

MANCHU ARCHERY EQUIPMENT

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INTRODUCTION

China has had one of the most diverse and long-standing archery traditions in history. Evidence suggests the use of composite bows from ancient antiquity up to as late as the 20th century. It was not however, a native Chinese type of archery equipment that made it all the way to the twentieth-century, for in 1644 China was taken over by a Northern people who had then started to call themselves Manchus. They came from the Northeast and took advantage of the decaying Ming dynasty to set up their own dynasty, the Qing. Under the Qing dynasty the Chinese arts and literature once again flourished under patronage of Manchu emperors, but the tools of its archery tradition changed to Manchu / Jurchen equipment that was now made by both Chinese and Manchu craftsmen. Today, archery equipment of the Qing dynasty is still often referred to as Chinese archery equipment. This is with some justification, after all it was widely used by Chinese as well from the seventeenth-century onwards. I prefer to call it Manchu archery equipment because it was developed by their Jurchen ancestors for the specific conditions of their daily life and introduced into China by the Manchus..

To understand Manchu archery equipment it is important to know that the majority of Manchus were former Jurchen tribes, hunter-gatherers whose bows and arrows were devised for large game hunting. As such they did not design their equipment for range and arrow velocity, but devised ways to shoot a very large projectile very accurately over reasonable distances. For a more detailed survey into this subject I refer to my paper *Rediscovering Manchu Archery* which I presented at the World Traditional Archery Festival 2008 Academic Seminar in Busan, South Korea.

In this article I will cover the subject of Manchu archery equipment in four sections, being thumb rings, bows, arrows and a short section on bow-holsters and quivers. I will end with a short conclusion. For now, we turn to the Manchu thumb ring.



Manchu general-in-chief of Gansu province, Yan Xiangshi showing typical Manchu dress and archery equipment. Hanging scroll, ink on silk, 1760. The text above describes his bravery and perseverance on the battlefield. Currently in Museum Yamatobunkakan, Japan.

The "Manchu" Qing dynasty

Lasting from 1644-1911 was the most prosperous age China had known by criterium of its gross domestic product, land surface it spanned, cultures it ruled, and the technological and literary advances it made. At its height the Qing ruled over a third of the world's population and with an equal share in world trade it was the world's strongest economy for well over a hundred years. The Qing set the borders of today's China and incorporated for the first time 56 different cultures in the Central Asian sphere into one single empire. Needless to say, the Manchus had a tremendous impact on Chinese culture and history. Much of their accomplishments are now commonly hailed as Chinese, while the Manchus that remain have gotten disconnected from their original language and culture. For example, the Chinese classic *Honglou Meng* (*Dream of the Red Mansion*) was written by a Manchu. The typical "Chinese" dress, known as the *cheongsam* is also of Manchu origin, its buttons closing to the side in typical Northern fashion to prevent the bow-string from hitting the buttons.

MANCHU THUMB RINGS

Thumb rings were used by archers all across central Asia and beyond, usually with a teardrop-shape such as seen among others in Turkey, Iran, India, Ming China, and Korea. The Manchus used a cylindrical ring instead. The technique using a Manchu thumb ring is somewhat more difficult to learn than the technique used with a conventional ring, but the release is very crisp. At first these rings were only practical but as the dynasty progressed ever more sumptuous rings were made of precious materials that were worn by Manchu men of high status as jewelry and a testament to their Manchu origins. Among the finest rings known today are those made under the reign of the Qianlong emperor (reigned 1736-1796), with at the pinnacle the many rings made for him personally.

Materials

User-grade Manchu rings were almost always made of bone. As the dynasty progressed, many stone, jade, ceramic and glass examples were made. When it came to use however, we see even the emperor and his most powerful men depicted using traditional Manchu thumb rings made of bone. All kinds of bone were used, but tiger bone was preferred. It is known that Manchu men, including the emperor, proved their martial prowess by taking on large Siberian tigers armed with spear or bow and arrow. It is conceivable that these rings were worn as a sign of the Manchu hunter's domination over the tiger.



A practical Manchu thumb ring, possibly of tiger-bone. Author's collection, photo author.



