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PLATE I

RECTANGULAR FINELY POLISHED SLAB, 36x21 INCHES, 200 LBS. IN WEIGHT.

PRESUMABLY USED AS AN ALTAR IN IMPERIAL WORSHIP, SHANG PERIOD.

COLLECTED IN CHINA

BY A. W. BAHR

NOW IN

# FIELD MUSEUM OF NATURAL HISTORY

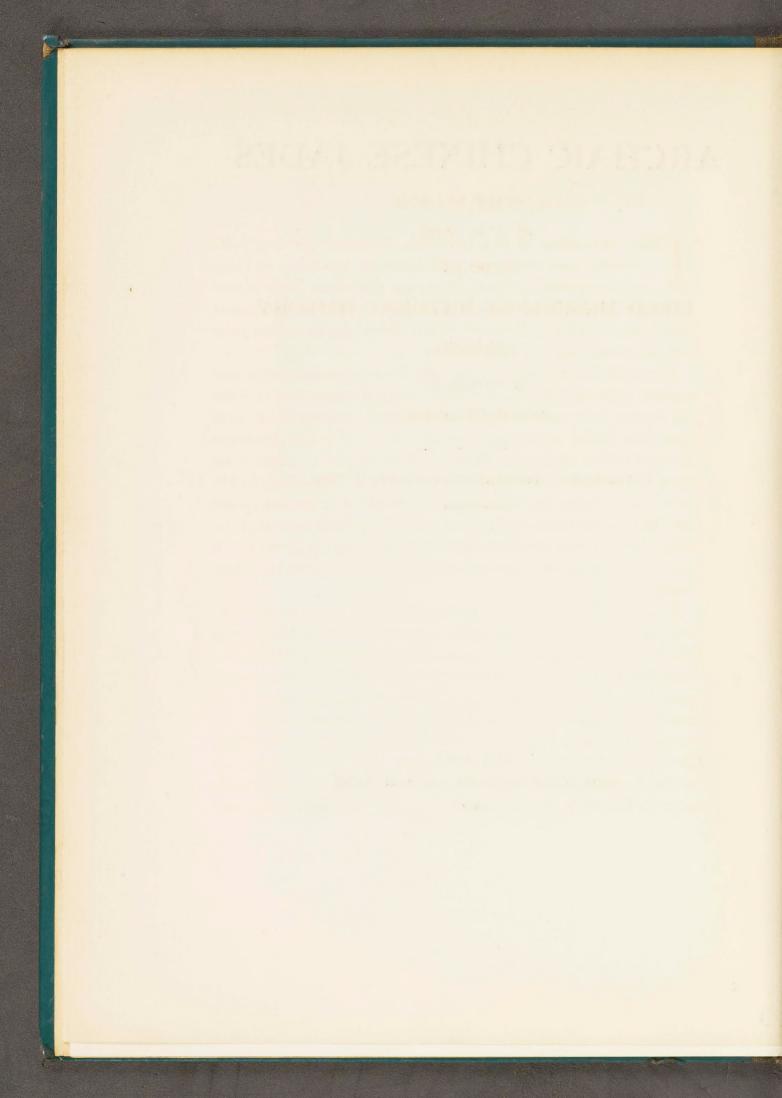
CHICAGO

DESCRIBED BY

BERTHOLD LAUFER

THIRTY-SIX PLATES, THREE OF WHICH ARE COLORED

NEW YORK PRIVATELY PRINTED FOR A. W. BAHR 1927



## PREFACE

HE assembling of this collection of archaic Chinese jades extended over many years of residence in China, and was only completed last year when on a visit there I was able—due to the unsettled condition of the country—to add hitherto unobtainable specimens from famous private collections, as well as jades from the recent excavations in Ho-nan.

The collection was made by me both from an archaeological and aesthetic point of view. It is of archaeological importance as these jade objects were used in the little understood ancient Chinese religious and burial ceremonies and for court and social functions. Artistically they merit admiration for their simplicity, which is reduced to a minimum, and their fine proportions. The color and the texture of the stone are skilfully utilized, and the treatment ranges from the symbolic or abstract to the naturalistic. These ancient jades, chiefly derived from bowlders or pebbles, have a greater variety of color than more recent ones, and most of this material is no longer found.

For years I have had access to the important collections of native connoisseurs for purposes of study; and when the troublous times forced the owners to part with some of their most cherished treasures, I spared neither pains nor expense in seeking especially rare or unique specimens. In this way I was able to obtain many fine jades from numerous noted collections; among the most important of these are remarkable examples from the famous collection of Wu Ta-ch'eng (through Fei Chung-sheng, his son-in-law). The late Wu Ta-ch'eng was the foremost collector and critic of archaic jades of the nineteenth century. His study of antique jades,  $Ku y \ddot{u} t' u k'ao$  ("Investigations

into Ancient Jades with Illustrations"), published in 1889, is the most recent and valuable Chinese contribution to the subject. Other jades in my collection come from the possession of Ku Hao-i, a descendant of a prominent old Su-chou family. I was fortunate enough also to acquire a number of the jades found at Sin-cheng in Ho-nan in 1923, the site of the recent important excavation of Chou bronzes. They were procured from an ex-Tupan of K'ai-feng fu, capital of the province. Their workmanship and style are of the highest quality, and suggest the existence of a local school of lapidaries, probably confined to the district, not second in skill to the makers of the bronzes.

This collection has been carefully examined, and all attributions as to periods have been carefully and critically considered. It was also my good fortune to have the active assistance and sympathetic co-operation of Dr. Berthold Laufer, Curator in the Field Museum of Natural History of Chicago, who has added still further to the sum of my obligation and gratitude by preparing this catalogue.

It is my hope that this collection will serve to interest the public in the little known early civilization of China, from the Shang dynasty downward, and to further the appreciation of its art.

New York, March 1, 1927.

A. W. BAHR.

BOUT a year ago I received a letter from Mr. A. W. Bahr who was then in China, informing me of the acquisition of a very comprehensive collection of archaic jades and requesting me to study it and prepare a descriptive catalogue of it on his behalf. Naturally I welcomed the opportunity of widening my experience in this attractive field of research, and the fact that Mr. Bahr had obtained a number of important pieces from Wu Ta-ch'eng's collection considerably enhanced my curiosity. Wu Ta-ch'eng's famous book had served as the foundation of my monograph "Jade," but, as every one knows, the outline sketches in Chinese works of archaeology do not allow one to judge the appearance and structure of the stone or even details of design which in many cases are misdrawn or may even be neglected. The advantage of having the originals in lieu of insufficient drawings is self-evident. On going over the collection consisting of upward of 650 individual pieces almost two-thirds of which belong to the early archaic epoch, it surpassed all my expectations; and all those who have had the opportunity of viewing the collection expressed their keenest appreciation of its scientific and artistic value. Of illustrious visitors mention is only made of Crown-prince Gustavus Adolphus of Sweden and Queen Marie of Rumania, who were unanimous in their praise. It is very gratifying that meanwhile the entire Bahr collection has passed into the possession of Field Museum, and I wish to express my obligations to the donors who have kindly contributed to the fund: Mrs. George T. Smith, Mrs. John J. Borland, Miss Kate S. Buckingham, Mr. Martin Ryerson, Mr. Julius Rosenwald, Mr. Otto C. Doering, and Mr. Martin C. Schwab, all of Chicago. Above all, however, my cordial and lasting gratitude is due

to Mrs. George T. Smith, who took the initiative in the movement and aroused general interest in securing this important collection for Chicago. Combined with two collections obtained by me in China in 1909 and 1923, Field Museum now owns about a thousand pieces of Chinese jade of all descriptions and periods, but particularly representative of the early dynasties.

One of the many attractive features of these ancient jades is that they are carved from a material no longer obtainable and that these stones display an infinite variety of colors quite at variance with those occurring in the jades of more recent date. The principal sources of supply of ancient jade were water-worn bowlders or pebbles fished from streams, but the mineral was also quarried in situ in several mines located in China. The consumption of this much coveted material progressed so rapidly that the supply became exhausted by the third or second century B.C. when the Chinese were compelled to search for jade outside of their country and imported it from Upper Burma and from Khotan in Turkestan. The latter is usually plain white or green, or green mingled with white. The ancient Chinese carvings, however, display all sorts of colors—gray, white, white and black, pure black, bluish, russet, yellow, brown, fawn, and innumerable shades of green.

As the earliest manifestations of artistic tendencies and as exponents of refined religious sentiments, these archaic jades form a most fruitful source for a study of ancient art as well as ancient religious and mythological conceptions, and present a veritable treasure-trove of information. At the time of the Chou there was no official priest-hood: the father was the priest of his clan; the prince, the priest of his kingdom; and the emperor, the pontifex maximus of the nation. Religion mainly consisted in nature-worship: the great cosmic powers, Heaven and Earth and the Four Quarters, were the principal objects

of worship. These six powerful deities, however, were not conceived as personal gods, and were accordingly not represented as human beings; the conception of anthropomorphic images is entirely foreign to China in times prior to Buddhism, but in consonance with the abstract metaphysical mind of the ancient Chinese, which reduced all phenomena to a fixed numerical system, the images of the supreme deities were found by means of geometric construction. The most precious material known to them, jade, was utilized in making these The deity Heaven was conceived of as circular, and his image was personified in a perforated disk of jade. There is a great variety of such disks of all dimensions and colors. The emperor was believed to receive his mandate from Heaven, and by his command ruled as the son of Heaven. Hence a disk of this type was also the emblem of sovereignty; when the feudal princes paid a visit to the emperor's court, they rendered homage to him by the presentation of such a jade disk. As jade was believed to embody qualities of solar light and to communicate directly with heavenly powers by means of its transcendental properties, the sovereign was able to commune and consult with Heaven through the medium of this disk. It was also buried with the dead. If of green or bluish color, this jade symbolizes the natural color of the sky, and further the sprouting and budding of vegetation created by Heaven.

The philosophy of the ancient Chinese was dualistic and classified all phenomena as male and female, as light and darkness, as heat and cold, as positive and negative. These two primeval forces were seen active in Heaven and Earth, and the union of the two and their constant interaction was believed to have resulted in the creation of nature and man. They were the two creative forces of the universe. Earth was therefore as important a deity as Heaven. Both were looked upon as the father and mother of all beings, as the sovereign

was the father and the mother of the nation. A passage in the ancient Book of Rites is as follows: "Sacrifices to the deity Earth were made to honor the beneficial actions of Earth, for Earth harbors all beings, and Heaven holds the stars and constellations suspended. We derive our food and wealth from Earth, we derive the regulation of our labors from Heaven. For this reason we honor Heaven and love Earth, and we therefore teach our people to return thanks to them." This was the farmer's emotional religion: to honor Heaven and to love Mother Earth. Now Earth was conceived as being flat and square or angular outside and rounded in the interior. Therefore, the deity Earth was revered under the image of a hollow tube of jade, rectangular in cross section and round inside, usually with a short projecting neck at both ends. The color of earth was yellow or brown, and, if possible, stones of such colors were selected for this image (see Plate XVI). The "teeth" in the corners are compared with the teeth of a saw, and the notches between them were wrapped around with silken bands. Silk was a gift of the deity Earth, and when silk cocoons were offered to the empress, she availed herself of such a tube as a weight-stone in weighing silk. When a feudal prince visited another, he presented the spouse of his host with a jade symbol of this kind, eight inches high. This applies to princes of the first rank. As everything was regulated by fixed rules, princes of the second and third ranks offered pieces only six inches in height; those of the fourth and fifth ranks, pieces four inches high.

This object, accordingly, referred to female power and was the sovereign emblem of the empress. Made of a smaller size (Plate XVII, Fig. 2), it was used for burial purposes, and in the grave it was placed on the chest of the corpse. In this case also it alluded to the deity Earth. The jade disk symbolizing Heaven was placed on the back of the body. The idea underlying this custom was that man as the

product of the combined forces of Heaven and Earth and being intermediary between the two, cannot be separated from them, and should also rest between them in his subterranean slumber.

In general the art of the Chou is impersonal, ritualistic, and sacrosanct, with little or no trace of realism in the designs adorning the surfaces of bronze vessels. These principally are of a geometric character, and are blended with conventionalized figures of animals, birds, reptiles, and fantastic mythological creations. The ornamental jades of the same period reveal an amazing feature inasmuch as they allow us to discriminate between two essential schools—one working after the conventional patterns of the bronze-founders and another freely and independently producing naturalistic types of animals, birds, fishes, and insects (see Plates XXI and following).

In the thirty-six plates of this Catalogue altogether one hundred and forty-six objects are illustrated; that is, less than one-fourth of the whole collection. It was a difficult task to make the proper selection from so large a number of specimens, and many new types as well as many beautiful carvings, unfortunately, had to be set aside for the present. In the new edition of my monograph "Jade," however, which is in course of preparation, the Bahr collection in its entirety will be embodied, and there also the various types will be discussed in detail in their historical setting and proper significance. The object of this Catalogue is merely to make a preliminary announcement of the Bahr collection and point out some of its significant features. Even with all its limitations and brevity it will reveal a great deal that is new. The archaic period is represented by about 470 pieces; the Han period, by about 105; and the middle ages (Wei, T'ang, and Sung), by about 70 pieces. B. LAUFER.

