist of five instruments (see plate XIII).

We have seen above that originally the 'Pi Pāt' was employed only to supply music for theatrical performances: 'Shadow Playa', 'Khon', 'Lakhon', etc., or, for making music of a rather vehement

nature. When the second Sovereign of the Dynasty adapted the 'Pī Pāt' to the 'Sepā', it became a melodious band sufficient in itself. When in the third Reign the 'Sepā' accompanied by 'Pī Pāt' became popular, the 'Pī Pāt' was enlarged by doubling the number of each instrument. The following were added:—

- 1. The oboe 'Pi Nok', to supplement the 'Pi Nai';
- 2. The 'Ranat thum' (basso xylophone), to supplement the 'Ranat Ek' (alto xylophone);
- The small set of gongs, to supplement the large set of gongs.
- The drum 'Poeng Mang Song Na' to supplement the 'Thon';
- 5. 'The basso cymbals ('Chhap') to supplement the alto cymbals ('Chhing');
 - 6. A second drum.

The 'Pī Pāt' of five players thus became one of eight, called "Pī Pāt Of Double Instruments," the older combination being known as "Pī Pāt Of Five Instruments,"

During the reign of King Mongkut, the brass carillon was invented to supplement the alto xylophone ('Ranāt Ek'), the iron carillon to supplement the basso xylophone ('Ranāt Thum'), and when these were added to the 'Pī Pāt', it became a band of ten players, called the 'Grand Pī Pāt' and is in use at the present day (see plate XIV. In this picture the 'single gong' has been added as in use in the 'Lakon').

KLONG KHEK (Exotic Drums),

In the present day Siamese orchestra there are two ir struments of foreign origin, namely 'Klong Malāyū' or Malay drum, and 'Klong Khek', probably of Javanese origin. These two instruments resemble each other and differ only in the composition of the band in which they enter.

The Malay drum combination consists of four drums, an oboe, and a single gong called 'Khong Mong' which are played by six persons.

Javanese drum combination consists of two drums, an oboe, and a single gong, which are played by four persons (see plate XV).

The difference between the Malay drum and the Javanese drum is that the faces of the first are held together with leather lashes, it is larger and is struck with a wooden stick on one side and on the other with the hand, whereas the faces of the second are held together with rattan and it is struck with the hands on both sides.

The use of these two different instruments in Siam appears to be as follows:—

They must have been introduced into Siam at different periods on different occasions. The Malay drum came first, probably employed in royal processions, in which the Malays took part, such as the elephant processions, and later on in the cremation processions of kings and princes. Finally its exclusive use is the provision of music in connection with the dead. The Javanese drum was probably introduced into Siam in connection with certain dances, such as the sword dance and the club dance, and proceeded perhaps from its use in the kriss dance. It was employed in processions, like the tonsure procession, the royal procession of barges, the gong not being used.

We may suppose that originally the Malay drum was employed in those processions, but later on, when the same drum came to be employed on occasions connected with the dead, it became an inauspicious instrument and therefore was replaced by the Javanese drum without the gong.

The introduction of Javanese drum into the Siamese 'Pi Pāt' in all probability dated from the adaptation to the Siamese stage of the Javanese story of Inao, in Ayudhya, for instance during the representation of Javanese dances, such as the kriss dance. Later when the 'Pi Pāt' played airs of Javanese origin, such as the 'Pleng Baolut' and the 'Saraburang', the Javanese drum was employed in the 'Pi Pāt' as a substitute for the 'Thon' drum. Again, even for airs borrowed from the 'Mahori' such as the 'Phra Thong', the Javanese drum was employed instead of the 'Thap 'and the 'Rammanā'. Finally the Javanese drum became a permanent part of the 'Pi Pāt'.

PISAW AND CAN.

In addition to the musical instruments already described, mention must also be made of some others which, I think, are old musical instruments of the Thai people (see plate VIII). One is called 'Pi Saw' and is made of bamboo tubes of varying sizes. It has been used from very early times to accompany singing, as mentioned, for example, in the story of "Phra Law." Nowadays it is played only in the Circle of Bayab. known as 'Can' is a bundle of reeds joined to an air-chamber and blown with the mouth in accompaniment to singing. To-day it is still popular in the eastern provinces. The 'Pi Saw' and reed organ players separate themselves into two groups, men on one side and women on the other, and they sing love songs in duet. During the reign of King Chulalongkorn, the 1st. Guard Infantry Regiment introduced the use of ten reed organs of varying sizes in unison like the instruments of European orchestra. The effect was found pleasing, and the orchestra of reed organs therefore continues to be played even to-day.