A cinnabar lacquered box containing seven jade rings made for the Qianlong emperor. Each ring is inscribed with poems by the emperor's own hand. Sold for over \$6 million dollars at Sotheby's, Hong Kong, April 2007, lot. 602. It is probably the most expensive archery equipment ever sold. Photo: Sotheby's.



Detail of a nephrite Qianlong era thumb ring in the collection of the Asian Art Museum of San Francisco Museum. Note the exceptionally fine work on the decoration. Photo: Author.

MANCHU BOWS

Manchu bows are of composite recurve design, with water-buffalo-horn bellies and sinew covered backs. Their cores are usually of wood, although bamboo was used as well. Preferred wood for the core was mulberry, and the ears were often birch for the more expensive bows while elm is frequently encountered on more standard bows. The handle was traditionally made of cork, sometimes leather is encountered on later examples. The sinewed back was covered with birch bark in increasingly elaborate patterns as the dynasty progressed. Starting from the late eighteenth-century onward, some bows had parts near the handle and ears that were covered with ray-skin in order to prevent these places from wear. Nocks on later bows often have horn inserts. The string bridges are made of deer antler, bone or wood. Among the better Qing bows were those with special patterns in the horn, or those made of albino water buffalo horn. Very rare are bows that were made from a single long piece of horn. Such bows are in the Palace Museum collection in Beijing, Shenyang, and one is in the Metropolitan Museum of Arts in New York, accession number 36.25.2525.

The Manchu bow is exceptional among traditional composite recurve bows because it is by far the largest bow of this type: the vast majority are between 160-170 cm in strung condition. This is mainly due to the extremely long ears of this design, reaching anywhere from 27 to 33 cm in length, that provide the smoothest draw found among traditional bows that is only comparable to a modern compound. As I pointed out in my previous article, the long ears sacrifice speed and efficiency in order to gain stability, eliminate the need for very consistent draw-lengths, and provide the ability to launch larger projectiles with unsurpassed accuracy on short to medium ranges. This will surprise many for it is often assumed that the only way to properly use the traditional horn - wood - sinew design is for a short and fast bow. But solely comparing numbers of speed and efficiency per pound of draw and judging a bow's effectiveness from only that is misleading. To me this is about as effective as judging a car only by the speed it can produce from a certain amount of break horse power. It sure says something, but it is a mistake to take it as the only criterium to judge a car by. As the seventeenth and eighteenth-century Manchus won war after war against people armed with firearms and / or short, fast bows, we need to seriously reconsider the common views on the military effectiveness of slower bow designs.



One of the largest Manchu composite recurve bows one can expect to encounter. Of simple execution. Early nineteenth-century. 102.3 cm across in current state, ears 33 cm long from tip to knee. Used for imperial examinations strength tests. They went up to 240 pounds of draw. It was said that there was nothing that a 100 pound bow could not pierce. Author's collection. Photo: author.

Decoration

Manchu bow decoration went through a number of phases that can be used as an aid to date them, but be wary, as with all dating of objects it is not an exact science and earlier designs have seen later revivals. The earliest bows were generally robust and of rather plain design where the natural materials were to speak for themselves. Even the bows attributed to the early Qing emperors which are now in the Palace Museum in Beijing are for the most part of this plain, natural and undecorated type. Most are characterized by having natural colored birch-bark covered limbs, often with a camouflage pattern painted on it in black or sometimes brown or red, and extremities covered with white birch bark. None of these bows have ray-skin covered parts, except for some examples that have a small patch of green ray-skin at the handle where the arrow passes.

In the mid. Qianlong reign a new type of bow emerged in the emperor's circles, now lavishly decorated with elaborate and multi-colored designs. The first of these bows documented was one of the Qianlong emperor's own bow, probably designed by and for himself. He had a number of these bows made that had limbs covered with elaborate patterns made of a large number of small pieces of bark, and that had auspicious symbols on certain points. The first of these were still executed in rather natural colors, later examples became brighter colored. The first bows with ray-skin covered ears also emerge around this period, being mentioned in the 1759 court regulations in the *Huanchao Liqi Tushi*. Officers throughout the eighteenth-century, many of them portrayed on a large series of large portraits in 1759 - 1760, are still depicted carrying the more plain and traditional designs but which are without doubt impeccably executed. This period represents as much the height in Qing bow-making, as it was a height in all other arts and crafts throughout the empire. Style variations set in this period were to endure in rather standardized form up until the very last days of the dynasty, and some even beyond.

