# THE CHINESE RHINOCEROS AND CHINESE CARVINGS IN RHINOCEROS HORN

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THE old controversies of sinologues make instructive, but rather terrifying, reading today. They were conducted with a savagery which is beyond us. The cut and thrust of the participants was ruthless; and no quarter was asked for or given. Like Housman, they would not have hesitated to write in an obliterating footnote that a German colleague with whom they disagreed was "a native of Strasbourg, still famous for its geese!"

Although the dust of these battles may have died down long ago, the controversies themselves passed away and the embers of their quarrels be extinct, one treads gingerly over the lava left by the eruptions of these Titans, pausing to listen nervously, lest the echo of some subterranean rumble might proclaim that these volcanoes are not dead and cold, but only sleeping, and might come to life again at the visitor's cautious tread.

Such a controversy was once conducted between Herbert and Lionel Giles, and Berthold Laufer over the meaning of two Chinese characters which have been applied to the rhinoceros. This divergence of opinion arose over the question, which animal or animals were referred to in the ancient Chinese texts by the two Chinese characters ssi and hsi. That both these characters have from post-Han times been applied to the rhinoceros is scarcely open to question, but in the Han and earlier texts their meaning is uncertain; and the only point of agreement between the participants in this controversy was that they both referred to large beasts bearing horns.

I have not been able to obtain a copy of that number of the Adversaria Sinica containing the article by Herbert Giles which initiated the controversy. The Museum's copy in which this article appeared seems to have been one of the victims of the bombing, but it is clear from the subsequent discussion that he took up the view suggested to him by his son Lionel, and anticipated by Palladius, that the two characters ssu and hsi should be more correctly applied to a bovine animal than to the rhinoceros in the earliest texts. He had altered the meaning of ssu in the second edition of his dictionary to that effect. This was followed by Laufer's attack on Giles's theories in the T'oung Paot of 1913, in which he says: "The contention of Professor Giles that the words se and si (Laufer uses this romanization for the forms ssu and hsi) originally refer to a bovine animal is not at all justified and none of the arguments advanced by him in favour of this

<sup>&</sup>lt;sup>1</sup> Berthold Laufer. "Arabic and Chinese Trade in Walrus and Narwhal Ivory." T'oung Pao, Vol. XIV, p. 323, footnote 2. Leiden, 1913.

point of view can be defended. All available evidence, philological, historical, archaeological, zoological and palaeontological, leads me to the result that the words se (ssu) and si (bsi) may well apply to the rhinoceros, and to that animal exclusively, and that from the earliest times two distinct species are understood, the word se referring to the single-horned rhinoceros (Rhinoceros Unicornis) and the word si referring to the twohorned rhinoceros (Rhinoceros Sumatrensis)." This was reinforced by a second attack in Laufer's "Chinese Clay Figures" published in 1914.2 There had already been some dispute over these two characters by sinologues. For Biot had rendered the character se or ssi as thinoceros and the character si or hsi as buffalo, to which Palladius in his Chinese-Russian dictionary had given exactly opposite meanings; while Couvreur had credited the character si (hsi) both with the meaning of rhinoceros and wild ox. Laufer could claim, however, the support of both Chavannes and Deveria for his interpretation, and could cite Bretschneider, both as a naturalist and a sinologue, as upholding his opinion that both the rhinoceros, and goblets made from rhinoceros horn, are repeatedly mentioned in the Chinese classics and that the latter has been reputed by the Chinese from time immemorial for their anti-poisonous virtues. In one hundred and sixty-three pages devoted to the rhinoceros in China in his book "Chinese Clay Figures," Laufer demolishes Giles's arguments to his own satisfaction. I have not seen the review of this book by Lionel Giles, published in the London China Telegraph of February 1st, 1915. Giles tells me he has no longer a copy in his possession but that it was quite a short one, unlike his subsequent outburst; and I think we can also pass over Laufer's reply in this review of March 5th of the same year.

