

Burmese "Opium" Weights

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The "opium" weights illustrated are from the collections of Mr. & Mrs. Tsai and the author.
The datings given are in some cases tentative.



One of the earliest examples of a hintha bird seated on a pumpkin base and holding a pearl in its mouth. Weight 1 viss, height 3 inches.

16th-17th century



A 1 viss hintha bird weight from Pegu district, seated on an octagonal pumpkin base. It has a total of 4 seals... one back and front depicting an embossed hintha and one on each side with writing. Height 3 inches, width at base 2 inches, height of base 1-1/2 inches.

16th-17th century

WIDELY seen in curio shops and stalls in both Burma and Thailand are delightful, boldly modeled bronze figures of birds and animals of varying sizes set on solid round or rectangular bases. They are referred to as "opium" weights. The term immediately conjures up visions of dingy secluded rooms off dark winding alleys, where frail transparent Orientals with glazed unseeing eyes lie lethargically on platform beds puffing intermittently at long clay pipes packed with a wad of opium which has been carefully measured using one of these weights. It is indeed tempting to contemplate that a notorious substance such as opium, the reliever of pain on the one hand and the cause of untold suffering to many on the other, should have its own distinctive and special set of weights and measures.

This, alas, seems to be but a myth. The term "opium" weight for these measures was probably coined by a foreigner with a vivid imagination and a fascination for the forbidden. While it is true that some of the smaller weights could have been used for measuring this drug, "opium" weights served a much wider, more useful and down-to-earth purpose: they were used to gauge the weight of the daily items of commerce found in the Burmese market-place. All types of food, raw materials and metals, both ordinary and precious, were sold in quantities determined by these weights. Items were measured by a beam hung with two baskets or trays. The correct weight was placed in one basket and the other basket filled with the desired material until the two baskets balanced.



Two hintha bird weights on pumpkin bases.
Note the seals on the base of each.
16th-17th century

A 50 tical hintha bird weight which is possibly
transitional between the ones with the pumpkin
base and those with the low rounded base.
Height 3 inches. 17th century



Five hintha bird weights of varying sizes.
16th-17th century

These weights have long attracted the attention of travelers to Burma. Early adventurers to the court of Pegu in the sixteenth century noted that silver bullion was weighed with these "curious animal" weights. Yule, an emissary of Queen Victoria, illustrated one in his book, *A Narrative of the Mission Sent by the Governor General of India to the Court of Ava in 1855*. It is quite possible that these weights were also once used over much of Thailand and Cambodia, but for the purpose of this article, the discussion of weights has been limited to those actually found in Burma.

It is not known exactly when these weights came into existence. Two small metal figures resembling a lion and *hintha* bird were uncovered during the 1956 archaeological excavations at Beikthano, near Taung-winggyi in central Burma, a Pyu site thought to date from A.D. 100-400. Unfortunately, there is no evidence to confirm that they were actually used as weights. There are references to weights and measures in the inscriptions of Pagan (A.D. 1044-1287) but to date, no actual examples have been found that can be ascribed to that period with any certainty. U Thaw Bitu, an eminent scholar-monk of the Shwegaing Chaung Monastery in the Sagaing Hills of Upper Burma, has made a diligent survey of the chronicles and other written records from the eleventh to the nineteenth centuries. He has uncovered many references to weights and the occasions on which they were used. Unfortunately, this material is at present only available in Burmese.



A 1 viss hintha bird weight on a small octagonal base with a sprig of foliage hanging from the mouth and a small niche in the front of the base. Height 4-1/2 inches. Late 17th to early 18th century



A 1 viss hintha bird weight on an octagonal base found in Pegu, with a worm-like object hanging from the mouth and a supporting prop below the tail. Height 3-1/2 inches, width of base 3 inches. 18th century



A 1 viss hintha bird weight on a circular base with a small niche in front. There is an object suspended from the mouth and a handle to aid in lifting. Height 5 inches, height of base 1 inch, width of base 4-1/2 inches. Early 18th century