Biloxi, Miss., February 16, 1927.

# PERIODS REFERRED TO IN CATALOGUE

Shang Dynasty									1766-1123 в.с.
Chou Dynasty									1122- 247 в.с.
Early or Wester	n I	Ian	D	yna	sty				206 в.са.р. 23
Late or Eastern Han Dynasty									A.D. 25- 220
Wei Dynasty									386- 534
T'ang Dynasty									618- 906
Sung Dynasty									960-1279

# CATALOGUE OF ARCHAIC CHINESE JADES

# PLATE I (Frontispiece)

RECTANGULAR FINELY POLISHED SLAB, SHANG PERIOD

Of a hard, jade-like serpentine, bluish black in color, intersected all over by a net of white veins, 36 x 21 inches, 3 inches thick, 220 lbs. in weight.

This unusual specimen was found some years ago in considerable depth under ground at Ya-chi near Yu Yao, in the prefecture of Shao-hing, Che-kiang Province, and immediately aroused great excitement and sensational speculations among the Chinese. It was regarded as a sort of palladium and connected with the exploits of the Great Yü (alleged date 2205–2198 B.C.), founder of the Hia dynasty. A scholar, Tsou An by name, has written a little notice on this stone under the title Ku yü fan kin t'u k'ao, and more sensibly refers it to the period of the Shang dynasty (1766-1123 B.C.). He recalls the famous bronze altar formerly in the possession of Tuan Fang and now in the Metropolitan Museum of New York, and argues that bronze altars were made for the feudal lords, jade altars for the Son of Heaven, that plain, undecorated objects are peculiar to the Shang dynasty and ornamented objects are characteristic of the Chou dynasty. He regards this slab as a sort of sacrificial tray on the same line as the yü kin referred to in the Li Ki (Couvreur's edition, Vol. I, p. 548). This is not the occasion to discuss and evaluate this scholar's opinion, which in my estimation is not correct. The fact that sacrificial low tables of bronze and pottery (e.g., "Pottery of the Han Dynasty," Plate XXIV) to place vessels upon were used in ancient China cannot be

doubted, but such tables or trays were easily movable and portable, which cannot be said in regard to the stone slab in question. On account of its enormous weight it must have been a stationary affair permanently set and fixed in one spot; it was not a building-stone (its six sides are equally smoothed and polished), nor was it placed on four feet as supports. In this event we should justly expect to see at least traces left by such supports in the four corners, but this is not the case. This slab, therefore, was used as it is, perhaps raised on a solid wooden pedestal, and undoubtedly served as an altar in royal or imperial worship. As it was found in the soil of the ancient kingdom of Yüe, the conclusion may be permissible that this monument is non-Chinese and has to be linked with the peculiar culture of Yüe. Aside from the rarity of the material which I have never seen before employed in any carving or otherwise, it is a monumental relic of a great antiquity and the product of a consummate skill in stone cutting and polishing.

### PLATE II (Colored)

ORNAMENTED AXE-HEAD AND CEREMONIAL DISKS, CHOU PERIOD

1. An unusual axe-head of a fine quality of translucent, gray greenish jade with moss green enclosures. It is decorated on both sides alike with a conventionalized face of Chou bronze style, bordered by a row of double triangles. There is no reason to retain for faces of this type the worn-out designation t'ao-t'ie which is merely the arbitrary interpretation of the Sung archæologists; as formerly pointed out by me, there is a great variety of such faces in the archaic bronzes, and they doubtless represent many different types of mythological figures or deities. The blade is slanting. The perforation is drilled from the obverse.

Right side 11.2 cm long, left side 10.5 cm long. At back 4.5 cm wide, at front 5.1 cm wide. Thickness 2-4 mm.

- 2. Unique small throwing disk or quoit, of ellipsoid shape and translucent, gray jade with opaque white and gray enclosures, due to chemical changes. The two sides are jagged, with four projecting teeth on each side, an emblem of war. This apparently was quite a favorite motif under the Chou, which ultimately assumed the rôle of a fixed pattern. We shall meet it again in swords (Plate VI, Fig. 3), axes (Plate IX), and disks (Plate XIII, Fig. 1, and Plate XV, Fig. 2). The lower curve is provided with a fine blade, so that this disk was intended as a weapon. For further explanation see Plate XIII, Fig. 1. 8.1 cm long. 5–7.3 cm wide. Diameter of opening 3.5 cm.
- 3. Unique disk carved from a translucent jade of a peculiar fawn color and filled with masses of opaque, clayish white enclosures due to desiccation or chemical changes. Two small segments have been cut off the sides, the edges being smoothed and polished in the same manner as the surfaces. This is the first and only type of this kind that has come to my notice. Undoubtedly some sort of abstract symbolism was associated with this procedure, but what this symbolism was cannot even be guessed. The perforation is drilled from one side, and the edge thus formed is slightly slanting.

Diameter 7.5 cm. Diameter of opening on obverse 2.4 cm; on reverse 2.1 cm. Length of slanting sides 4.4 and 4.6 cm, respectively. Average thickness 3 mm.

### PLATE III (Colored)

#### CEREMONIAL SCRAPER AND DISK, CHOU PERIOD

1. Scraper of trapezoidal shape, carved from a beautiful jade resplendent with a reddish brown, light yellow in the upper and left portions, which are translucent. The cutting edge is along the lower side. Three perforations permit the implement to be suspended in a vertical position, back upward, edge downward. The two lateral perforations are drilled from the same surface (the one shown in the

plate), while the middle and higher one is drilled from the opposite side. The perforations are gradually slanting, so that the piece which was removed had the shape of an obtuse cone.

Length over back 10 cm, over cutting edge 12.6 cm. Length of sides 7.3 cm. Thickness at back 7–8 mm, gradually tapering toward the blade.

2. A superb disk emblematic of the deity Heaven, brown, moss green, and gray, translucent in the green portions. The outer circle is not quite perfect, and this is the case in almost all disks of the Shang and Chou periods. One of the former period in the Bahr collection is quite irregular both in its circumference and thickness. The more we advance toward the Han period, the more regular the circle of disks will grow; and only under the Han do we encounter perfect circles.

Diameter 20.9–21.1 cm. Diameter of opening 6.2 cm. The opening is not exactly in the centre. Thickness varying from 2–6 mm on the inner edge, 1–2 mm on the outer edge.

### PLATE IV (Colored)

#### AXE-HEAD AND CEREMONIAL DISK, CHOU PERIOD

1. Axe-head of translucent gray greenish jade, brown along the edges and filled with sprays of russet lines due to the presence of iron oxide in the stone. Rounded in the upper left and lower right corners, right angle in the lower left corner. Cutting edge on the right, gently curved. Perforation drilled from one side. A perfect and elegant specimen.

12.4–12.7 cm long. 6.5 cm wide at back, 7.7 cm wide at blade. Diameter of perforation 0.9–1 cm on obverse, 0.6 cm on reverse.

2. A beautiful manicolored disk symbolic of the deity Heaven. Translucent stone in black, brown, russet, yellow, and gray, with white clouds. Saw-mark on the obverse.

Diameter 16.5 cm. Diameter of opening 6.2 cm. Of uneven thickness along the outer edge, varying from 1-3 mm; on inner edge 3 mm.

#### PLATE V

CEREMONIAL JADE KNIFE AND DAGGER, CHOU PERIOD

1. The knife was presumably an emblem of sovereign power, and is of excellent quality both as to material and workmanship. The stone is of a mottled green interspersed with yellowish white clouds and marked with black spots and lines. The blade, very fine (only 1 mm thick), runs along the left side. The upper end is gently sloping. A peculiar feature of this implement is formed by five rounded notches at the back, the two outer ones being placed opposite the two perforations, and the central one being located in the middle of the back. Aside from a practical purpose, it may be inferred from the symbolic tendencies of the Chou period, these five notches must have had some symbolic significance. The implement was obviously suspended in a vertical position, blade downward, while silk or hemp cords were passing through the perforations and over the notches and were taken up and knotted above the central notch. Perhaps silk threads of five different colors (the wu se: black, red, green, white, yellow) in reference to the five notches were utilized to symbolize the five points of the compass (wu fang: north, south, east, west, and centre) or the five elements (wu hing: water, fire, wood, metal, earth). The two perforations are well balanced and drilled from one side only (the upper side, which is shown in the illustration).

Cf. "Jade," Plate VIII, Fig. 2.

41 cm long over the blade, 39.3 cm over the back. Upper edge 8.4 cm long, lower edge 7.2 cm. Average thickness along back 3–6 mm; of blade 1 mm. Perforations 1 cm in diameter on obverse, 7–8 mm on reverse. Another jade knife in the Bahr collection, of a similar type, is very thin and fine, almost like paper, and extremely light in weight.

2. Ceremonial short sword or dagger carved from a porphyritic rock or diabase of great hardness, black being the fundamental color. The surface is dotted with numerous red spots, the lower part is almost entirely fiery red in color. This is the only object of this material and peculiar coloration that has come to my notice; in its shape also it is unique, and its sharp, regular outlines and well-balanced proportions are very remarkable. The two projections functioning as guards set the hilt clearly off from the blade. The perforation in the lower portion of the hilt is possibly of a more recent date when someone may have conceived the idea of carrying this implement as a protective amulet; or if it be old, it is conceivable that by means of it the dagger was suspended in the grave, acting as a demon-killer and disperser of evil influences.

27.8 cm long. Blade 5.7 cm wide. Hilt 4.3-5 cm wide, 6 cm long, 4-5 mm long; over the guards 6.7 cm wide. The blade is 4 mm thick above, 2 mm in the middle, and gradually attenuates downward to 1 mm.

#### PLATE VI

CEREMONIAL KNIFE, CHISEL, AND SWORD, CHOU PERIOD

1. Ceremonial knife almost identical in type with the one in Plate V, Fig. 1, but of smaller dimensions. The stone is of a mottled yellow intermixed with black clouds and speckled grayish white. The particular feature of this implement is that it is possessed of two blades—one along the left long side curved inwardly and another along the upper, gradually slanting side, whereas the opposite lower side is blunt and runs almost straight. Two functions, accordingly, are combined in this implement—those of a knife and a chisel. It is finely wrought and polished with great care. There are two proportionately large perforations near the back, the lower one presenting a curious anomaly inasmuch as it consists of two joined circles, the upper one of which is slightly larger.

27 cm long over the blade, 25.3 cm over the back, 6.7 cm over the upper narrow side, and 6 cm over the lower narrow side.

2. Ceremonial sword-like chisel, skilfully carved from a bowlder of mustard color whose rough surface appears in the hilt, but otherwise the implement is well smoothed and polished. The hilt with straight upper line (as in Fig. 3 of the same Plate, while that in Plate V, Fig. 2, is rounded) and concave sides is perforated and clearly set off from the slender blade whose sides are elegantly curved. The cutting edge runs obliquely, forming an obtuse angle on one side and an acute angle with sharp point on the opposite side. This type has obviously been evolved from an everyday implement, and iron slips with a beveled steel edge of the same form are still used in China, or at least were used during the Kwang-sü era.

37 cm long along the right side, 31 cm along the left side. Width 4.3 cm above, 3.6 cm in the middle, 4.4 cm below. Cutting edge 7 cm long. Average thickness 8 mm.

3. Ceremonial sword-like weapon, an emblem of war. This beautiful and unique specimen is carved from a jade bowlder of an exquisite dark green color mingled with gray clouds and clusters of black specks. On one side the original condition of the stone and its color is well preserved, while the other side (shown in the illustration) is much weathered and disintegrated into an indistinct yellowish gray. It was this side on which the sword must have lain in the grave, exposed as it was to chemical actions of the soil. The striking characteristics of this implement are the crescent shape and the jagged appearance of the blade, which almost resembles a saw, and the regular notches which decorate the upper portion. The shoulders, to the right and left of the rectangular hilt, are each provided with two notches, and these continue to the number of nine on each side. These notches form "teeth." Teeth, in the days of the Chou, symbolized warfare, and troops were levied by means of an instrument carved into the

shape of teeth (cf. "Jade," p. 101). I am inclined to think that the object under discussion is a near kin to the *ya chang* mentioned in the Chou li and at any rate answers this purpose much better than the specimen to which Wu Ta-ch'eng has assigned this rôle.

52 cm long, left side without hilt 42.5 cm long, right side without hilt 44.5 cm long. Hilt 7 cm wide, blade 11.5 cm wide above, 10 cm in the middle, 11.8 cm below. Average thickness 6-9 mm.

