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Weapons of Ancient China

梅文 ◎ 编著



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责任编辑：高 杨 司 雯

特约编辑：朱昌爱

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中国春秋时期的著名军事家孙武曾经说：“兵者，国之大事，死生之地，存亡之道，不可不察也。”在中华文明的漫漫历程中，几乎时时笼罩着战争的血雨腥风。而作为文明演进的副产品，中国传统兵器更是集历代科技、工艺、文化、艺术于一身，打上了一个民族历史的烙印。

中国传统兵器的发展经过了一个漫长的历史过程，其萌芽可以追溯到原始社会。当时人类将自然界中的石块、竹木、骨角等，经砍削、打磨、烘烤，制成弓、箭、刀、矛、棍等工具。随着部落战争的出现，很多生产工具演变为兵器，兵器制造技术不断提高，生产规模日益扩大。商周时期，青铜兵器占据着兵器的主流；春秋战国至宋代，铁制兵器大行其道；从宋代起，中国兵器进入

“The art of war,” said Sun Tzu, strategist during China's Spring and Autumn Period (770 B.C.-476 B.C.), “is of vital importance to a state. It is a matter of life and death, a road to either safety or ruin. Hence it is a subject of inquiry that can on no account be neglected.” True, over the past thousands of years of Chinese history wars were never missing. As a by-product of civilization progress, weapons in ancient China, something that had incorporated science, technology, culture and art, showed Chinese history from a unique perspective.

The history of ancient weapons can be traced far back to China's primitive society when tribe people made the first bow, arrow, chopper, spear and cudgel ever seen in history from stone, bamboo, wood or animal bones by cutting, grinding and baking. The things they made were tools rather than

冷兵器与火器并用的时代，直到清朝灭亡。回顾中国兵器的进化历史，可以帮助我们从一个角度审视科技的力量，反省文明的意义。

本书以中英文对照的方式回顾了中国传统兵器发展过程，对具有代表性的兵器类型进行了全方位介绍，同时配有大量实物及细节图片，以帮助读者更加直观、具体地了解中国传统兵器。

arms. However, with more and more fights happening between or among tribes some tools took a change, becoming weapons. Their making technology was better and the size of production bigger. During the Shang and Zhou Dynasties bronze was the major material for weapon making; from the Spring and Autumn and Warring States period down to the Song Dynasty, iron replaced bronze as the material. Beginning from the Song Dynasty, fire arms worked in battlefields together with cold arms and this situation lasted until the collapse of the Qing Dynasty. So exploring the progress of ancient weapons can help us understand the strength of science, technology and civilization through a different approach.

In both Chinese and English, this book, by detailed descriptions and many illustrations, explores the history of most representative weapons existent in ancient China, hopefully able to make a worthwhile information source for readers interested in this topic.

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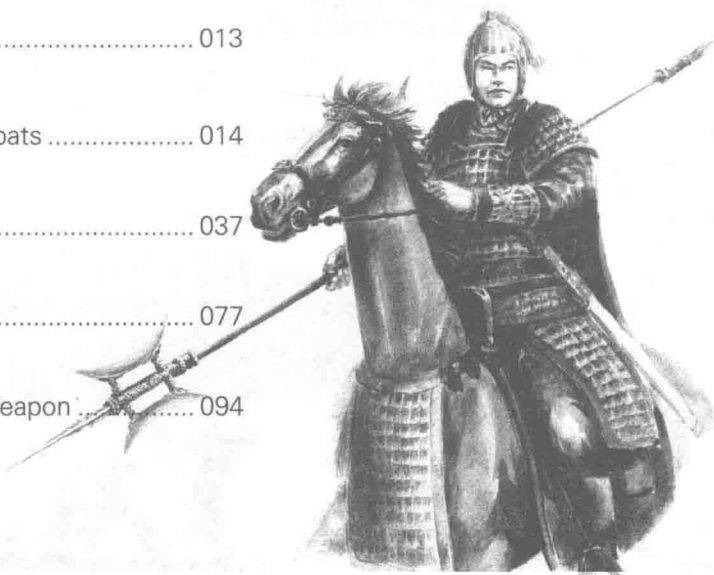
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绪论 中国古代兵器的历史

Introduction: The History of Weapons in Ancient China

在中华民族五千年的文明史中，战争一直伴随着社会的发展与变革。而战争中使用的各种兵器，不仅代表了各个时代工程技术发展的最新成果，并且成为古代战争与战场的缩影。

人们来自自卫和狩猎的工具就是最初的兵器，往往没有特定的形状，只是随手取得的木头、石块，或是动物残骸的骨角而已。在人类漫长的进化过程中，人们逐渐学会通过打磨来制造石器，于是开始有了简单的石斧、石刀等。而从简单的石制兵器开始，中国古代战争史拉开了冷兵器时代的序幕。

Over the past five thousand years of civilization wars accompanied almost every significant social change. Weapons used in these wars made a window on the latest engineering technology of every age. In a way, they were an epitome of ancient wars and battlefields in history.