A most exciting find was made by U Maung Maung Tin of the Burma Historical Commission, Mandalay, who

recently uncovered a Burmese palm leaf manuscript written by Nandabahu, an administrator in the time of Alaungpaya (1752-1760), one of Burma's most illustrious kings. It contains a list of weights and their dates of usage, beginning with the Pinya-Ava period (thirteenth to fourteenth century A.D.) and continuing to his time of writing in the eighteenth century. The list is as follows:

Chicken	1340-1628
Stork	1342-1421
Stag	1364-1367
Elephant	1526-1542
Goat	1421-1468
Bird of Paradise	1439-1442
Toe Naya	1426-1672
Tibetan Bull	1629-1648
Crested Horse	1394-1750
Crested Bull	1322-1723
Heron	1401-1605
Bear	1425
Mynah	1312-1322
Hintha	1425-1714
Red Hintha	1348-1584
Koel (cuckoo)	1367-1590



A 20 tical duck type hintha bird weight.
Height 2-1/2 inches.
18th to early 19th century



Two well-worn weights of 50 ticals and 1 viss on rounded bases, the smaller of which has a niche in front. Height of 50 tical weight 3 inches, of 1 viss weight 4 inches.
18th century



A 50 tical hintha bird weight on a rounded base with a small niche in front. There is a handle and a small worm-like object suspended from the mouth.
Height 3 inches.
Late 17th century



A 1 viss hintha bird weight on a circular base with a plain handle and a worm suspended from the mouth. Note the use of incising for decoration. Height 4-1/2 inches.
Late 17th to early 18th century

Broadly speaking, weights may be divided into two groups... birds and quadrupeds. Within these two groups there is at times a problem of differentiating between the different birds and animals because they are fairly stylised. Constant use and handling over the years have also blurred many of the distinguishing details. Not all the creatures listed above have been positively identified in existing weights. It is quite possible that many of the earlier weights were melted down and re-moulded into the prevalent styles of the day. On the other hand, a number have been uncovered which are not included in Nandabahu's list, such as the tortoise and spider weights. Unusual weights such as these could have been made according to the whim of the craftsman, rather than following a directive from the king.

Opium weights come in various sizes and up to the nineteenth century a complete set consisted often units. The largest was a viss, a unit of weight of Indian origin equaling approximately 3-1/2 lbs or 100 ticals. This was followed by the 50, 20, 10, 5, 2 and 1 tical, ending with 1/2, 1/4 and 1/8 ticals. For easier lifting, many of the one viss, 50 and 20 tical weights came with a handle attached to the head and tail of the weight. These handles blend in well with the animal and give the larger weights a certain elegance which is lacking in the smaller ones. During the nineteenth century, larger weights such as 10, 5 and 2-1/2 viss became more popular.



A pair of karaweik weights, 50 ticals and 1 viss, on small

A 20 tical hintha bird weight on an

pumpkin bases. Late 16th century

octagonal base with sloping sides.
Height 2+ inches. 19th century

They were sometimes cast in brass rather than bronze. The larger weights, from 10 ticals to one viss, were usually carefully modeled with greater attention to detail. The small weights were generally not so carefully formed, and with those of less than one tical it is often difficult to discern the creature being represented.

An opium weight consists of two parts, an animal figure and a base which are nearly of the same weight. The base may be circular, rectangular, hexagonal or octagonal. Most bases taper upwards to form a small platform on which the animal stands; many are incised with horizontal lines and short, hatch stroke designs. In addition to this decoration, many weights have marks stamped on the side or underneath the base.

The weights and measures system was subject to scrutiny by the king who, at the beginning of his reign, had a master set of weights made in the form of an animal of his choosing. These weights were kept in the *Hluttaw* (parliament) and people were expected to make sure that the weights they used conformed in heaviness to the standard weights. As far as is known, they were not required to alter the forms of the weights they used with each accession; the weights of previous reigns could still be used, provided they conformed in heaviness to the new Hluttaw weight. Weights were checked and legalized by a stamp or seal given by the king or his officials in each town.