#### PLATE VII

#### MISCELLANEOUS OBJECTS

- 1. A snake of brown and black jade, of surprising naturalness, the body writhing in three coils and the tail in spiral form (6.5 x 3 cm, 2.5 cm high). This object is said to have been found in southern China, and is presumably a work of the Han period. As there are two perforations, one in the end of the tail and another produced by the coils of the body, the carving could have been attached to some object. It may have been worn as an ornament, perhaps as a charm against snake-bites. Han period.
- 2. Miniature official head-dress of ancient style, of gray translucent jade partially decomposed. Tang period or earlier. 5.4 x 3.4 cm. 3.7 cm high.
- 3. Ceremonial jade thrusting sword, Chou period, with curved blade in two elegant sweeps and with concave sides. Black in color, with gray greenish clouds. Thicker along the edges than in the middle portion. Rectangular hilt. Sword-guard in shape of two jagged crescents on the sides, one higher than the other; they are connected by a double band of very slightly incised lozenges. On one side there are in the lower band five nail-marks of irregular shapes, perhaps symbolizing the five fingers clutched around the hilt. On the one hand, this specimen is remarkable for its perfect symmetry and graceful

outlines; on the other hand, the irregular position of the guards and the two asymmetrical points of the blade form a strange, but not unpleasing contrast.

Length of right side 55 cm, of left side 52.7 cm. Width of hilt 5.9 cm. Width over guards 9.5 cm. Width of blade 6.5, 5.7 cm. Average thickness 5–8 mm.

- 4. Saddle-shaped ornament of gray and dark brown jade and convex shape, Chou period. Its form is somewhat suggestive of the fungus of immortality (*ling chi*). The upper surface is engraved with delicate designs of standing birds with long necks, of a quite unusual style. Presumably it formed part of the ornaments used in a horse's harness.
- 5. Charm of black jade, in shape of a shoulder-blade bone, probably worn in the girdle as an ornament and amulet, Chou period. Divination from the cracks of the burnt shoulder blade of a sheep is a very ancient practice among many tribes of Central Asia (cf. R. Andree, Scapulimantia, Boas Anniversary Volume, New York, 1906, pp. 143–165). There are many fine pieces of black jade in the Bahr collection like axe-heads, tubular beads, insects, pigeons and other birds. 6.4 x 4.5 cm.

#### PLATE VIII

CEREMONIAL DOUBLE-EDGED DAGGER AND CHISEL, CHOU PERIOD

1. This dagger belongs to the same type as the one formerly in the possession of the late Viceroy Tuan Fang ("Jade," Plate IX), except that the shape of the hilt is different. The stone is sea-green in color, beautifully cut and polished, extremely thin, and translucent. Like Tuan Fang's dagger it is double-edged, and the blades are still fairly sharp and work satisfactorily in cutting paper. The two cutting edges terminate into a sharp point on the right side so that a triangle is formed at the end; it was thus a weapon designed for thrusting,

stabbing, and cutting. The surface of the blade is flattened out into two zones separated by a raised medial line. While in Tuan Fang's dagger the hilt forms a rectangle decorated with bands of grooved lines, we encounter here a hilt of a peculiar asymmetric style which secures a firm grip for the hand and offers a pleasing shape.

22 cm long, 4.4 cm wide above, 5.2 cm wide below.

Another dagger in the Bahr collection, ivory yellow in color, terminates into an acute-angled triangle with sharp edges. It is provided with guards marked by five notches on each side, making four "teeth of war."

2. Ceremonial chisel of plant-green jadeite filled with masses of white clouds. It is similar in type to the one illustrated in "Jade," Plate IV, save that in the latter the upper part forms a straight line, while in this case both handle and blade form a curved, convex line. The perforation is in the centre between the two long sides, and has been equally drilled from the upper and lower sides, leaving a ridge in the interior, which is visible in the illustration.

18.6 cm long, 8-9.8 cm wide, 3-5 mm thick.

#### PLATE IX

#### NOTCHED CEREMONIAL AXE-HEADS, CHOU PERIOD

1. Axe-head of a greenish material intersected by brown veins, decorated along the sides with the "teeth of war" (not unlike molar teeth). Compare Plate VI, Fig. 3, and the similar specimen in what formerly was Wu Ta-ch'eng's collection in "Jade," p. 43. The blade (on the lower side) is blunt. The perforation is drilled from one side only (that is, the side shown in the illustration). Both surfaces and edges are finely carved and polished.

12.3 cm long, 10.6 cm wide at the butt, 11 cm wide over the blade. Diameter of the perforation 2.1 cm.

2. Ceremonial hatchet of brown jade, partially white due to decomposition, the upper left corner being deep black. The surfaces are much weathered and pitted. This is the type of shoulder-headed or spade-shaped celt which I discussed at length in "Jade" (pp. 73–79) and of which at that time only bronze types from China were known to me. The present specimen goes to prove that the bronze types were preceded by types in stone and jade, the latter being utilized for ritual purposes. It is very elegant in shape and of most careful and perfect technique. It is decorated with three sets of teeth, along the sides and at the top of the hilt, the notches being angular, and the rectangular teeth being arranged in staircase fashion. The cutting edge forms a curve above and a right angle below; it is blunt.

15.8 cm long, 8-8.3 cm wide, 3-4 mm thick.

#### PLATE X

INCOMPLETE DISK AND DISK IN THREE SEGMENTS, EARLY HAN PERIOD

1. Incomplete disk or ring (küe, "Jade," pp. 210, 215) of light green jade in the portion which is dark in the illustration and light brown mingled with white spots toward the edges (light in the illustration). Phænix and dragon with a lizard body and single horn are carved in flat relief and looking at each other. The same design is reproduced on the other side, except that the position of the animals is reversed, so that also on the reverse the bird appears on the left, the dragon on the right side. While in general the two are alike on either side, there are interesting minor differences; for instance, the bird's head on the reverse is larger; it has six tail-feathers on the reverse, but eight on the obverse. The bird has a horn-like projection emerging from behind its head, of the same style as the dragon's horn, a tuft of three feathers on the crown of its head, and two long feathers falling down from under its beak, likewise in harmony with what

might be styled the dragon's beard. The dragon is equipped with a sort of small elephant's trunk proceeding from its nose in a curved line. A rectangular slip (3.7 cm long and 2 mm wide) is sawed out between the heads of the two creatures, indicating that they are separated and cannot reach each other and symbolizing the rupture of amicable relations between two parties. This presumably was the emblem of an imperial divorce, the dragon being emblematic of the sovereign, the phænix of the empress.

The shape of the disk is an irregular oval, the lengthwise diameter being 12.7 cm, the horizontal diameter 11.8 cm. The opening is an almost regular circle with a diameter of 5.3 cm. Average thickness 2–3 mm. Width of disk 2.9–3.6 cm.

2. Jade disk in three separate segments. Translucent, gray jade marked by regular brown lines, leaving yellowish opaque segments along the edges. Each section has a perforation at each end, drilled from one side. In the upper section a small piece on the right side is chipped off. Disks of this type (compare Plate XI, Fig. 2, and Plate XIII, Fig. 1) were doubtless attached to the shroud by means of hempen or silken cords passing through the perforations, and were placed under the back of the corpse ("Jade," p. 138) to symbolize the deity Heaven.

Diameter 12.2–12.6 cm. Diameter of opening 7 cm. Width of disk 2.7–2.9 cm. Average thickness 2-3 mm.

#### PLATE XI

WHEEL DISK, CHOU PERIOD, AND DISK IN FOUR SEGMENTS, EARLY HAN PERIOD

1. "Wheel disk" of dark green jade,—a novel type, being somewhat similar to, but not identical with the jadeite ring illustrated in "Jade," Plate XXV, Fig. 6. By the name "wheel disk" I do not mean to suggest any relationship of this type with a wheel, but merely

desire to have a brief and convenient term for this new type whose origin and significance remain to be studied. The inner circle is almost perfect, but the outer circle is rather irregular.

Diameter 14 cm. Diameter of opening 6.8 cm. Total height of wheel 2 cm. Wheel rises above the surface of the ring 6-8 mm. Thickness of wheel 3 mm. Width of ring 3.5 cm. Average thickness of ring 1-1.5 mm.

2. Disk of yellow brown serpentine interspersed with white clouds, in four segments. Each segment has two perforations at one end and a single one at the opposite end; the four are so arranged that the double perforation connects with the single one. Note the saw-marks on two pieces. The four segments do not form a perfect circle, but run in somewhat irregular concave lines (compare Plate XIII, Fig. 3). The lower side is much disintegrated.

Diameter 17.5-18-19 cm. Diameter of opening 7-7.5 cm. Width of segments 5-5.5 cm.

A similar disk consisting of four segments, but with a different arrangement of the perforations (four in each segment, one in each of the four corners) is figured in the recent work of H. d'Ardenne de Tizac, L'Art chinois classique (Plate 29a). This author is inclined to think that the division into four sections was not necessarily prompted by any intention of symbolism, and argues that this disk rather large and extremely primitive dates from an epoch when technical methods were little developed; it seems to him that it was simply easier to do the work in four pieces than in one. I do not share this opinion. Technically the three- and four-piece disks are more laborious; first the complete disk was sawed out, and it was then sawed into three or four parts each side of which had to be smoothed and polished. This is by no means a primitive process, but the product of an advanced stage of culture. Moreover I am convinced that nothing in ancient Chinese art is accidental, but that everything has a definite meaning

and purpose. There was assuredly a volitional symbolism underlying the division into three or four.

#### PLATE XII

WHEEL DISK WITH DESIGNS PAINTED IN VERMILION, CHOU PERIOD. DECORATED DISK, LATE HAN PERIOD

1. "Wheel disk" of ivory or cream colored jade, disintegrated into a dark gray on the inner side of the wheel. On both faces of the disk a geometric design in concentric arrangement is painted in bright vermilion which was preserved under a heavy layer of loess; particles of loess still adhere to it in many places, as may be recognized in the reproduction. A complete vermilion circle was outlined along the outer edge, but is only partially preserved. There is in the Bahr collection another wheel disk of the same material and size, likewise decorated with vermilion designs, so that these disks were possibly used in pairs. These are the sole examples of ancient painted jade known to me, and have a particular interest in offering very early attempts at drawing and painting. In the forthcoming edition of "Jade" careful drawings of these designs will be reproduced.

Diameter 12–12.3 cm. Diameter of opening 5.7 cm. Wheel rises above surface of ring 3 mm.

2. Disk of gray jade overlaid with vermilion on both sides and decorated all over with plain spirals (known as "sleeping silkworm cocoons") arranged in four concentric rows.

Diameter 13.6 cm. Diameter of opening 4.3 cm. Thickness 4 mm.

#### PLATE XIII

NOTCHED DISK, CHOU PERIOD, AND DISK IN THREE SEGMENTS, EARLY HAN PERIOD

1. This disk, of dark green jade, is the most interesting of all disks in the Bahr collection, as it represents the combination of a disk with

a weapon. Its character as a weapon is brought out by two facts—the six notches or "teeth of war" on each side (cf. Plate II, Fig. 2) and the curved blade along the upper edge, very similar to the blade of the ceremonial jade axes. This implement, accordingly, was designed to serve as a throwing discus or quoit like the chakras or quoits of India and related disks found in the neolithic periods of the Mediterranean culture-areas (compare C. Buttin, Les Anneaux-disques préhistoriques et les tchakras de l'Inde, Annecy, 1903; G. Wilke, Südwesteuropäische Megalithkultur, 1912, pp. 96–99). The Chinese jade type, as it is, of purely ceremonial significance, must go back to an earlier and plainer type of stone actually used for hurling. The Indian chakra is mentioned in the Annals of the Sui dynasty (Sui shu) with reference to the country P'o-li; it is described as a disk of the size of a Chinese metal mirror, with a central perforation and the outer rim jagged like a saw; when thrown at a man from afar, he will surely be hit.

15.4 x 13.6 cm. Diameter of opening 6.4-6.5 cm. Compare the miniature type in Plate II, Fig. 2.

2. Disk of light green jade interspersed with white clouds, made in three separate segments, like the one in Plate X, Fig. 2, each with a perforation at the ends. The three pieces join perfectly into a complete disk. They were evidently connected by cords passing through the holes, and the disk was then attached to the shroud. The holes are all drilled from one side and double as large on the side drilled as on the opposite side (4 and 2 mm in diameter, respectively).

Diameter 12.4 cm. Diameter of opening 4.9 cm.

#### PLATE XIV

LARGE DECORATED CEREMONIAL DISK, HAN PERIOD

Of green jade. Decorated in concentric zones, interlaced bands with spiral patterns in the outer zone and five rows of small, plain

spirals in the inner zone. These spirals are alternately open above or below. For the purpose of arranging these spirals in regular rows a network of intersecting lines was incised in such a way that each spiral is enclosed in a hexagon and that two vacant triangles are left between two spirals. The outer and inner circles are perfect. Compare Plate X, Fig. 2.

Diameter 23.7 cm. Diameter of opening 4.2 cm. Width of ring 9.5 cm. Average thickness 5 mm.