Within this class there is yet another group of instruments. Each of them consists of some bamboo tubes and an air-chamber. One which is called 'Ray Rye' gives but a single note (I have seen this played by laymen in the Bovarnives Monastery when the general assembly of the monks begin their daily service. But it is not known for what purpose it was originally used). The second, called 'Naw', belongs to the "Mu ser" tribe. The third, called 'Teng' belongs to the "Meo", and is still used in dances in the districts on the northern frontier of Siam. There is also another musical instrument which was formerly a favourite with the Siamese. I am not sure whether it is our own or we have adopted it from some other people. It is a kind of Jew's harp called 'Chong Nong'. It is made of bamboo and provided with a tongue which can be twenged with the hand or vibrated by means of a twine fastened to it performer holds the instrument in his mouth, twangs or vibrates its tongue, puffs his cheeks, and breathes the required variations of tone upon it. It can produce melody and is played solo. They say that the lover played the 'Chong Nong' outside his lady's house as a sign, Now no one uses it. I suspect that the instrument is exotic since I have seen a small musical instrument of the same kind, made of iron called 'Pia Lek' which has long been in the market,

List of Illustrations.

- N. B. See from left to right unless mentioned otherwise.
- Plate I. Stringed instruments played by twanging the strings:—
 1. Gourd lute. 2. "Krachappi" lute. 3. "Cha Khe" lute.
- Plate II. Stringed instruments played by drawing the bow across the strings:—
 - "Saw Ü" fiddle.
 Three-stringed fiddle.
 "Saw Duang" fiddle.
- Plate III. Instruments of percussion :-
 - Top row: 1. "Bandoh" drum. 2. Multiple eastanets (Krap Puang). 3. Single gong ("Khong Mong").
 - Second row: 1. Alto cymbals ("Chhing"). 2. Basso cymbals ("Chap"). 3. Two pairs of custanets.
- Plate 1V. Instruments of percussion which have evolved from the single gong:--

Above: Single gong.

Below: 1. Set of two gongs ("Khong Khū"). 2. Set of three gongs ("Khong Rabeng"). 3. Set of gongs ("Khong Vong").

- Plate V. Instruments of percussion which have evolved from the castanets:—
 - Top row: 1. Alto xylophone ("Ranāt Ek")
 2. Basso xylophone ("Ranāt Thum").
 - Second row: 1. Brass carillon ("Ranāt Ek Thong").
 2. Iron carillon ("Ranāt Thum Lek").
- Plate VI. Instruments of percussion whose faces are covered with skin:—
 - "Thon" or "Thapon".
 Javanese tom-tom.
 ("Klong Khek").
 "Song Nā" ("Two-faced" drum).
 - 4 Malay tom-tom ("Klong Malayū"). 5. "Thap" or "Thon" (long bodied drum with one face). 6. "Thut" drum ("Klong Thut"). 7. "Rammanā" (Shallow

drum with one face). 8. "Chatri" drum,

Plate VII. Wind instruments :-

Javanese oboe ("Pî Javā").
 "Cha nai" oboe.
 ("Pî Chanai").
 Flute (Klui).
 "Pî Ō" oboe.
 "Pî Nai" oboe.
 "Pî Nok" oboe.

Plate VIII. National musical instruments of the Siamese which have come down from the past:—

Beginning from the top right hand corner: 1. Jew's harp ("Chong Nong"). 2. "Naw" pipe. 3. Reed organ ("Can"). 4. "Pi Saw" pipe. 5. "Teng" pipe. 6. "Ray Rye" pipe.

Plate IX. Brahmin playing the gourd lute.

Plate X. "Khap Mai" group.

Plate XI. The "Mahori" players as in the Ayudhya period.

Plate XII. The "Grand Mahori" group.