The earliest type of seal seen on an opium weight, probably dating from the sixteenth or seventeenth centuries, is a small round embossed replica of the animal represented on the upper portion of the weight. This was pressed into the front of the pumpkin-shaped base on which the animal is mounted. In later seals (circa eighteenth century), the shape of the animal is merely outlined in a small niche in the front of a plain round base.

A popular nineteenth century seal is in the form of a star flower with four to nine petals. On the larger weights this was placed on the right side of the base, while on the smaller ones it was found on the underside of the base. Some other marks which have appeared on the bases of opium weights are:



Very occasionally, Burmese digits representing the year of manufacture or the actual units of weight may also be inscribed on the base.



Eight karaweik weights of varying sizes. 19th century

Opium weights were cast by the *cire perdue* or lost wax process. Since they were to be used as standard measures, great care was taken in weighing the amount of molten metal needed in casting. Extreme caution was also taken in measuring the amount of wax needed when making a mould. For one viss of bronze, ten ticals of wax were used. The proportion of wax would vary slightly depending on the composition of the alloy. Made of lead, the animal mould would be in two half pieces, while the base mould consisted of only one piece. During casting, the molten metal was poured in through an opening in the base. Occasionally a weight might be found with a very small base. This was due to the mould being a little too large for the amount of metal used. The further addition of metal would alter the weight, so the base was left incomplete. The basic metal used was bronze, an alloy of copper, tin and zinc. The earliest weights found dating back to the sixteenth and seventeenth centuries are reddish in colour due to a higher proportion of copper being used in the alloy. During the late seventeenth and the eighteenth centuries, tin became more dominant in the alloy, ranging from 10 to 40 per cent, thus giving the weights a slightly silvery-whitish hue. Weights made during the late eighteenth and the nineteenth centuries display the typical light yellowish colour associated with bronze. Late nineteenth and twentieth century weights, being made of brass, assume a deep yellowish colour. Weights in Upper Burma were made by craftsmen either in Ava or the Tampawaddi district, half way between Mandalay and Amarapura. In lower Burma, during the seventeenth and eighteenth centuries, weights were made in the Pegu district.

Just as the composition of the alloy varied at different times, so did the animal styles represented on the weights. Studies of the animals depicted in sixteenth to nineteenth century frescoes and in the diagrams on Buddha's Footprints over the same period of time made independently by U Thaw Bitu and U Win Maung, an artist of Mandalay, have led to a broad tentative dating of some of the opium weights found. Much more work needs to be done in this field, however, before findings can be considered conclusive. With further research it might even be possible in future to assign weights to various reigns with a fair degree of certainty.



1 viss and 50 tical karaweik weights on inward sloping octagonal bases. Height of 1 viss weight 4-1/2 inches, height of 50 tical weight 3-1/2 inches. 19th century

A 1 viss hintha bird weight on a hexagonal base. Height 4-1/2 inches. 19th century

Let us take three of the most common animals depicted on opium weights, the hintha bird, the *karaweik* and the *toe*, and look at some of their different forms as a possible guide to tentative dating.

The most common weight is in the form of a hintha bird or Brahmani duck which is sometimes also referred to as a *hamsa*. The emblem of the Mon kingdom which once ruled over lower Burma, it has a duck's beak and feet and a crested comb. There are usually three to four layers of ruffles down the back of the neck. The beak often has an object suspended from it which may resemble a worm, a sprig of foliage or a pearl. The breast is generally rounded and protruding; the wings are set close to the body and may be decorated with curved lines to indicate the main feathers. The tail usually turns upwards like that of a drake, although occasionally it may be short and stumpy. Back and tail feathers may be indicated by a series of parallel curved lines. The feet, which are not usually very clearly moulded, support the front of the body, while a prop of metal under the tail adds extra support to the back. Details of the head and feathers may be emphasized by incising.