#### PLATE XV

JAGGED CEREMONIAL DISKS, HAN PERIOD (1) AND CHOU PERIOD (2)

- 1. Incomplete disk of clear, gray, translucent jade interspersed with small, white, cloudy spots; a brown speckle surrounded by white clouds on the left (visible on both sides of the disk) and tiny brown flecks on the lower right side. The periphery of the disk is divided into four sections of equal arcs, each marked by a deep notch which forms a horn-like projection. There is a break at the top of the disk, a rectangular slip (4 mm wide) having been sawed out. This object therefore belongs to the type küe (compare Plate X, Fig. 1), and also displays some relationship to the type süan ki in the following Fig. 2. Diameter 13.8 cm. Diameter of opening 6.8 cm. Width of ring 2.5–3.6 cm. Width of notches 7 mm. Thickness at outer rim 1 mm, at inner rim 1–2 mm.
- 2. Jagged jade disk (so-called süan ki) from the collection of Wu Ta-ch'eng, identical with the one reproduced from his book in "Jade," pp. 105 and 107. The material is a grayish white jade interspersed with opaque, cloudy and russet spots and with dark brown portions and veins along the rim. As to the reverse in Wu's sketch (p. 107), the two plain vertical lines are intended for saw-marks, while the horizontal double line denotes a deep groove (1–2 mm wide) intentionally

carved in the stone. The periphery is divided into three sections (almost in the same style as the preceding specimen is divided into four), each section being equipped with the teeth of war.

Diameter 13.6 cm. Diameter of opening 6.7 cm. Width of notches 1.2 cm. Thickness 3, 4 and 5 mm.

In 1923 I obtained in China a disk of the same type, but divided into four sections and each section provided with three notches.

#### PLATE XVI

EMBLEM OF THE DEITY EARTH (ta ts'ung), CHOU PERIOD

A very archaic type, yellow, the color corresponding to Earth. The surface is considerably decomposed, pitted and weathered away, partially discolored into a whitish gray; the material is a mineral of a high degree of toughness and high specific gravity (3.3). Square in section, the object was perforated with a tubular drill from both ends, the borings gradually narrowing toward the middle where is left a solid partition with but a small opening in the centre—the only case of its kind known to me. Each of the four corners is divided into eleven zones by means of twelve sharp incisions or notches. The zones are not decorated.

27.2 cm high. The four sides each 6.3 cm wide above, 7 cm wide below. Diameter of the two openings 3.6-3.7 cm. Each of the cornered sections is 2 cm high.

#### PLATE XVII

TWO EMBLEMS OF EARTH (ts'ung), CHOU PERIOD

1. Black jade interspersed with brown and gray spots, highly polished, also in the interior, in good state of preservation. Divided into five zones making five projections in each of the four corners, each zone ornamented with three fine line bands. Between the shorter and longer bands there is an incised circle with a smaller concentric circle

and two short lines opposite each other outside of the circle. Worked with great precision, finesse, and much regard to details.

13.7 cm high. 6.2 cm wide above, 6.5 cm below. Diameter of openings 5.5-5.7 cm.

2. Chocolate brown with white and greenish speckles. Corners rounded. Each corner is decorated with two parallel raised bands. Three deeply incised grooves and three cavities alternate in each band, and are divided by a vertical incision. This object belongs to the type tsu ts'ung ("Jade," pp. 137 et seq.).

2.6 cm high. Diameter of openings 6.2 cm, the circle is almost perfect.

# PLATE XVIII

# JADE SANDALS, CHOU PERIOD

Two jade plaques in the shape of a shoe-sole. The Chinese scholar who ceded these unique pieces to Mr. Bahr expressed the opinion that the two form a unit and, being exactly of the shape and length of a human foot, were attached to the soles of the emperor's shoes during the imperial sacrifice to Heaven. The underlying idea was, he explained, that the emperor's feet should not be sullied by immediate contact with the soil.

It is correct that these two plaques must have been closely attached to some foundation, as demonstrated by the row of perforations running along the edges. The upper one has twenty-one perforations quite evenly distributed, the nine around the curve being placed at intervals of about 1 cm (more or less); the lower one has fourteen in a symmetrical arrangement. It is true also that the two plaques, as shown in the plate, fit perfectly, their respective width being identical (8.5 cm) and the two central perforations being located on the same line, so that the two plaques could have easily been lashed together. They are also of a fairly uniform thickness (3–4 mm).

There is one striking discrepancy, however, and this is that the two plaques are carved from different stones which considerably vary in structure and color. The upper one is light greenish in color, interspersed with white clouds above and with brown blackish strata beneath. The lower plaque is of a green color, rather uniform, with an abundance of massive, white clouds.

It is conceivable that each of these slabs formed a sandal of its own; the rounded portion obviously was the place for the heel. In order to raise the foot above the ground and prevent its contact with the soil, it was not necessary to use a jade plaque the entire length of the foot. Each of these plaques (the upper one is 14.8-14.9 cm long, the lower one is 12.8 cm long) was capable of serving this purpose. It is interesting that the former is exactly 7 inches, the latter 6 inches long according to the foot measure of the Han period. Both plaques are highly polished, but it is noteworthy that on the lower sides they are worn out and rough; these sides, in all probability, had never been polished as they were designed for wear and tear. The upper slab has a maximum width of 9.5 cm above and gradually narrows until it reaches a width of 8.5 cm at the base. The lower one has the same width at the base, but slightly narrows toward the curvature to 7.5 cm. It will be noticed that the curves in the two are of different shape; it seems to me, therefore, they must represent two different sandals belonging to different feet.

We read in Chinese records of the discovery of jade shoes in ancient graves. In A.D. 479 a tomb was rifled by brigands in Siang-yang, Hu-pei Province. According to a tradition this tomb was regarded as that of king Chao of Ch'u (515–489 B.C.). In this tomb were discovered many precious objects like jade shoes (or, according to another reading, pattens), a jade screen, and books consisting of bamboo tablets. The last-named go to show that the contents of this grave must

have gone back to a great antiquity. There is a Jade-shoe Rock in I-chang connected with a traditional story to the effect that a king of Yüe when crossing the river left a pair of jade shoes which he wore and that the imprints left by these are still visible in the rock. Unfortunately, there is no description of this jade footgear, but we may imagine that it was on the order of the sandals here figured and described.

## PLATE XIX

DECORATED JADE ORNAMENTS, CHOU PERIOD

The five ornaments reproduced in this Plate in the size of the originals, likewise the disk in the following Plate and the tiger-head in Plate XXXIV, Fig. 5, according to Mr. Bahr's information, were discovered in a tomb at Sin-cheng south of Cheng chou, in the prefecture of K'ai-feng, Ho-nan Province, a locality that has in recent years obtained fame owing to the discovery of an important series of bronzes. These have been reproduced and described in a Chinese work Sin-cheng ch'u t'u ku ch'i t'u chi (3 vols.), published in 1923 by Li Ju-kien, in which also a few jade objects are figured.

Whether the pieces in question actually come from Sin-cheng or not is immaterial; the main point is that all of them represent the climax of the lapidary's art, display the same style, and must have emanated from one local school, or possibly even from the hands of one and the same artist. In technical skill and artistic quality these gems surpass anything heretofore known of Chou art.

1. This plaque, like the other pieces in this Plate, formed part of the complex girdle-pendant worn by the people of the Chou period. Uniformly clear and grayish, translucent jade, admirably carved alike on both faces and even on the upper and lower narrow sides. The style of the design, as also in Fig. 2, corresponds exactly to that of the Chou

bronze ornamentation. There are traces of vermilion in the deep incisions. Perforated horizontally straight through from the left to the right. There are three notches on the upper side and four on the lower side, probably for holding the silk band or cord that passed through the perforation and was then tied around the plaque.

Thickness 5-7 mm. Diameter of perforation 4-5 mm.

- 2. Thin, translucent plaque of the same material as 1. Decorated only on the obverse; the reverse is plain, but elegantly polished. A conventionalized monster-head is presumably intended in the design. Thickness at upper end 3 mm, at sides 2 mm, at lower end 1 mm.
- 3. Oblong, rectangular plaque of pure white jade, a masterpiece of technique, decorated with spiral designs alike on both sides; the unit of pattern is repeated eight times on either side. It is clearly, precisely and firmly cut. Many traces of vermilion are left in the incisions (they appear black in the illustration). Perforated lengthwise clear through the centre. There are seven notches on each long side and two at the upper and lower ends, to the right and left of the perforation, probably serving for the passage of silk cords.

Thickness in the middle 7 mm, toward the rims 4 mm. Diameter of perforation 4 mm.

4. Ornament of gray jade (same as 1 and 2), rounded on the obverse and flat on the reverse, decorated on both sides; for this reason it could not have been used as a button, but must also have served as an ornament in the girdle-pendant. The obverse shows two animals of a nondescript species in the round; the reverse, a single animal of the same type. The perforation, not in the centre, was drilled from the reverse, where it is 4 mm in diameter, while it is 2 mm on the obverse. Average thickness 3 mm.

5. Tubular bead of light greenish jade perforated vertically and decorated with a continuous, incised spiral pattern all around. The two flattened ends form an oval with a diameter of 10–12 mm.

## PLATE XX

DECORATED JADE DISK, CHOU PERIOD

Carved from a light greenish, translucent jade and decorated on the obverse with a firmly engraved spiral pattern of Chou style, the unit of design being repeated ten times,—a masterpiece of the lapidary's art. The band is bordered by a finely engraved rope pattern along the outer and inner rims. The reverse is plain, and was coated with a heavy layer of vermilion which is mixed with loess.

Diameter 11.8 cm. Diameter of opening 6.2 cm. Thickness 2-3 mm.

# PLATE XXI

NATURALISTIC AND CONVENTIONALIZED OX-HEADS, CHOU PERIOD

These and the other small animal ornaments illustrated in the following plates were interred with the dead and presumably attached to the shroud. They are carved only on the obverse. All of these little gems have perforations for attachment, although these are not in every case visible in the illustration. They were intentionally executed as inconspicuously as possible; for instance, in the ox-head of Fig. 1 a tiny hole is drilled from the reverse and connects with the slit forming the animal's mouth. It is not necessary to suppose that ornaments of this type were exclusively made for burial purposes; many of them may have been worn by the living, and were buried with them like everything else that was dear to them during life. In this plate of ox-heads a naturalistic (1–2, 5–6) and conventionalized (8–10) style with an intermediate type (3–4, 7) may be easily distinguished. In 1 and 2, of opaque gray jade, the horns and ears, eyes and nose are

treated in a naturalistic style and clearly carved. In 8-10 the horns assume the form of a pillar which is even surmounted by a well set-off capital: this is the style of the Chou bronze-founders, and it is obvious that this school of lapidaries derived its inspiration from the decorations of the sacrosanct bronze vessels. Another school of naturalistic tendencies flourished, perhaps in some other locality, and may have worked after traditions going back to the Shang period. The pillarshaped pattern appears again in an animal that bears some relation to a tiger (Plate XXIII, Fig. 3, and see Pelliot, Jades archaïques de Chine, Plate XXV). Between the horns of 8 appears a rectangular appendix which somewhat abbreviated also occurs in 2. In 9-10 two hooks are attached to the inner sides of the pillars and result in a sort of heartshaped figure in the open space. The naturalistic horns are engraved with plain angular spirals, with a herring-bone pattern in addition in 1. As the ox was the sacred animal employed in agriculture for drawing the plough and man's helpmate in winning his daily bread, it is conceivable that ornaments of this type were favorite with the class of farmers.

#### PLATE XXII

CONVENTIONALIZED ANIMAL-HEADS (1-4) AND CROUCHING BUFFALO (5), CHOU PERIOD

- 1. Brown-yellow stone carved out of an almost rectangular slab; back hollow, front of two slanting sides with a ridge in the middle on which the nose is represented. The face is human, the eyes are denoted by circles. The two lateral tips above the forehead are each perforated, likewise the lower right and left tips; the left tip is broken off. 3.8 x 2.3 cm. 3 mm thick.
- 2. Ox-head of green translucent jade, carved on one side, partially in naturalistic, partially in conventional style.

  3.9 x 3.4 cm, 2-4 mm thick.

3. Gray white jade, solid carving from a tubular piece rounded on the back and angular in front (like Fig. 1), perforated lengthwise. Conventionalized animal or demoniacal face. Lines on forehead, eyes and eyebrows in relief. Back plain and polished.

5.3 cm long. 2.5 cm wide above, 2.1 cm below. Diameter of perforation above 8 mm, below 7 mm.

4. Dark green jade carved on obverse with a strongly conventionalized nondescript face.

 $2.5 \times 2.4$  cm. 5 mm thick in the centre, gradually tapering toward the edge. There is a perforation in the base connecting with the reverse.

5. Plastic figure of a crouching buffalo of clear plant-green jade. Body and head with horns are naturalistically modelled, but angular spirals are carved on the horns, the eyes are rectangular in shape, and round spirals adorn the nostrils. The tail and the four legs are represented. This is a very fine and striking example of ancient glyptic art, exceedingly well and proportionately modelled.

5 x 2.4 cm. 1.5 cm high.