In the nineteenth-century a simplified version of the "Qianlong style" made it to the masses, with similar layout of the decoration but with more standardized designs. The use of luck and longevity symbols reached a height in this period of dynastic decline. Ray-skin sides of the handle and ears are now a common feature on the better quality bows. Relatively simple bows remained in use until the very end of the Qing, but would never again approximate the understated grace of the early Qing bows.



A Kangxi period imperial bow of classic late 17th / early 18th century design. The imperial household inventory tag is still attached, stating in Chinese and Manchu that it had a draw-weight of 7.5 li, equivalent to 100 pounds, showing that the early Qing emperors were still very capable archers. The strongest Kangxi bow in this collection has a draw weight of no less than 150 pounds. Palace Museum, Beijing. Photo:



A rare Qing bow with applied bark in a geometric “mosaic” pattern. It was probably made in the Beijing workshops that also made the imperials bows in the late eighteenth, or more likely, early half of the nineteenth-century. It has decoration layout that is identical to the late Qianlong emperor’s bows with the only difference that it has ray-skin ears and handle protectors while a;; Qianlong bows of this mosaic type had plain wooden ears. Author’s collection. Photo: author.



Details of the above bow. It is decorated with eternal knots, swastikas and lozenge patterns derived from Indian and Tibetan art. Combined they are a pun in Chinese for victory and dynastic continuity for many generations, the concerns of a high military official or ruler. Lower class bows often express more common wishes for longevity, wealth, luck and having many descendants. Author’s collection. Photo: author.

Manchu bows, Mongolian bows?

To the general audience Manchu bow bears a striking resemblance to the Mongolian bow. Indeed it looks rather similar to the bows used in Mongolia up to today, with the only difference that antique Manchu bows have longer ears and were of more refined manufacture. The bows are certainly related, but not in the way that is often assumed which is that the Mongolians introduced this type of bow to the Jurchen / Manchus. Quite on the contrary, when the Qing fought the Mongolian tribes in the seventeenth and eighteenth-centuries the Mongolian armies were already equipped with firearms and spears. It was after their incorporation to the Qing empire that many Mongolians, now assimilated in the Qing army, once again picked up a bow, this time the Manchu bow. Manchu bows are hard to make and their long ears make them less forgiving to twist, so they must be made to very precise standards. Those border regions that picked up Manchu archery therefore frequently made them with shorter ears, making them somewhat faster and easier to make and maintain. These Manchu-derived bows are now still made in Mongolia, parts of Tibet, and Qinghai up to today. Even China’s last bowyer, Yang Fuxi, makes bows of this style now. They have little to do with the original Mongolian bow, which were quite like the bows used by Song and Ming China also.



Details of the ear of a typical nineteenth-century bow with details that remind of earlier styles. Author's collection. Photo: author.



The limbs of this bow remind strongly of the camouflage patters found on seventeenth and eighteenth-century bows. However, the emerald green ray-skin details, shape of the camouflage itself and the construction of the ears are a giveaway for this bow's later manufacture. Author's collection. Photo: author.

Two limbs showing a layout that derived of the imperial mosaic bow above, with a patch with lobed panels demarcating the transition from working limb to ear. These patches are adorned with auspicious designs, like on the mosaic bows but without actual mosaic-covered limbs. These auspicious designs also found their way to Mandarin ranking badges of the same period.

Such limbs are common on bows dating from the mid. to late nineteenth-century.

Author's collection. Photo: author.



MANCHU ARROWS

Manchu arrows were initially designed for hunting various types of game, and are very large by any standards. Large arrows have many advantages when hunting. They are strong, durable, and easy to find when one missed. They provide the ability to carry very large and heavy arrowheads, which could do more damage. When not killing the target instantly it was not likely to go far with a large and heavy arrow stuck through its body. A typical antique Manchu military / large game hunting arrow is made of wood, 9 to 15 mm thick, 95 to 115 cm long, and frequently weigh 60 to 100 grams. Whistling arrows were even larger, the largest example I have examined having a 19 mm thick shaft and a total length of about 130 cm. To stabilize large, relatively slow and heavy arrows they needed long feathers: often about 24-38 cm in length. Most commonly used were feathers of vultures and steppe eagle. Crane was also used. The arrowheads were tanged, their needles inserted and glued in the wooden shafts. The shaft's end was then wrapped with glue-soaked sinew which was in turn covered bark of prune or cherry, to protect it from moist and strengthen the whole. The nocks usually often self-nocks wrapped with a type of bark or ray-skin to protect it from splitting. On rare occasion one encounters bone nocks, or nocks assembled from different wooden parts.