A set of nine hintha bird weights. These are sometimes referred to as cock weights. The bases are hexagonal. 19th century

The earliest hintha weights found are thought to date from around the sixteenth and seventeenth centuries. They are set on a pumpkin-shaped base. The head is large and crested, while the neck is usually plain. Sometimes an object may dangle from the mouth. The breast is quite small and the wings large. The upturned tail resembles a sprig of curling foliage. The feet are barely discernible and the bird appears to be sitting on the base. A small circular replica of the hintha may be embossed on the front of the base. There may also be other round or square seals bearing letters and numbers on the sides of the base. Some of the loveliest hintha weights uncovered date from the eighteenth century. They are generally supported on a smaller round base, a few of which tend towards the octagonal. The beak closely resembles a duck's bill. The larger weights often have an object suspended from the mouth, touching the centre of an ample breast. The eye is usually outlined and the head is crowned by a two or three-point curling crest, which is echoed in the four or five layers of feathers lying flat against the nape of the neck.

The wings and tail curl gracefully upwards in a restrained manner. The larger weights, too, are equipped with a plain hook-shaped handle attached to the back of the neck and the base of the tail feathers. The feet show a little more sculpturing than in previous examples. Some weights have a small niche at the front of the base in which an outline of a hintha has been imprinted. Unfortunately, many of these marks are very blurred and the hintha outline is most difficult to make out.



A 1 viss karaweik weight on an octagonal base. Height 4-1/2 inches. 19th century



An early example of a 50 tical toe ouncing weight on an octagonal base with a niche in front. Note the embossed designs. Height 3 inches. Late 17th century

During the eighteenth and nineteenth centuries, a hintha weight closely resembling a traditional duck form also came to be used. The shovel-shaped beak is set right against the breast as if in a sleeping position. The neck, wings and tails are very simply moulded with little attention to detail. The bird is mounted on an octagonal base with sloping sides.

During the nineteenth century, the hintha weight became more flamboyant. Set on a larger hexagonal or octagonal base, some weights at first glance appear to resemble a cock rather than a duck. Some sellers of opium weights in Mandalay actually refer to them as cocks. The crest and the neck feathers curve outwards. The wings are concave unlike the earlier examples which are convex. The eye is very prominent. Less attention has been paid to the tail feathers than in earlier examples. The feet are very large and there is a prop of metal supporting the tail. The handles on the larger weights have become quite elaborate and are decorated with a centre knob and side protuberances. Some bear the mark of a star flower on the side or under the base. Modifications to this style have continued in twentieth century reproductions.

One bird often confused with the hintha is the karaweik, or Burmese crane. It is second in popularity as far as the bird weights are concerned. Some early karaweik weights set on a pumpkin base have been found, usually reddish-black in colour due to the high amount of copper present in the alloy. The bird is characterized by a long, blunt, slightly drooping bill, prominent eyes, a large fluffy crest and ornate tail. The legs are in a crouched position. The form of the bird quite closely resembles those painted in the sixteenth-seventeenth century frescoes. In keeping with this style, there is often a small circular replica of the bird stamped on the front of the base of the larger weights. Late eighteenth and nineteenth century

weights have a sharply pointed beak rather like that of a chicken. The feet, where visible, also resemble those of a chicken. The body is longer and slightly more streamlined than that of a hintha, which looks rather plump by comparison. The crest is similar to that of a hintha, while the neck feathers look like upturned frills. The back feathers are often emphasized by bands of horizontal hatch strokes. Tail feathers curve upwards to be almost level with the head in many cases. A star flower mark may be discernible on the sloping octagonal base.



Four toe ounge weights. Late 17th to early 18th century

Another most popular animal form expressed in Burmese weights is the toe, often erroneously referred to as the *chinthe*, due to its resemblance to the Burmese lion which guards the entrance to temples throughout Burma. The toe is a fabulous animal supposed to inhabit the Himalayan forest. It has the face of a lion, horns, and the hooves and tail of a horse. There are different species of toe in Burmese folklore such as the *toe naya* which resembles a lion, and the *toe ounge* which is like a bull. The *toe myin* has certain characteristics pertaining to the horse, while the *toe nwa* is not unlike a cow. Semblances of these different types of toe have been seen in opium weights and probably refer to such names as Tibetan bull, crested horse, crested bull and toe naya mentioned in Nandabahu's list of weights. Some of the earliest toe found which date back to the seventeenth and eighteenth centuries stand on a low octagonal base. They are thought to resemble the toe ounge Tibetan bull. The face with its bared teeth and flaring nostrils resembles a lion, while the round plump body, long tail and round hooves are more like a horse. The head is crowned with a pair of horns, below which are small pointed ears. Some are decorated with sprigs of foliage curling from a grinning mouth. Many have curvilinear mouldings over the chest and face. Sometimes on the base there is a small niche containing an outline of the animal.