# PLATE XXIII

#### TIGERS AND OTHER ANIMALS, CHOU PERIOD

The tiger occupied a well-defined place in ancient Chinese mythology and religion. Besides Heaven and Earth, the ancient Chinese worshipped and deified four other cosmic powers,—the four quarters, east, south, west, and north which simultaneously were identified with the four seasons of the year. The region of the east was worshipped under the image of a green jade tablet, the south with a red jade tablet, the north with a black jade piece of semicircular shape. While these were geometrical constructions, the deity of the west formed a notable exception, for it was revered under a white jade tab-

let engraved with the image of a tiger. This is the oldest example of a zoomorphic image of a deity. In this case the tiger represents a celestial deity symbolizing the palace of the west and at the same time the autumn. In astronomy, the tiger as symbol of the autumn was the star Orion. The tiger was regarded as a solar animal, the lord of the mountains, the king of all the quadrupeds. Huang-ti, one of the ancient legendary sovereigns, is said to have tamed tigers for purposes of war, and it was observed that in the autumn the animal descended from the mountains to make war on the human habitations. The tigers mate toward the autumnal equinox, the young are born toward the end of April and make their début in May, but still remain in their mountain strongholds. In the zodiac, therefore, the tiger represents a sign that marks the commencement of the summer. In the autumn when the tiger cubs have gained sufficient strength, they leave the mountains to invade the villages, and this event signals the inauguration of the autumn. The severity of the autumnal season was aptly symbolized by the tiger's ferocity. What the Chinese worshipped was not the tiger itself as an animal, but it was the tiger as the personification of one of the great spiritual and elemental forces of nature and the emblem of the quarter of the west and the autumn. In the grave, images of the tiger were placed to the right side of the corpse, as the right side was facing west in the grave. Simultaneously, the tiger acted as a guardian of the grave; royal tombs were even surmounted by stone statues of tigers to protect the resting-place.

The flat jade carvings of tigers illustrated in this Plate (1–4, 6) are widely different from those known heretofore either of jade or bronze. That in Fig. 1 is surprising in its forceful naturalistic conception, while that in Fig. 3 is again inspired by the formalistic and ritualistic traditions of the bronze-founders. The dolphin (Fig. 5) occurs quite frequently in the art of the Chou (compare Plate XXIX, Figs. 1 and 4),

and there are numerous examples of it in the Bahr collection. The monster-head in Fig. 7 and the strongly conventionalized bird in Fig. 8 agree exactly with the Chou bronze style, and are copied from or made in imitation of the corresponding designs in bronze.

# PLATE XXIV

RUNNING AND CROUCHING HARES, CHOU PERIOD

These delightful motion-pictures of hares emanate from the naturalistic and popular school of Chou lapidaries which created the oxheads, buffalo figures, stags, birds, and fishes true to nature. They reveal that innate Chinese joy of the rapid motion and action of animal life. I do not believe that any mythological significance is attached to these hares; they are simply and purely artistic creations. They are all finished on both sides and provided with perforations for attachment. Those in Figs. 1–3 are carved from a peculiar brownish purple jade, that in Fig. 4 from a white and purple jade, that in Fig. 5 from a light gray and greenish jade with opaque white streaks, that in Fig. 6 from a light green jade.

- 1. 5.4 x 3 cm.
- 2. 4.8 x 2.5 cm.
- 3. 5.6 x 3.2 cm.
- 4. 4 x 2.4 cm.
- 5. 4 x 1.8 cm.
- 6. 4 x 2 cm.

Thickness 2, 3, or 4 mm in the various pieces. Compare Pelliot, Jades archaiques de Chine, Plate XXXI.

#### PLATE XXV

MONSTERS, BIRDS, BEAR, AND ALLIGATOR, CHOU PERIOD

1. Monster with wide open jaws, of semicircular shape, carved alike on both sides. Round and angular raised spirals, groups of

parallel lines, and a herring-bone pattern form the designs on the body. The notches and teeth-like projections correspond to the Chou bronze style.

8.6 x 2.4 cm. 3-4 mm thick.

2. An upright figure, a human or mythological being with an animal head.

4.6 x 3 cm. 4 mm thick.

3-4. Conventionalized crested birds with incised designs, in agreement with Chou bronze style. Gray jade much weathered and discolored.

3.5 x 3.7 cm. 2 mm thick. 4.5 x 2.7 cm. 2 mm thick.

5. Plastic figure of bear, walking, with open jaws. Unique piece of yellow brown stone.

4 x 0.8 cm. 1.6 cm high.

- 6. Bird of yellowish jade with long crest and fish-like tail. Two perforations. On the reverse the color is much paler and more decomposed.
- 7. A reptile, probably an alligator, of dark gray and yellow serpentine, of naturalistic style. Similar figures of alligators are extant in bone.

#### PLATE XXVI

BIRDS, FISH, AND HUMAN FIGURE, CHOU PERIOD

1. A standing bird, probably a species of crane, with flat crest; the body is filled with spiral designs, carved alike on both sides. The eye is perforated; another smaller perforation in the foot. The material is a dark gray and greenish opaque jade much weathered and changed in color.

7.4 x 3.9 cm. 2-3 mm thick.

2. Naturalistic bird, probably duck, a spiral marking the chest, the feathers indicated by lines. The eye is expressed by a faintly incised circle.

Gray green jade with white enclosures under the surface due to disintegration.

3.5 x 2.4 cm. 3 mm thick.

3. Conventionalized bird with curved beak, carved from a rectangular plaque of light greenish, translucent jade and decorated alike on either side. The notched rectangle above the head is apparently intended to represent the bird's crest. The influence of the Chou bronze style of birds is evident. The workmanship is most careful and exquisite.

7.1 x 3 cm. 5-6 mm thick.

4. Conventionalized miniature bird adapted to the shape of a jade plaque, with fish-like tail. The eye is indicated by an incised circle which is too large in proportion.

 $3.2 \times 2.1$  cm. 1 mm thick.

5. Crested bird with curved beak, turning its head around. The projection on the left, with incised line in the middle, is the bird's tail. An angular spiral is incised on the body (on both sides). Perforation in head drilled from both sides. Gray bluish jade interspersed with dark blue dots; neck and left side dark brown.

4.2 x 5.6 cm. 2 mm thick.

6. Bird of gray jade, presumably pigeon, carved alike on both sides, lines partially filled with vermilion. Spiral and feathers of same style as in Fig. 2 of this Plate.

4 x 2.7 cm. 4 mm thick.

7. A cormorant of naturalistic style in its outline. The straight and hooked bill leaves no doubt of this identification; the lower point

of the hook is unfortunately broken off. The neck is ornamented with wave lines, and the body is filled with a spiral composition. Light yellow, uniform color.

5.7 x 3.5 cm. 2 mm thick.

- 8. Miniature fish with crest, of gray yellowish jade.  $2.7 \times 1.2 \text{ cm}$ .
- 9. A bird on the wing. Beak broken off. Yellow bluish jade. 4.1 x 3.1 cm. 2 mm thick.
- 10. A floating duck with head turned back and with a young one attached in front, of gray green jade. Probably Han period. 5.5 x 3 cm. 3-5 mm thick.
- 11. Human or mythological figure in profile, seated with drawnup legs, carved from gray, translucent jade. It is related in style to Fig. 3 of this Plate.

### PLATE XXVII

ORNAMENT, MONSTER, AND BIRD (1, 4-5), CHOU PERIOD GIRDLE PENDANTS (2-3), HAN PERIOD

1. Flat plaque gray greenish in color, considerably decomposed and discolored. There are two small perforations at the top for suspension. There is a round or rather oval aperture nearly in the centre. To the right and left of it two pieces of a rhomboid shape have been cut out, and the edges are serrated. The lower portion is treated in open work, resulting in twelve figures of curious forms, some assuming the shape of arrowheads. Perhaps this ornament belonged to a man of the military profession.

14.5 x 8.2 cm. 1-2 mm thick.

2. Semicircular plaque of gray translucent jade, presumably headpiece or part of a girdle-pendant ("Jade," p. 200) and also used as a [41]

resonant stone. There are three rows of small perforations 8+7+5=20 (some do not come out in the photograph, as they are filled with hardened loess). The designs on the top are reminiscent of those encountered in the top-pieces of Chou bronze bells. Traces of vermilion.  $15 \times 4.2 \text{ cm}$ . Thickness on lower side, 3, 4-4.5 mm, on upper side 1.5 mm.

- 3. Girdle-pendant in shape of a fish-monster, of cream-colored jade mingled with bluish and reddish spots and veins. In regard to the indentations compare the figures in "Jade," p. 180.
- 4. Four-footed monster in silhouette, cut out of a flat plaque alike on both sides, light yellowish brown in color.
  6.2 x 3.5 cm. 2 mm thick.
- 5. Bird carved from a thin plaque of dark gray jade with incised designs.

7.5 x 3.9 cm. 2 mm thick.

#### PLATE XXVIII

# DRAGON AND THREE PAIRS OF BIRDS CHOU PERIOD

1. Green jade plaque carved alike on both sides, in shape of a type of dragon with serpent-like body engraved with spirals and half circles along the edges, rather irregular and crudely cut. Two small perforations for attachment.

15.4 x 4.2 cm. 4-5 mm thick.

2. Pair of birds of thin, translucent green jade; the two are almost, but not entirely alike. Each bird is combined with a fish-body. Small perforation on breast and a ring on the back. Incisions were filled with vermilion.

4a. 10.7 x 4.1 cm. 1.5 mm thick. 4b. 10.7 x 4.4 cm. 2-2.5 mm thick.

3. Pair of conventionalized birds of dark, almost black jade, each carved alike on both sides. Incisions sharp and firm and filled with vermilion. Fish-like tails.

3a. 7 x 2.9 cm. A little over 1 mm thick.

3b. 7 x 3.1 cm. 1.5 mm thick.

4. Pair of thin plaques of green jade, carved only on one side. Reverse overlaid with vermilion. The design is evolved from the conventionalized bird figures and corresponds exactly to the Chou bronze style.

6.1 x 4.2-4.4 cm. 1 mm thick.

# PLATE XXIX

PAIRS OF DOLPHINS, FISH, AND MONSTER, CHOU PERIOD

1. Pair of plaques of white bluish stone in shape of dolphins. Incrusted with hardened loess. Carved alike on both sides.

1a. 8.6 x 2.5 cm. 2-3 mm thick. 1b. 7.7 x 2.2 cm. 2-3 mm thick.

2. Fish of sea-green, translucent jade, carved alike on both sides. Three small perforations above and four below.

10.6 x 3 cm. 0.5–1 mm thick.

There is a pair of these fishes, but only one has been photographed. The Bahr collection contains about seventy fishes among which many well-defined species can be distinguished.

3. Curved green jade plaque in form of a monster with open jaws, carved alike on both sides. Incisions coated with vermilion. Small perforation at left end. Filled with spiral and line patterns, one square spiral on the left. The eye is represented by a spiral.

10.1 x 2.6-2.7 cm. 5 mm thick.

4. Pair of dolphins of green jade, carved alike on both sides. Snout, upper part, and tail grayish, likewise entire lower surface.

Small perforation in head. Eye outlined in form of a spiral. Contours and incisions cut with great firmness and evenness; graceful and perfect.

4a. 10.2 x 2.3 cm. 1.5-2 mm thick. 4b. 10.3 x 2.3 cm. 1.5-3 mm thick.

The differences in measurements and details show that these pairs were not made from stencils, but were each freely carved from hand.

### PLATE XXX

### INSECTS, CHOU AND HAN PERIODS

The fondness of the ancient Chinese for insects is well known, and the cicada as a symbol of resurrection played a prominent rôle in the ancient ritual complex of jade. Jade as the most highly prized substance found in nature was believed to be endowed with the property of preserving the body and prompting its resurrection. The last service rendered to a departed friend was to send for him a piece of jade which was placed on his tongue. These protecting amulets assumed either the shape of a tongue, or were carved in the form of a cicada. In either case the significance was that the mourner desired to hear his friend's voice again. It was an expression of faith and hope. The cicada plays an eminent rôle in the folk-lore of the Chinese who were deeply impressed by the long and complicated life-history of this interesting insect. In the same manner as the larva creeps into the ground and rises again in the state of the pupa till finally the cicada emerges, so the soul of the dead was believed to fly out of the old body and to awaken to a new life. The cicada, accordingly, was a symbol of resurrection. The Bahr collection abounds not only in very fine cicadas, but also reveals the interesting fact that several other species of insects were represented in jade. The insect in Fig. 7 of this Plate is a very beautiful, naturalistic cicada of gray and black jade (6 x 2.7

cm), the abdomen of the insect being represented on the lower side. Cicadas and most other insects were carved in considerable enlargement. The insect in Fig. 8 is not a cicada, but is presumably intended for a kind of beetle; it is a wonderful carving, the wing-covers being particularly fine; the coloring is no less amazing: it is dark green and brown on the upper surface, gray (the common color of jade) and yellow brown on the reverse.