Plate XIII. The old "Pi Pat" of five instruments (with the addition of the "Song Na" drum and the "Sepa" castanets).

Plate XIV. The "Grand Pi Pat" group.

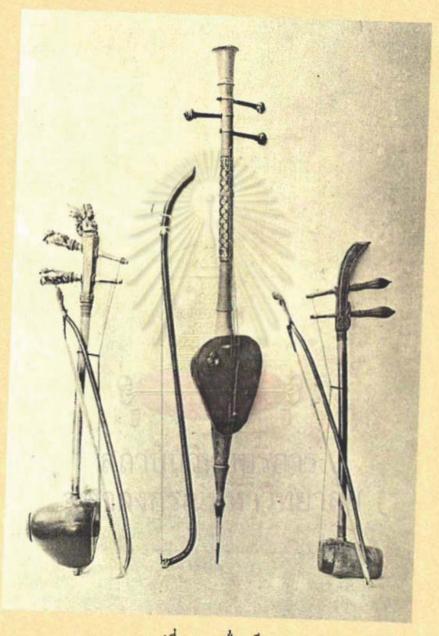
Plate XV. The "Klong Khek" group.

Plate XVI. The Royal String-band.

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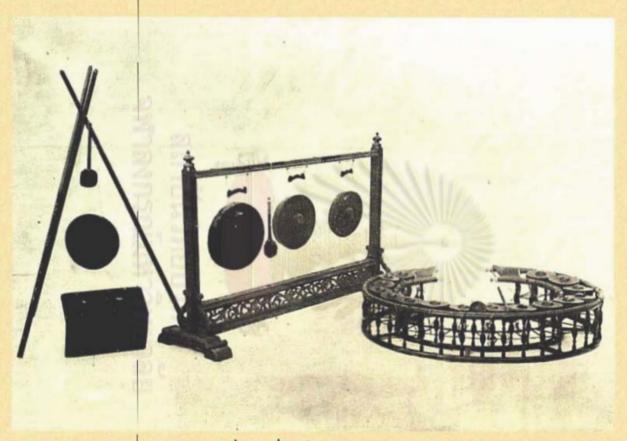
บที่ เครื่องคืด
Plate I. Stringed instruments (Group i).



รูปที่ ๒ เครื่องสี Plate II. Stringed instruments (Group ii).



รูปที่ ๓ เครื่องที่ Plate III. Instruments of percussion (Group i).



รูปที่ ๔ เครื่องที่เกิดจากฆ้องใหม่ง Plate IV. Instruments of percussion (Group ii).



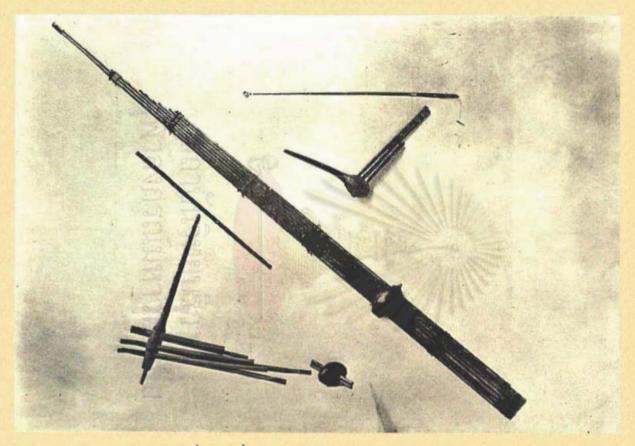
รูปที่ ๕ เครื่องที่เกิดจากกรับ Plate V. Instruments of percussion (Group iii).



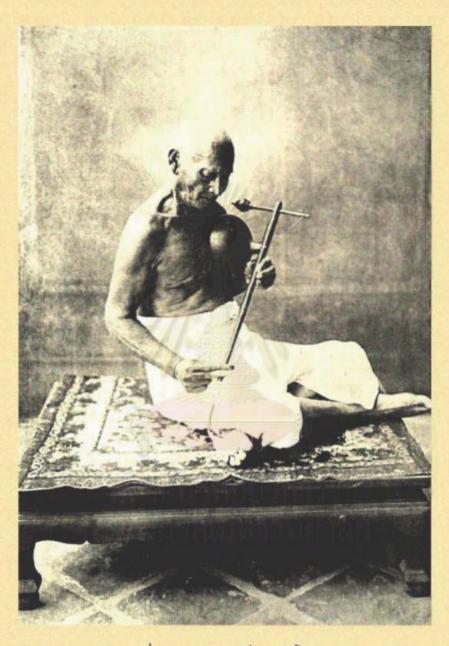
รูปที่ ๖ เครื่องอย่างหุ้มหนัง Plate VI. Instruments of percussion (Group iv).