A typical Manchu target arrow of the early to mid. nineteenth-century. Tibetan cherry bark wrappings, ray-skin nock, and steppe eagle feathers. Note the unusual length of the fletchings, reaching just short of halfway up the shaft. Author's collection. Photo: author.



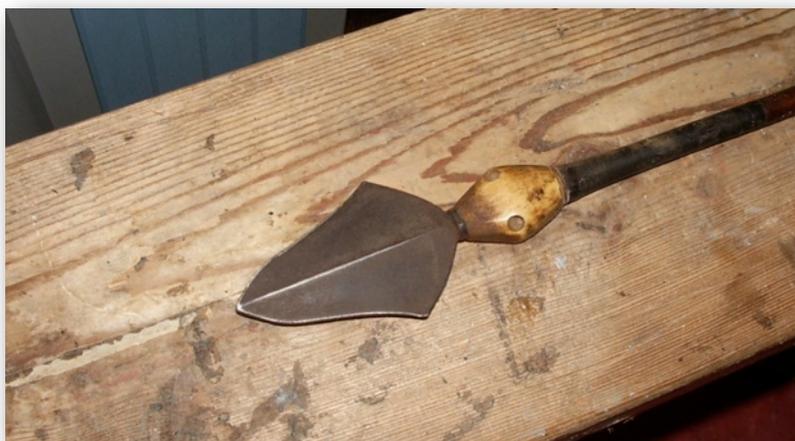
Ray-skin covered nock of the above arrow. Photo: author.

Arrowheads

For most the subject of antique Chinese arrowheads is a vague field, with so many dynasties and a multitude of shapes and styles. Frequently dealers and collectors come up with most optimistic dating of their items, and even more fantastic assumptions on the purpose of certain styles and shapes. To cut through the shroud, all we need to do is consult the useful texts and illustrations left by those who actually used them. What did they say about their own equipment? As the vast majority of Chinese arrowheads found on the market are in fact Qing dynasty arrowheads, there is no book more useful than the 1759 and 1766 editions of the *Huangchao Liqi Tushi*, painstakingly compiled on imperial edict and proof-read by no less than the Qianlong emperor himself who was an accomplished military strategist, designer of weapons, and outstanding archer. It describes 64 arrows, states their size, materials, construction, decoration and intended use. It lists peculiar arrows for shooting hare, waterproof duck hunting arrows, a variety of military and hunting arrows, even arrows designed to shoot game on different undergrounds: small animals can be crushed on rock or need penetrated when on a soft underground. Other arrows were universal, to be used for a multitude of game such as the large broad-headed arrows used for bear, boar and tiger.

Manchu whistling arrows are notable for their size, diversity and the sophistication of their designs. There are many theories on their use but from the above work it gets obvious that at least by the high Qing, any arrow with a whistle and a sharp tip was a hunting arrow, for some types of game, mainly deer and hare, get startled by the sound of the whistle and thus sit still from the moment of release until impact. Other whistles with no sharp parts were used for distracting game or driving them to open spaces. There was even a special arrow to wake a tiger. One type of whistle was especially designed for a peculiar Manchu target shooting game that was still practiced by the Xibe tribe in the 1960's.

The large Manchu hunting arrows used to down large and thick-skinned game such as wild boar worked well against soldiers in all kinds of armor. The standard military arrow all through the Qing, the *meizhen* or "plum needle" was pretty much a hunting arrow that found a new purpose. It is nearly identical to bone arrowheads used by the "wild" Manchurian Orochen hunters up to the 1920's.



The head of an eighteenth-century Manchu whistling arrow for shooting deer and stag. Anonymous Chinese private collection. Photo: author.