The large insect in Fig. 1, of a white-gray-greenish material (8.3 x 4.1 cm, 2–6 mm thick), is what is commonly called by Chinese a cicada, but my colleague, Mr. Gerhard, a professional entomologist, denies that it could represent a cicada. The white insect in Fig. 2, in his opinion, is some species of the genus *Geocoris*. Exact identification of these insects is difficult and in most cases impossible, especially as antennae and legs are not represented. The gray jade plaque in Fig. 3 has merely the cicada shape thoroughly conventionalized, and is engraved with geometric patterns, as we find in the so-called cicada designs of archaic bronzes.

8.4 x 3.5 cm. 3 mm thick. Hardened loess on both sides.

Fig. 9 is of a beautiful, green, transparent jade, highly polished on the upper side, but dull on the reverse; there are no designs either on the reverse.

5.9 x 2.5 cm. 5 mm thick.

Figs. 4–6 form a peculiar group of insects, resembling or perhaps even identical with the group 10–13 in Plate XXXI. The identification is difficult, because the legs and antennae and, in most cases, not even the head are represented.

# PLATE XXXI

VARIOUS SHELLS AND INSECTS, CHOU AND HAN PERIODS

1, 6. Shells resembling the chrysalis and door shells (family *Pupidae*), also the auger shell (genus *Terebra*) which occurs in the

China Sea. An exact identification is impossible. The piece in Fig. 1 has one lateral perforation for suspension. It is skilfully carved from a gray greenish jade clouded by white enclosures.

4.9 cm long.

- 2, 9. Larvae or caterpillars of some kind of beetle. 3.9 and 4.6 cm long, respectively.
- 3. Pupa or larva of a cicada, of gray jade and natural size, of naturalistic style.

  2 x 1 cm.
- 4-5. Silkworms of naturalistic style with clearly outlined heads. 3.9 and 4.2 cm long, respectively.
- 7–8. Implements of gray jade, of later date than 4 and 5, probably used to untie knots, in shape of conventionalized silkworms. The silkworm ridges have developed into a stereotyped pattern in Fig. 7, it is surmounted by the full figure of an animal in the same manner as we find in the knobs of seals. Fig. 8 is surmounted by a pigeon; in this piece only the form is preserved, the ridges have been abandoned and replaced with an engraved spiral composition.

  4.9 cm long.

10–13. Small insects which defy identification. Compare Plate XXX, Figs. 4–6.

#### PLATE XXXII

PAIR OF PIGS, ORNAMENTAL TUBES, AND GIRDLE-PENDANT, CHOU PERIOD

1. Two plastic, solid figures of crouching pigs of bright green jade with yellow and white spots, due to chemical changes under ground. Probably used as a charm. There are five more such pigs in our col-

lection, which show but slight variations in detail, but are all of the same geometric style. The carver evidently had a rectangular slab before him and saw in it the vision of a pig; then he gradually worked the features of the animal into it. This type has also become known from tombs in Korea.

1a. 10.5 cm long. 2.2 cm high.1b. 10.2 cm long. 2.5 cm high.

- 2-4. Tubular beads with concave outlines, of yellow jade with black dots and veins, yellow jade with green and brown spots, and pure gray jade, respectively. The perforations were drilled from both ends and joined in the middle. The reproductions do not render justice to the beauty of these pieces. Another of this type in the Bahr collection is decorated with incised spirals of Chou bronze style.
- 2. 6.6 cm high.
- 3. 6.5 cm high.
- 4. 7.1 cm high.
- 5. A pendant of a glossy white jade, square in section and gradually tapering toward the end. As a type it belongs to the class tien usually explained as ear-rings ("Jade," p. 253), but it is evident that this object is too long and heavy to serve such a purpose. I would rather be inclined to think that it was a girdle-pendant. In opposition to the plain tien published by Wu Ta-ch'eng, this example is decorated on its four sides with a design the unit of which is repeated twelve times on each side and somewhat resembles the character wang ("king"). The vertical line in the centre is alternately simple and double. There is also a certain similarity with the designs on the Earth symbols. The perforated portion has the shape of an obtuse pyramid, and the opposite end that of a pointed pyramid.

 $13~{\rm cm}$  long. Two opposite sides  $1~{\rm cm}$  wide above and  $6~{\rm mm}$  below, the two others  $9~{\rm mm}$  wide above and  $5~{\rm mm}$  wide below.

### PLATE XXXIII

HUMAN FIGURE, CHOU PERIOD

Plastic figure of a bearded old man, carved from a peculiar, bluish gray, glossy stone, rounded at the back, a central ridge in front. Ears and nose are not represented. Eyes and mouth are indicated by simple slits, those of the eyes being placed obliquely. The beard is pointed and triangular in shape, marked by ten slightly incised lines. He is completely enveloped in a robe with long, drooping sleeves in which the hands are hidden. The feet are not represented. The artist evidently had a rectangular plaque before him which he adjusted into the shape of a man, hence the rectangular outlines of the head and the base. There is a large series of similar human figures in the Bahr collection; most of these have perforations running from ear to ear, through the sleeves or the length of the body, and were intended for suspension. This one is solid and not perforated.

14.3 cm high. 3.5-5 cm wide. Base 4 x 2.7 cm.

## PLATE XXXIV

PAIR OF HUMAN FIGURES, BAT, AND ARCHER'S THUMB-RING, HAN PERIOD. MINIATURE DAGGER AND TIGER'S HEAD, CHOU PERIOD

1. Pair of plastic figures representing a bearded old man of the same type and style as the one illustrated in "Jade," Plate XLII, Fig. 3, and described on p. 311. The two figures are of equal size and identical color, having been carved out of the same prismatic block in which the two were back to back; they were then cut loose from one another at the back. Hence they are real twins. The jade is light green in color with a dark brown zone in the centre. Each man has a long triangular beard, and is equipped with a flat cap and a coat which falls over a long, girdled gown. The uppers of the shoes are outlined in front. The faces are but vaguely suggested.

2. Implement of a dark brown glossy stone, perhaps used for untying knots, surmounted by the full figure of a bat of naturalistic style. The back is flat, the front consists of two slanting sides, the cross section is triangular.

8.8 x 2.1 cm.

- 3. Archer's thumb-ring, a very ancient type which has been unknown heretofore. It is of dark gray jade ornamented with incised designs of Chou bronze style. The broad portion below served for protecting the ball of the thumb. The string of the bow rested against the peg or spur on the other side. Beneath it there are two connecting oval perforations in the ring. A string or several passed through these and was tied around the thumb, so that the ring was tautly in place. The Koreans used a similar thumb-ring, save that the spur was wanting. Compare "Jade," pp. 283–285.
- 4. Miniature dagger or rather suggestive of a sheath containing a dagger or short sword with curved point, carved from gray green jade almost entirely discolored and weathered away. The reverse is plain, the obverse is decorated with incised designs which may have been derived from an ornamented bronze blade. This object was obviously used as an ornament suspended in the girdle. There is a perforation in the middle of the upper narrow side which connects with a perforation in the reverse, and there are two more perforations in the reverse connecting with perforations in the lateral narrow sides, altogether three pairs arranged in the form of a triangle.

13.3 cm long. 1.7-2 cm wide. 3-5 mm thick.

5. Tiger's head, hollow carving from gray jade. According to Mr. Bahr, this piece was found at Sin-cheng together with the jades illustrated in Plates XIX and XX. The jaws are open, and the teeth are

represented (not visible in the illustration, as the piece was photographed from above with a vertical camera).

5.8 x 5 cm. 2.7 cm high.

### PLATE XXXV

## WHITE JADE FIGURE OF A LADY, WEI PERIOD

This unique and graceful statuette, as far as is known at present, is the only one of jade of this early period, and in its style agrees with the corresponding clay figurines of the same epoch. It is skilfully carved from a fine white and gray jade here and there intersected by brown veins. A delicate, aristocratic, oval face of calm dignity, with a high forehead. Her hair is combed down in front and back, but leaves the ears free. The crown of the head is surmounted by a toupet and head-dress. The lines marking the hair are of extreme finesse. She is clad in a long flowing gown, the neck protected by a collar, and wears a girdle around the waist. The hands are stuck through a slit in the long drooping sleeves which terminate in a bag. The hands are perforated horizontally, and must accordingly have held an object that passed through the perforations. The figure gradually broadens toward the base, the uppers of the shoes jut out in front. On the lower side of the base the soles of the feet are incised, and the back view demonstrates that the artist was anxious to produce a real work of sculpture with a complete finish.

17 cm high. Base 4.5 x 3.7 cm.

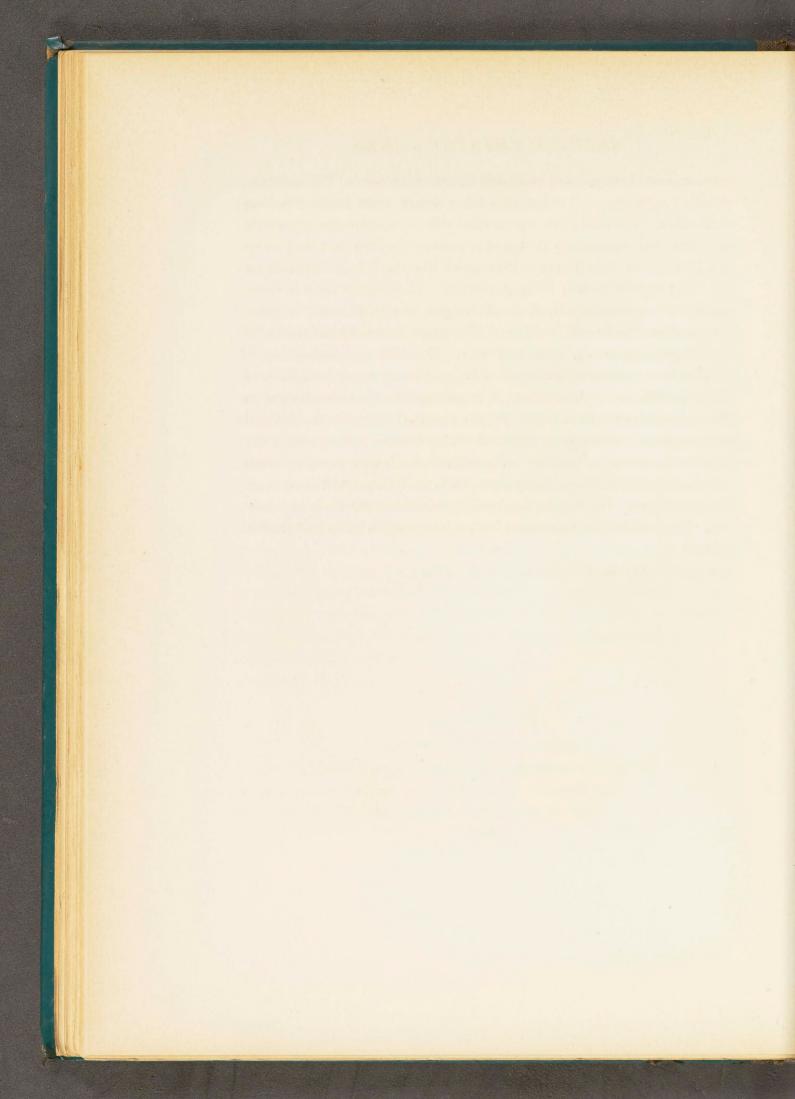
#### PLATE XXXVI

#### JADE RHYTON, SUNG PERIOD

Carved from a gray, translucent jade filled with pink spots and black veins. A magnificent carving and technical masterpiece of the Sung period. The decorations are laid out in five zones. The upper

one contains three pairs of birds and two pairs of fishes. The birds are standing opposite each other on a lotus flower, their beaks touching each other. The fishes are represented side by side on the inner side of a lotus-leaf, apparently designed to convey the idea that they swim in a lotus-pond; this design is very much like the fish conceptions on the Ting and Ts'e-chou Sung porcelains. The second zone is decorated with conventionalized floral designs; the third, with a spiral composition; the fourth, with a row of strongly conventionalized facial masks showing brows, eyes, and nose. The fifth and lower zone is divided by a curious animal-head with projecting nose, the species of which is difficult to determine. It is noteworthy that the designs in this zone are not symmetrical, but are reversed on the two sides and even represent monsters of different style. On the side shown in the illustration we see a monster with a bird's beak and two feet, each equipped with two large, sharp claws; it is confronted with a conventionalized bird. The handle is gracefully curved in the form of a fishtail. The bottom is ornamented with a composition of incised double spirals.

14.6 cm high. Opening 9.4 x 5.4 cm. 1.5 mm thick.