Weapons came from things man had used for self protection and hunting in distant antiquity. These things took no regular shape, simply a piece of wood or stone or animal bones one conveniently picked up for the need. After a long period of time man learnt how to shape a weapon by grinding. With the appearance of first stone axes and blades the prelude to the magnificent drama of wars in ancient China began.





> 石兵器

古代冷兵器经历了石兵器、青铜兵器和钢铁兵器三个发展阶段。

原始社会晚期，各氏族、部落之间因纠纷而引起的武力冲突日渐增多，规模也不断扩大，最终发展成部落之间的战争。在这种战争中，单纯利用带有锋刃的生产工具已经不能满足需要，于是就有人用石、骨、角、木、竹等材料，仿照



• 原始带柄石斧（良渚文化）
Early stone axe with a handle (from the Liangzhu Culture)

> Stone Arms

Cold arms in ancient China experienced three developing phases: the stone arm period, the bronze arm period and steel and iron arm period.

Due to the increasing number of fights that happened in the late primitive society and that they often developed into a war between tribes, production tools with edges were far from enough for the need of fighting. Some smart

people began to shape stone, animal bones, horns, wood or bamboo into the earliest weapons by cutting, grinding, polishing into the appearance of, say, bird's beak or beast's claws. Most of them were stone, stone cutter, stone spear, stone axe, stone spade, stone arrow, stone dagger



• 原始带孔石铲（新石器时代）

Early stone spade with a hole (from the Neolithic Age)

动物的角、爪、鸟喙等形状，采用刮削、磨琢等方法制成最早的兵器。其中以石制的为多，主要有石戈、石矛、石斧、石铲、石镞、石匕首、石制标枪头等，有的还把石刀嵌入骨制的长柄中。这些石兵器大致经过选材、打制、磨琢、钻孔、穿槽等工序制作而成。

石器时代的兵器虽然制作粗陋，但是已经形成了冷兵器的基本类型，如：长杆格斗兵器戈、矛，短柄卫体兵器刀、匕首，射远兵器石镞等。石兵器的制作虽然简单，但是却为第一代金属兵器——青铜兵器的创制开了先河。

and stone javelin head. Some had a shaft of animal bone. Making such an arm involved different steps: material selection, shaping, polishing, drilling holes and trough cutting.

Rough as they were, they initiated basic types of cold arms: *ge*, a spear like weapon with a long shaft, a lance, a dagger, a blade, and stone arrow heads as a projection weapon. Although these things were simple and rough they parented the first-generation weapons, the bronze ones.



• 原始石刀

The earliest stone cutter

> 青铜兵器

在新石器时代晚期，中国人的祖先已经初步掌握了冶铜技术。用来装备军队的青铜兵器，在公元前21世纪的夏代就已经问世。到了商代（前1600—前1046），随着青铜冶铸技术的提高，青铜兵器得到了进一步的发展，制品有长杆格斗兵器戈、矛、斧，卫体兵器短柄刀、剑，射远兵器弓箭，防护装具青铜甲、皮甲、盾等。



• 青铜尖首刀（商）

Bronze dagger (Shang Dynasty
1600 B.C.-1046 B.C.)

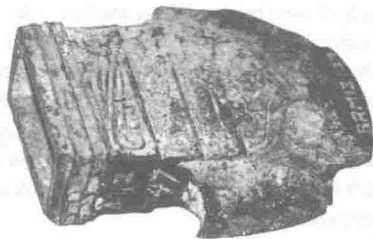
> Bronze Weapons

By the late Neolithic Age remote ancestors of Chinese people had learnt how to smelt bronze to make weapons for soldiers. From the Xia Dynasty founded in the 21st century B.C. to the Shang Dynasty (1600 B.C.-1046 B.C.), with a matured bronze melting technology, bronze weapon making further progressed to have long-shaft *ge*, *mao* (spear), axe, dagger and sword with grips, and projection weapons like bows and arrows. By then, bronze or leather armors and shields were popular.

By the Spring and Autumn and Warring States periods (770 B.C.-221 B.C.), complex swords were born, which meant their ridge and blade had different amount of tin. Swords of this kind had strong edge and supple back, thus more deadly and durable. This complex sword marked a milestone in the progress

春秋战国时期（前770—前221），还出现了青铜复合剑的制造技术，即剑的脊部和刃部分别用含锡量不同的青铜铸成。这种脊韧刃坚、刚柔相济的复合剑既有比较高的刺杀力，又经久耐用，是青铜兵器制造技术提高的一个重要标志。同时，铜制的射远兵器弩也在实践中得到了广泛的使用。

of bronze arm making. Projection weapons like bronze crossbows were widely used in battles.