Manchu military arrowheads of the meizhen type. Note the angular execution on the far right, a typical nineteenth-century style. The rest is probably eighteenth-century or older. Author's collection. Photo: author.



Note the offset feathers, meant to promote fast spin that stabilizes the large arrowheads on these hunting arrows. Author's collection. Photo: author.



Tips of Manchu arrows. From left to right: standard military arrow, target whistle arrow, target arrow, small game hunting arrow, another small game hunting arrow. Note the angular shape of all the arrowheads, this is typical for nineteenth-century manufacture. Author's collection. Photo: author.



A splice in the shaft at the tip of a late nineteenth-century hunting arrow, it looks like a quick repair as the wrapping was not re-done. Author's collection. Photo: author.



Different types of nocks on Manchu arrows. From left to right: a rather atypical bulbous nock with ray-skin wrapping. (The bulb is probably inspired by Indian nocks.) The next two are high quality target arrows of which one is already shown above, with cherry bark and ray-skin wrappings. The fourth is the simple nock of a large hunting arrow, wrapped with black ray-skin. The last is the self-nock of a standard military arrow. Author's collection. Photo: author.



The steel head of a late eighteenth-century imperial hunting arrow. Note the golden damascened decoration depicting water plants. The outline of this arrowhead is typical for Manchu arrows of this period. Palace Museum collection, Beijing. Photo: author.

BOW-HOLSTERS AND QUIVERS

The Manchus never carried many arrows to battle, on parade, or to the hunt because their style focused on well-aimed shots on relatively short distances. Their quivers were rather small, only covering about one-fourth of the arrow's total length, and kept the arrows clearly separated in a fan shape. On the back of the quiver were usually three pockets for special arrows with large heads, and sometimes also two or three small pockets for more slender arrows in the front. Inside the quiver the arrows were separated by means of a folded blanket that held them, or in some instances by leather separators. Quivers were often made of rawhide, covered with leather, silk or velvet. They were fitted with brass or iron fittings. Lavish court examples were covered in silk-brocade and had intricate gilt-iron fittings holding semi-precious stones, gems and pearls.

Their bow-holsters covered about half the bow, leaving the other half exposed so it could be drawn quickly. Manchu bow-cases all had a ring on the side through which they could insert their trusted saber, without its scabbard when going in battle. (At any other occasion the saber was suspended from the belt, in its scabbard, hilt usually backwards.) The most obvious reasons for this would be to avoid carrying the extra weight of the scabbard and with a sharp edge hanging down from their bow-case, enemy foot soldiers would be discouraged trying to pull the Manchu mounted warriors off the horse by grasping the holster. Like the quivers, bow-holsters were made of rawhide or leather, and covered with the same range of materials as the quivers.



One of the Qianlong emperor's own sets of bow case and quiver, covered with silk brocade with flowers, iron fittings with gems. He had a set for every occasion. Note the ring on the right corner of the bow-holster. Palace Museum, Beijing. Photo: Palace Museum.



A peek inside a very similar quiver that also belonged to the Qianlong emperor. Palace Museum, Beijing. Photo: Author.



A simple early nineteenth-century military quiver with some of the earlier depicted arrows. Author's collection. Photo: Author.



These quivers are often mistaken for Chinese military quivers but they are in fact Tibetan. They can be seen on various photographs taken in Tibet by the Younghusband expedition. Anonymous Chinese private collection. Photo: Author.



The Manchu bow-case and quiver are much more similar to those of their Korean neighbors. The question remains, who came up with it first? Museum Volkenkunde, Leiden. Photo: Author.

CONCLUSION

The largest of composite recurve bows was far from unrefined. As a practical hunter's tool it evolved into Chinese elite showpieces, assuming Chinese styles of decoration but never losing their very own geometry and shooting characteristics. In the height of the Qing we still see a large range of Jurchen hunting arrows in use by the imperial family. If the Manchus had not taken over China, their bows and arrows may never have reached a general audience and would have disappeared quietly due to global modernization. Instead, the height of the Qing resulted in an interesting blend of robust Manchu practicality and fine Chinese craftsmanship, as shown by the many fine pieces of archery equipment made in this period. With this article I hope to have been able to contribute to an appreciation and understanding of Manchu / Qing archery equipment.

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