1. Ornamented Axe-Head. 2-3. Ceremonial Disks. Chou Period.







1. Scraper. 2. Ceremonial Disk. CHOU PERIOD.

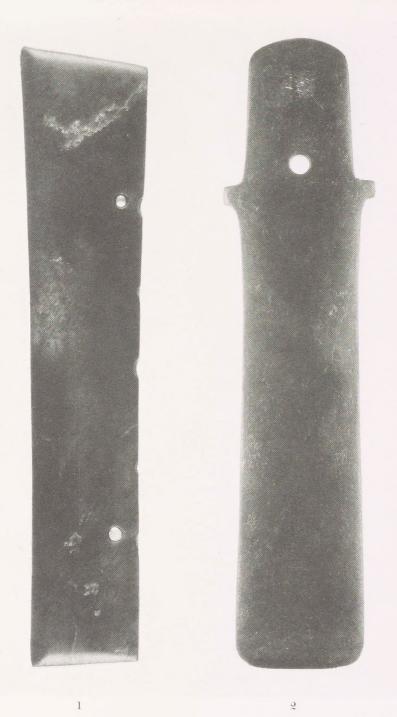




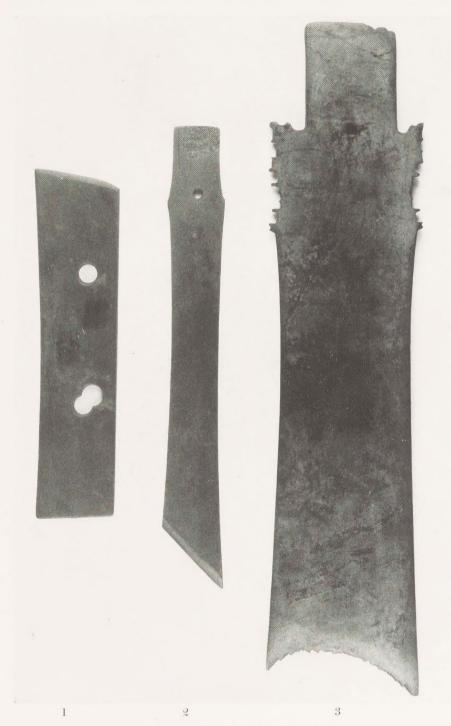


1. Axe-head. 2. Ceremonial Disk. Chou Period.

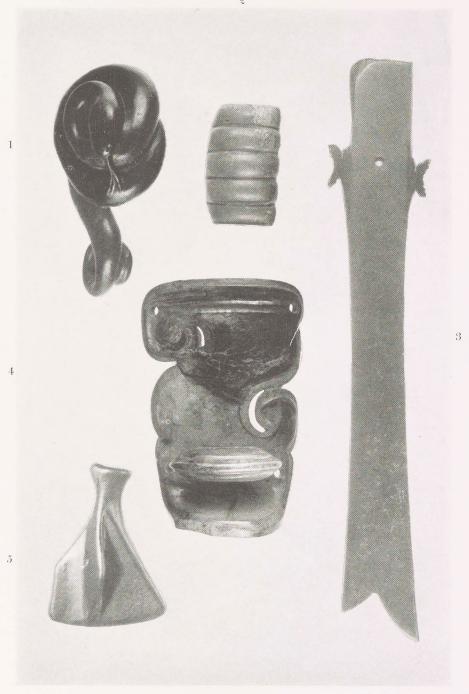




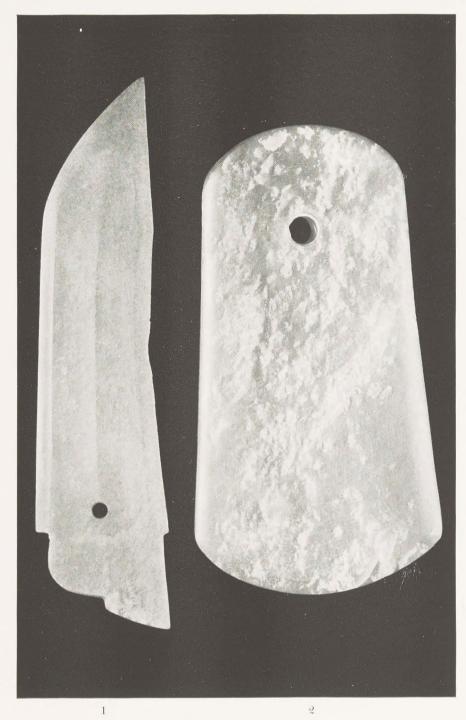
1. Ceremonial Knife, Chou Period. 2. Ceremonial Dagger, Han Period.



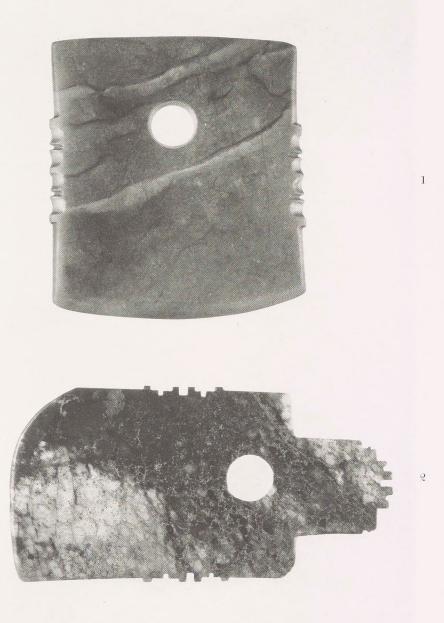
1. Ceremonial Knife. 2. Chisel. 3. Sword. CHOU PERIOD.



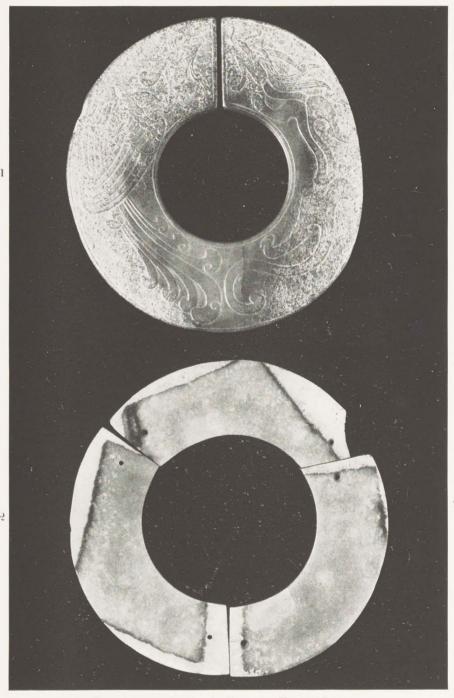
1. SERPENT FROM SOUTHERN CHINA, HAN PERIOD. - 2. HEAD-DRESS, T'ANG Period. 3. Ceremonial Sword. 4. Engraved Ornament. 5. Black JADE CHARM IN SHAPE OF SHOULDER BLADE, CHOU PERIOD.



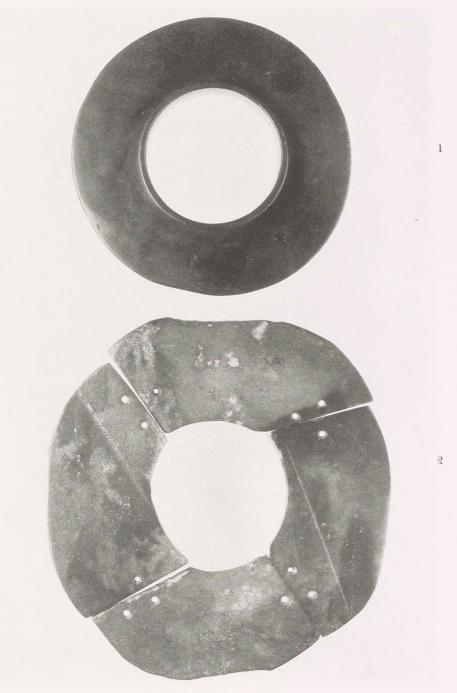
1. Ceremonial Double-edged Dagger. 2. Chisel. CHOU PERIOD.



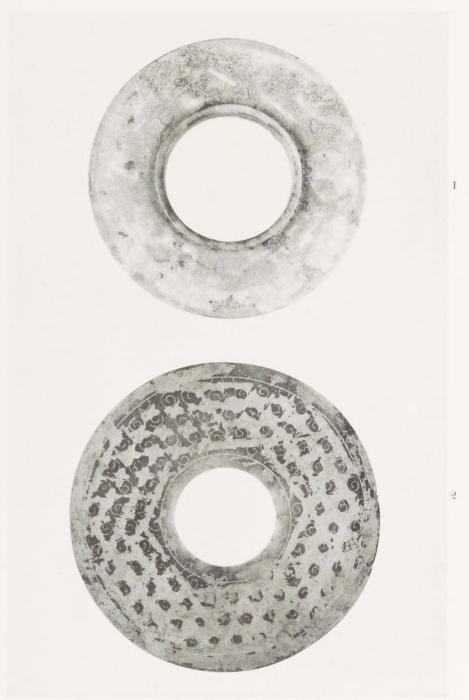
Notched Ceremonial Axe-heads, Chou Period.



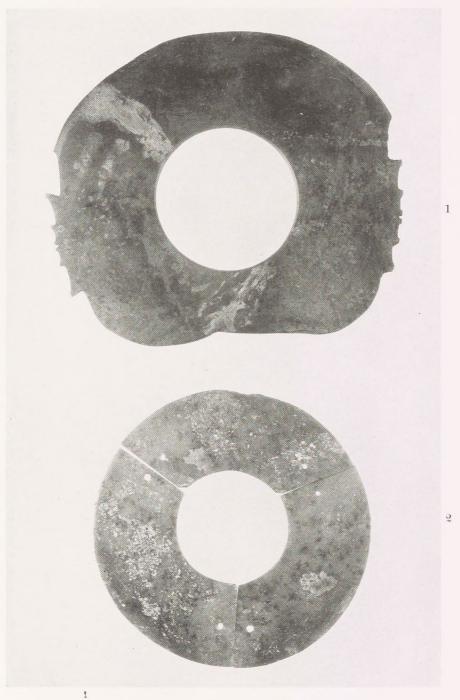
1. Incomplete Disk. 2. Disk in Three Segments. EARLY HAN PERIOD.



1. Wheel Disk, Chou Period. 2. DISK IN FOUR SEGMENTS, EARLY HAN PERIOD.



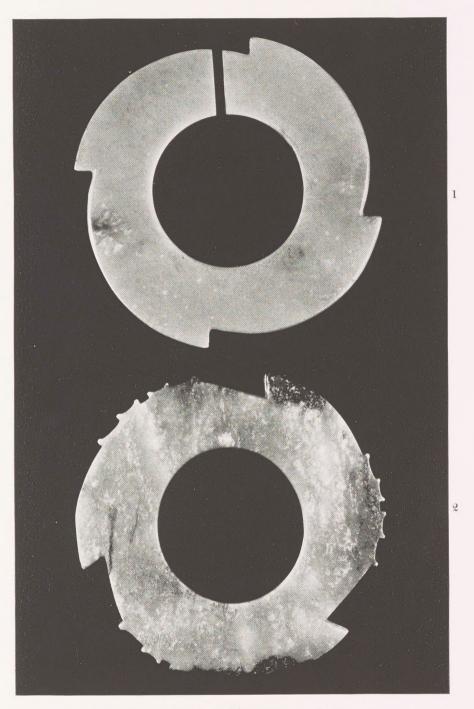
Wheel Disk with Designs Painted in Vermilion, Chou Period.
 Decorated Disk, Late Han Period.



1. Notched Disk, Chou Period. 2. DISK IN THREE SEGMENTS, EARLY HAN PERIOD.



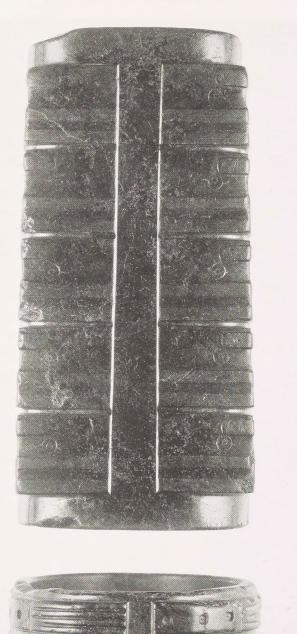
DECORATED CEREMONIAL DISK, HAN PERIOD.



Jagged Ceremonial Disks. 1. Han Period. 2. Chou Period.

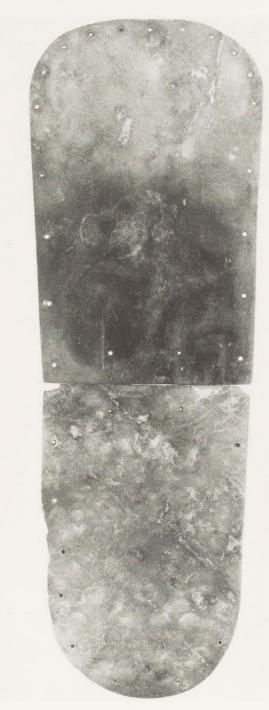


EMBLEM OF EARTH, CHOU PERIOD.



EMBLEMS OF EARTH, CHOU PERIOD.