• 青铜斧（西周）

Bronze axe (Western Zhou Dynasty, 1046 B.C.-771 B.C.)

战神蚩尤的传说

在中国古代的神话传说中，青铜兵器是由和黄帝（约公元前27世纪）同时代的部落首领蚩尤所创制的。蚩尤部落生活在黄河下游地区，以凶狠残暴、英勇善战而著称。据说蚩尤有兄弟81人，个个铜头铁臂，战斗力很强。蚩尤最先制造出青铜的剑、戈、矛、戟、弩，并使用这些兵器先后打败了21个诸侯部落，进而向黄帝宣战。黄帝部落和蚩尤的军队在涿鹿（今河北省境内）爆发了一场激烈的大战，这就是史上有名的涿鹿之战。蚩尤的军队装备了锋利的青铜兵器，虽然双方打得难分难解，相持了很长时间，但黄帝最后终于取得了胜利，并将蚩尤处死了。不过由于蚩尤勇武善战，而且发明了许多兵器，所以被后人推崇为“战神”。在汉代的画像石图像中，常可以看到蚩尤的形象，他被画成似人非人的神兽形状，双手各执一兵器，两足也各抓一件兵器，头上还顶着一件兵器。



• 蚩尤石刻画像（汉）

Chi You, stone carving (Han Dynasty)

Legend about Mythological Warrior Chi You

Bronze weapons, legend says, were invented by Chi You, a contemporary of the Yellow Emperor (a tribe leader who lived in the 27th century B.C.), another tribe leader living in the lower ranges of the Yellow River. Chi You and his people were fierce fighters. Chi You, legend says, had 81 brothers, each of them being a killing machine. Chi You was believed the first to make varieties of bronze weapons, with which he conquered 21 tribes in rapid succession until he met the Yellow Emperor in a battlefield. A fierce battle happened in present-day Zhuolu of Hebei Province. Although Chi You's army was equipped with advanced bronze weapons, after a long stalemate he was defeated and was put to death. However, because of his numerous military exploits, also because of his invention of bronze weapons, later generations took him as a god of war. His image, half human and half beast, each hand and foot holding a weapon, with another one on his head, was seen in many Han-dynasty stone reliefs.

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古代兵器
Weapons of Ancient China



• 黄帝与蚩尤的涿鹿之战

The Yellow Emperor and Chi You in the Zhuolu battle



> 钢铁兵器

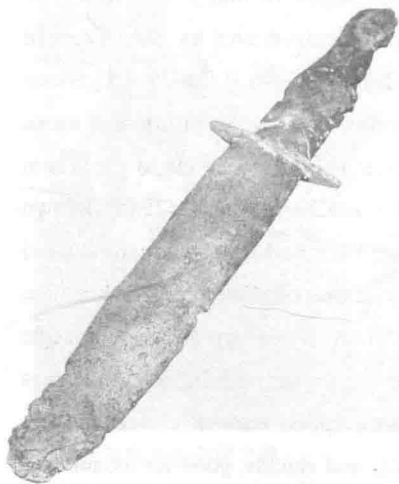
早在商代，人们已经能够使用陨铁制成比较锋利的钺刃，后来又在浇铸青铜钺身时将钺刃合在一起，制成铁刃铜钺。到了春秋晚期，人们已经开始使用人工制造的铁器。西汉时期（公元前206—公元25），钢铁兵器的使用十分普遍，军队装备钢铁兵器的比例不断上升。从东汉（25—220）到唐宋，钢铁兵器进入全面发展的时期。坚韧锋利的各种钢铁兵器层出不穷。步兵使用刀、盾作战，具有攻防兼备的作用；骑兵使用双刃马稍，可直透敌兵的铠甲。至于射远兵器弩，继西汉出现带刻度的望山后，又在东汉出现了腰开弩；三国时期（220—280）的诸葛亮创制了连弩，使蜀军的射远兵器得到了很大

> Steel and Iron Weapons

By the Shang Dynasty (1600 B.C.-1046 B.C.) people had learnt how to make sharp blades for a fighting purpose with siderite, and before long, bronze swords with iron edges. By the late Spring and Autumn Period (770 B.C.-476 B.C.), people began to make weapons with man-made iron and by the Western Han Dynasty (206 B.C.- 25 A.D.), iron weapons became popular and more soldiers had iron weapons to use. From the Eastern Han Dynasty (25-220) down to the Tang and Song dynasties, steel and iron weapons matured in technology, with many very sharp and very durable weapons to appear. Infantry soldiers were equipped with nice steel or iron swords and shields, good for assault and defense, while cavalymen had double-edged swords that pierced the enemy's armor easily. Long-range projection