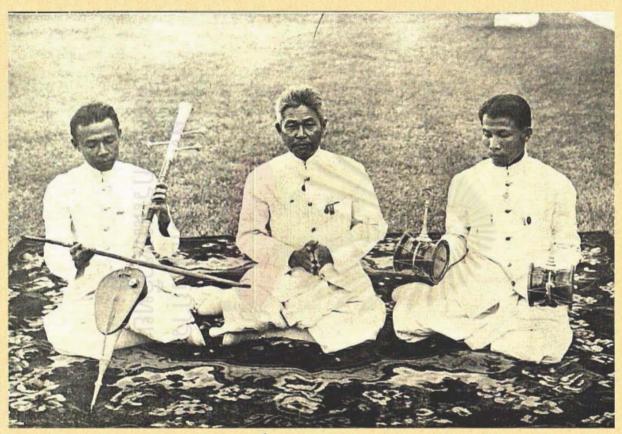
รูปที่ ๗ เครื่องเป้า Plate VIL Wind instruments,



รูปที่ ๘ เครื่องดุริยางค์ โบราณของชนชาติไทย Plate VIII. National musical instruments of the Thai,



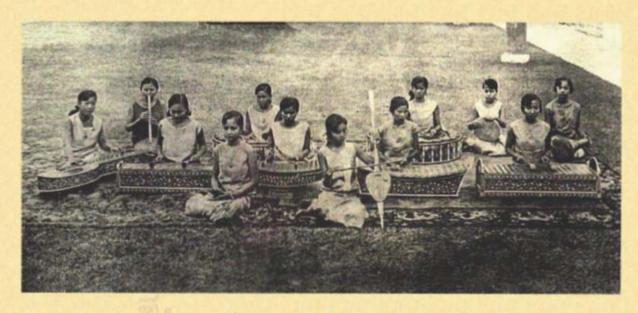
รูปที่ ธ พราหมณ์ดีดพิณน้ำเต้า Plate IX. Brahmin playing the Gourd lute.



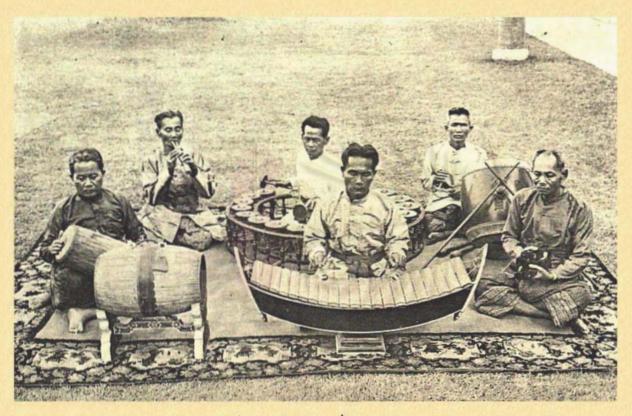
รูปที่ ๑๐ ขับไม้ Plate X. "Khap Mai" group.



รูปที่ 🕳 มโหรเครื่องสี่ Plate XL The "Mahori" of four instruments.



รูปที่ 🕒 มโหรเครื่องใหญ่ Plate XII. The "Grand Mahori" group.



รูปที่ ๑๓ บีพาทย์เครื่องท้า Plate XIII. The "Pi Pat" of five instruments.



รูปที่ ac บีพาทย์เครื่องใหญ่ Plate XIV. The "Grand Pi Pat" group.



รูปที่ ๑๕ เครื่องกลองแขก Plate XV. The "Klong Khek" group.



รูปที่ ob มโหรเครื่องสาย Plate XVI. The String-band.