## PLATE XVIII BAHR COLLECTION



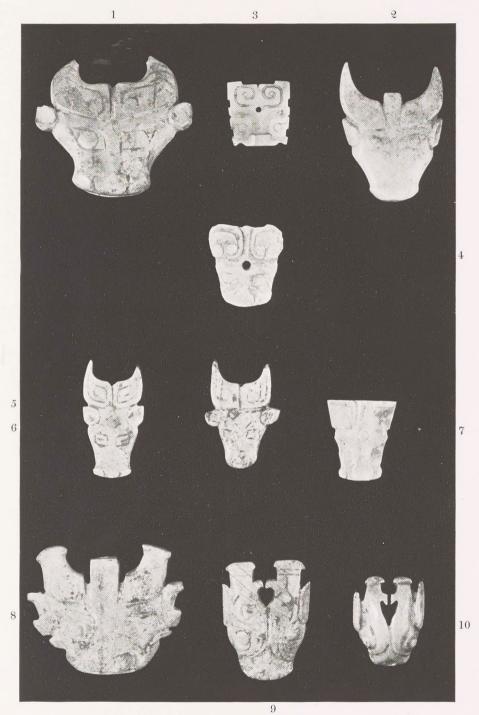
JADE SANDALS, CHOU PERIOD.



DECORATED JADE ORNAMENTS, CHOU PERIOD.



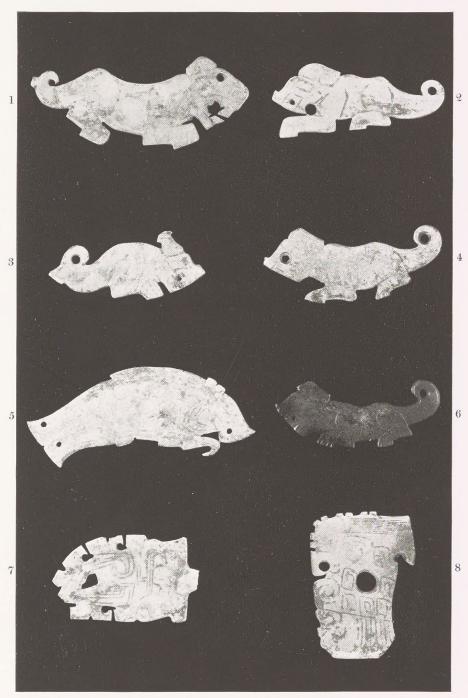
DECORATED JADE DISK, CHOU PERIOD.



NATURALISTIC AND CONVENTIONALIZED OX-HEADS, CHOU PERIOD.

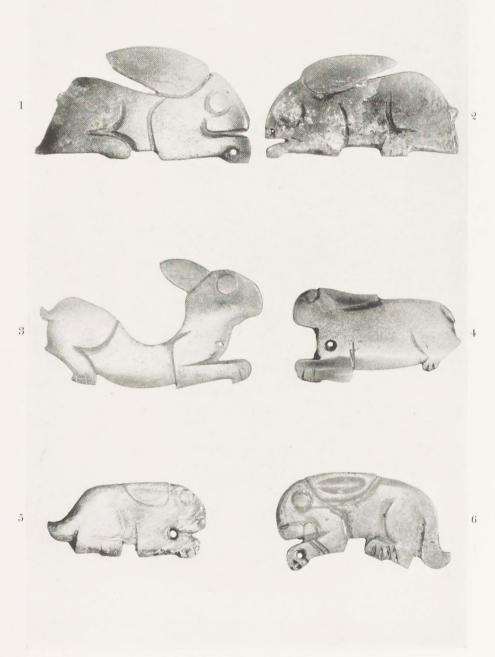


1-4. Conventionalized Animal-Heads, Chou Period.5. Full Figure of Crouching Buffalo, Chou Period.

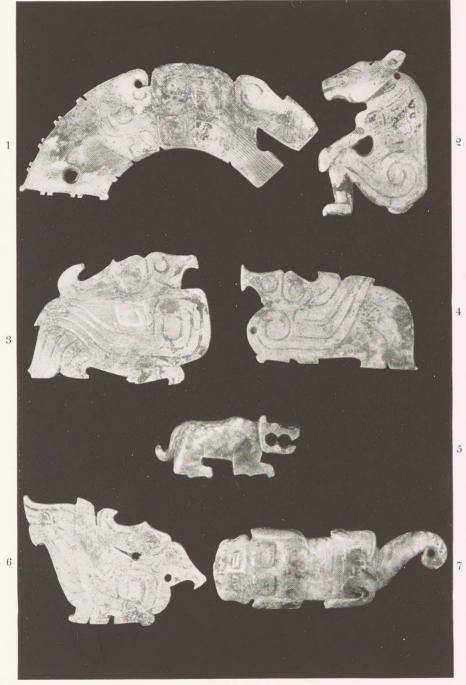


1–4, 6. Tigers. 5. Dolphin. 7. Monster Head. 8. Conventionalized Bird. Chou Period.

# PLATE XXIV BAHR COLLECTION

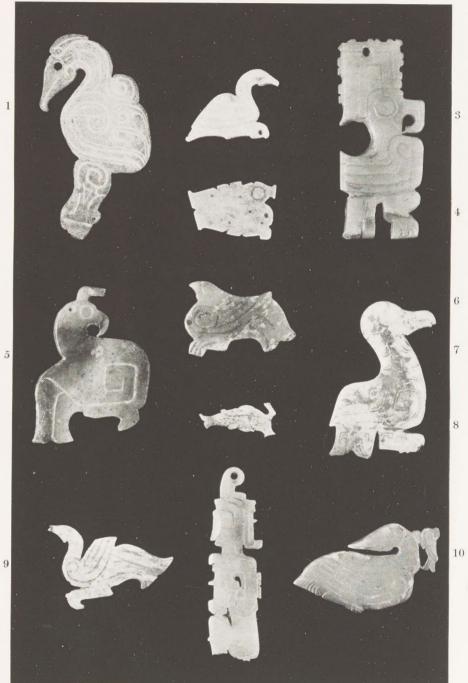


HARES, CHOU PERIOD.



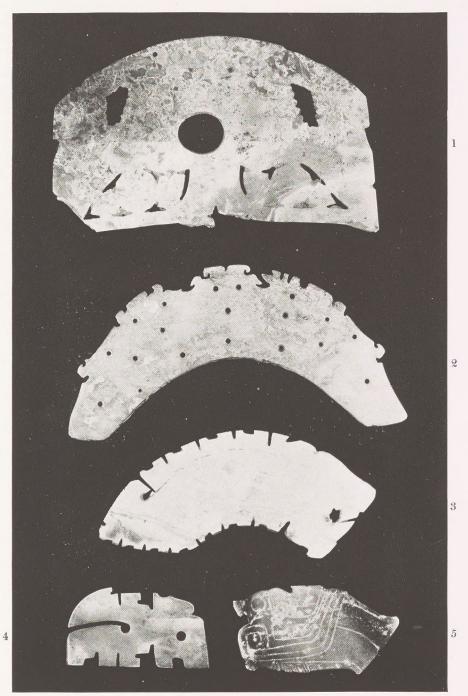
1-2. Monsters. 3, 4, 6. Birds. 5. Bear. 7. Alligator. CHOU PERIOD.





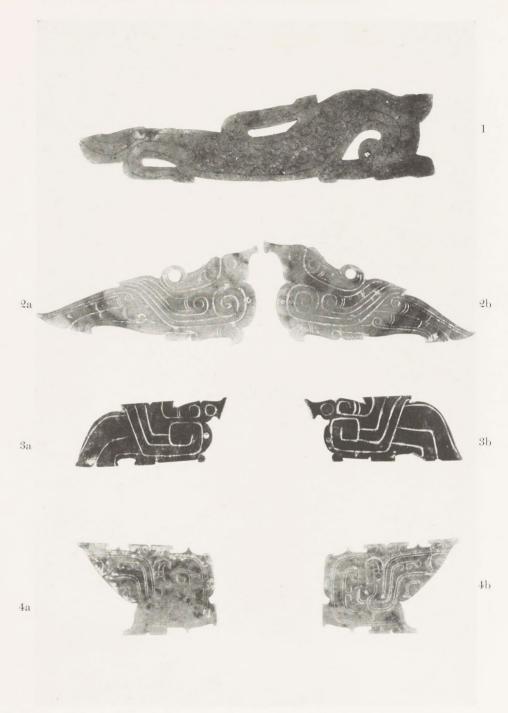
11

1-7, 9, 10. Birds. 8. Miniature Fish. 11. Human Figure. Chou Period.

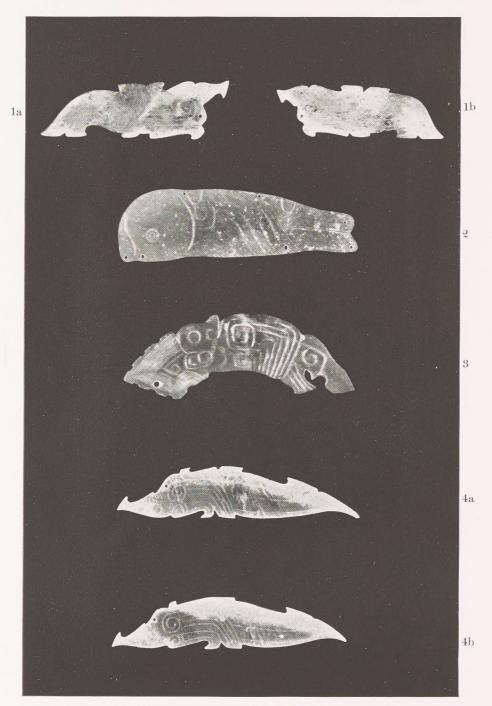


1. Ornament. 4. Monster. 5. Bird, Chou Period. 2, 3. Girdle Pendants, Early Han Period.

#### PLATE XXVIII BAHR COLLECTION



1. Dragon. 2-4. Pairs of Birds. Chou Period.

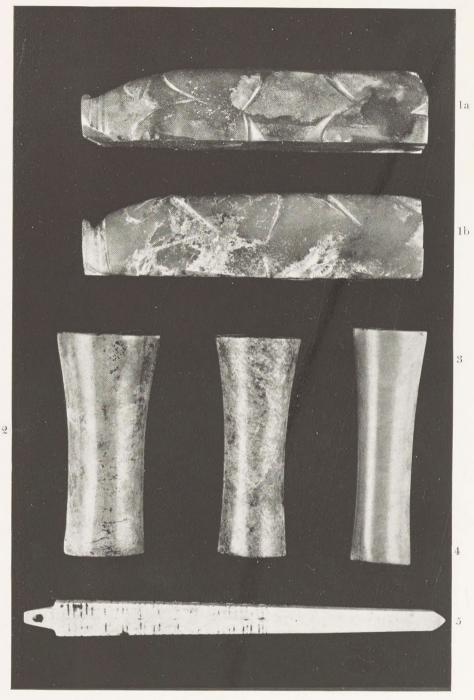


1, 4. Pairs of Dolphins. 2. Fish. 3. Monster. Chou Period.



INSECTS, CHOU AND HAN PERIODS.

1, 6. Shell. 2, 9. Larvae of a Beetle. 3. Larva of a Cicada. 4-5. Silkworms. 7, 8. Implements in Shape of Conventionalized Silkworms. 10-13. Unidentified Insects. Chou and Han Periods.



1. Pair of Pigs. 2-4. Ornamental Tubes. 5. Girdle Pendant. Chou Period.

### BAHR COLLECTION PLATE XXXIII



Human Figure, Chou Period.



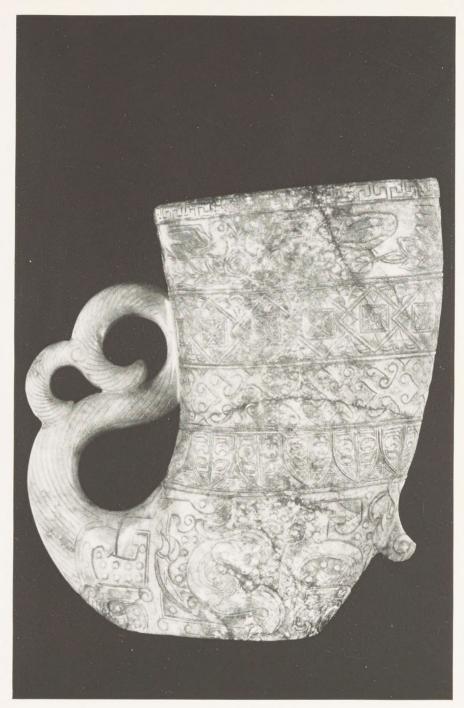
1. Pair of Human Figures. 2. Bat. 3. Archer's Thumb-ring. Han Period. 4. Miniature Dagger. 5. Tiger's Head. Chou Period.

## BAHR COLLECTION PLATE XXXV



White Jade Figure of Lady, Front and Back, Wei Period.

### PLATE XXXVI BAHR COLLECTION



Jade Rhyton, Sung Period.



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