1 viss toe myin weight on a rectangular base. Height 4 inches. Late 17th century



1 viss toe myin weight on a circular base with a sprig of foliage suspended from the mouth. Height 4-1/2 inches. Late 18th to early 19th century

Like other nineteenth century weights, the later toe becomes much more flamboyant. The face is still that of a lion with the body of a horse and could well be a toe myin rather than a toe oung. The head, in addition to ears and horns, now bears one or two extra curling protuberances, as do the mane and tail. These are also repeated on the handle. Instead of a sprig of foliage suspended from the mouth, many have what looks like a beard issuing from the chin and curling up slightly on the chest. The base in most cases is rectangular with sloping sides incised with horizontal decoration. Some bases have a round mark at the back, while others have the star flower. Some of the transitional types, while like the toe myin in form, retain a circular base and sprig issuing from the mouth.



A 5 viss toe myin weight with a nine star flower seal on the side of the rectangular base.
Height 8 inches, height of base 2 inches. 19th century

These three types are the most common animals to be found on opium weights. Other animals such as the elephant, chicken, horse, tortoise, spider and even a fish have been seen but they are extremely rare. When not in use, weights were kept in a beautifully carved semicircular wooden box especially made for the purpose. The lid is carved in bas-relief with floral or animal motifs, while the inside of the base is hollowed out into depressions to accommodate the two trays of the scales and the weights which are neatly arranged around the scales. These boxes, along with the weights, are very good examples of the care and craftsmanship that the Burmese have put into fashioning their everyday objects.



Semicircular wooden box for keeping "opium" weights. A pair of toe animals are carved in bas-relief on the lid.
Length 19 inches, width at widest part 9-1/2 inches, height 4 inches. 19th century

Because of their popularity with tourists, fakes and reproductions of opium weights abound. Weights in bronze ceased to be made shortly after the British took over Burma completely in 1885, and they were gradually replaced by the familiar round iron weights widely used in many countries today.

In checking the authenticity and possible age of a weight, it is necessary to take into account a number of factors. The style of the animal depicted is important, for it varies at different periods. A comparison with dated examples seen in Burmese painting is a fairly reliable guide. These have been published in a number of art books and scholarly publications. A knowledge of the animals actually used on weights is helpful, for some of the animals currently being produced on new ones, such as the peacock, were never previously depicted on weights. It is not sufficient to date on style alone, though, for moulds continued to be used for many years throughout various reigns. It is necessary to check the alloy composition, which can be done by scratching the base with a sharp object. As previously mentioned, a coppery colour suggests that the weight could be an early one, whereas a strong brass colour indicates that the weight is probably new. Seals and marks on the base can also serve as an aid to dating, for various seals were used at different times. A word of warning here, for these are relatively easy to fake, as they were usually added later, rather than at the time of casting. Another guide to the authenticity of weights is to check the base. If the underside of the base is completely smooth, it is probably new. The bases of genuine opium weights are usually pitted and scarred due to constant use and rough handling.



50 tical and 1 viss toe myin weights on rectangular bases with sloping sides. Height of 50 tical weight 3-1/2 inches, height of 1 viss weight 4-1/2 inches. 19th century

When collecting weights, it is advisable to select separate examples rather than purchasing them in a set, for fakes are commonly included in some sets. It is relatively easy to purchase some of the larger and medium weights, but it takes a little more persistence and patience to rummage around antique shops to acquire the smaller units. This is part of the fun for most collectors. Collecting weights is not expensive, but dealers (in Thailand and Burma) are aware of the rarity and superior craftsmanship of certain weights and will charge accordingly. Nothing can match the joy and exhilaration experienced by a collector who finds exactly what he has been looking for over a period of time...the opium weight collector is no exception.