改善；到唐代（618—907），射远的强弩已经发展成为重型的床弩，杀伤力大大增强。随着钢铁兵器的发展，各种兵器的制造实现了标准化，而且军队的装备也逐渐实现了制式化。就装备军队的兵器来说，有格斗兵器、卫体兵器、射远兵器和防护装具，种类齐全，用途多样，具有攻防兼备、轻重结合、长短互补的特点。

北宋仁宗庆历四年（1044）刊印的《武经总要》，全面记载了北宋初年制造和使用的钢铁兵器，集



• 铁短剑（西汉）

Iron blade (Western Han Dynasty, 206 B.C.- 25 A.D.)

weapons also gained a rapid progress too. After an improved version with graduation of crossbows named *wang shan* that appeared during the Western Han Dynasty, more sophisticated ones were seen in the Eastern Han, and during the Three-kingdoms Period (220-280), crossbows for multiple shots at one time were invented, something credited to the famous strategist Zhuge Liang, which tremendously improved the fighting power of the army from the State of Shu. By the Tang Dynasty (618-907), heavy crossbows with a longer range took a change, becoming what was called *chuang nu*, “bed crossbows”, a long-range and more deadly weapon. By then, weapon making, for the first time in history, was standardized, so was the weaponry for different forces. More varieties were seen, short and long, light and heavy, for close-up combats, for body defense, for projection and for protection, able to satisfy all needs from attacks and defense.

Wu Jing Zong Yao, or *List of Weapons*, a book printed in 1044, the fourth year of the Qingli Reign under Emperor Renzong of the Northern Song, documented in great detail all the cold arms made and used in and before the



宋代以前发展的各种冷兵器的大成。人们常用刀、枪、剑、戟、斧、钺、钩、叉、镋、棍、槊、棒、鞭、铜、锤、挝、拐子、流星等十八般兵器来形容中国古代兵器之多。但是实际上，中国古代兵器远远不止这十八种。宋代以后，钢铁兵器虽然仍在发展，但是它们的战斗作用同逐渐发展的火器相比，便退居次要地位。

early Song Dynasty, including *dao* (the broad sword), spears, swords, halberd, axe, battle axe, hook, fork, *dang* (a fork like weapon), cudgel, *shuo* (a long spear), club, scourge... 18 varieties in total. Actually, cold arms used in ancient China are more than 18. After the Song Dynasty, cold arms, though still in development, slowly but surely yielded their dominant place to the developing of fire arms.

• 铁器时代的骑兵对战

Cavalry fight during the Iron Age





诸葛亮

诸葛亮是三国时期杰出的政治家、战略家和军事家，他先后辅佐刘备、刘禅父子，为蜀汉的建立和发展贡献了一生。公元207年，刘备为见诸葛亮三顾茅庐，诸葛亮感动之下为刘备指明了一条正确的政治军事路线，并出山辅助刘备。221年，刘备称帝，国号“汉”，史称蜀汉，诸葛亮任丞相，领益州牧。在多年的斗争中，诸葛亮运筹帷幄，计谋高超，不仅以一介书生统领千军万马助东吴赤壁破曹、从荆州直取成都、南征平定蛮族、六次北伐曹魏，而且凭借其聪明才智发明和改进了不少兵器，如十箭连发的诸葛连弩和运输工具木牛流马等。

蜀汉丞相诸葛亮



• 诸葛亮画像
Portrait of Zhuge Liang

Zhuge Liang

Famous statesman and strategist during the Three Kingdom Period, Zhuge Liang devoted his life first to Liu Bei, ruler of the State of Shu and later, to his son, Liu Chan who succeeded Liu Bei as the ruler. Liu Bei made three trips to him for advice in 207A.D. . Moved by this sincerity and respect Zhuge Liang laid a correct strategy for Liu Bei to seize power. From then on, he became Liu Bei's military advisor. In 221A.D. , Liu Bei ascended throne to become the ruler of the State of Shu; Zhuge Liang was his prime minister, given Yizhou, a large area, as his support. Zhuge Liang was legendary. As a book reader he led Shu troops to many military successes, helping East Wu frustrate Cao Cao's advance in Chibi, taking Chengdu after a long march from Jingzhou, subduing the barbarian rebellions in the south, making six northern expeditions against Cao Cao the ruler of the state of Wei. More unbelievable was his inventions and improvements made on crossbows that could fire ten arrows at one go and self-propelled wood carts for transportation.