Lionel Giles's first review was followed by a second and much longer review in Adversaria Sinica, entitled "Mr Laufer and the Rhinoceros," in which, with proper filial piety, he maintained his father's position, with some acerbity. "Mr Laufer," he says on this occasion, "has not the gift of lucid and orderly exposition, and some of his statements are self-contradictory, so that, in order to weigh the evidence presented to us, it will be necessary to run through this chapter on the Rhinoceros and discuss each point as it arises. Mistranslations will be noted," and noted they are even when they have nothing to do with the Rhinoceros! "Mr Laufer," we are told, "appears to think that he has only to assert a thing loudly and long enough to make it true. I can only appeal to the judgment of any unprejudiced observer," and "Mr Laufer makes a terrible hash of his translation of the Pu ku t'u lu... while his translation of the Pên Ts'ao and other works simply swarms with mistranslations, which in one or two cases seriously affect the argument," ending with "Mr Laufer's imposing fabric, so laboriously constructed in these pages, has its foundations in the sand and is not strong enough to shield it against the winds of criticism." Giles senior, in a frontispiece, endorses his

Berthold Laufer. Chinese Clay Figures. History of the Rhinoceros, Part I, pp. 1-173, Field Museum of Natural History, Chicago, 1914.

<sup>&</sup>lt;sup>3</sup> Herbert Giles and Lionel Giles. Adversaria Sinica, Series ii, No. 1, pp. 11-60. "Mr. Laufer and the Rhinoceros," Shanghai, 1915.

son's remarks (with slight reservations), and in a tailpiece makes this annihilating observation: "For my part, as I have already stated, Mr Laufer is a valuable asset as an archaeologist, but I have elsewhere shown that he is not qualified to translate Chinese," and ending with the remark, "If Mr Laufer claims to find the horn for such a goblet (the reference is to the horn goblets mentioned in the *Shih Ching*) on the head of a rhinoceros, I am obliged to part company with him in the quest for truth."

Laufer does not seem to have replied to this onslaught, but echoes of the controversy appear twenty-four years later in an article, "The Rescue of the Chinese Rhinoceros," by L. C. Hopkins in the Journal of the Royal Asiatic Society. In this article, Hopkins reiterates Laufer's opinion that the character ssu, when it appears on the Shang-Yin oracle bones, refers to the rhinoceros, and takes issue with three Chinese, Mr Shang Ch'êng-tso; Mr T'ang Lan and Mr Tung Tso-pin on this question. Mr T'ang, belonging to the Giles faction, believed the character ssu referred to a wild ox; while Mr. Tung took it to refer to the unicorn—this, as Hopkins quite rightly says, leads us nowhere. There was no reference to the hsi character in this article.

But six years earlier there had appeared in the *China Journal* an article entitled "Rhinoceros and Wild Ox in China" by Carl Whiting Bishop, which to me holds the key to the whole problem, although it seems to have been ignored by Hopkins, who may not have known of its existence. If the deductions of this article are correct, then both Giles and Laufer and, incidentally, Hopkins were mistaken.

Bishop investigates not only the construction of the two characters, but the texts in which they appear. He points out that the ssi pictograph, which occurs on the oracle bones of the Shang-Yin dynasty, suggests an attempt to indicate a creature with two lateral horns — in other words, a bovoid; while the hsi character is formed of two elements, "ox" and "tail." (Plate 15B). So far, everything is in favour of Giles's line of argument. Bishop goes on to build up from Chinese sources a most convincing picture of the two animals and their habitat. He comes to the conclusion that they were of totally different species, since when they were enumerated in old texts, along with other animals, one of the latter is, as a rule, placed between them. If they were closely related, it seems curious that the two terms should have been separated in this way.

Turning to the ssi character, he quotes from Chinese texts to show that the animal was well distributed over the middle parts of the Yangtze basin, and the Yellow River, and that it inhabited Southern Shensi, Eastern Honan and Szechuan in classical times. The Tso Chuan (600 B.C.) says it was plentiful in Sung (Eastern Honan) and the

<sup>&</sup>lt;sup>4</sup> I cannot resist adding that in the margin of the copy of Adversaria Sinica containing the article which I have consulted and which apparently belonged to Herbert Giles, as it has his signature on the outside leaf, there appears opposite the paragraph I have quoted, in the margin, in what is unmistakably the same hand, the two words 'a crusher."

<sup>&</sup>lt;sup>5</sup> L. C. Hopkins. "The Rescue of the Chinese Rhinoceros," Journal of the Royal Asiatic Society, pp. 253-260. London, 1939.

<sup>&</sup>lt;sup>6</sup> Carl Whiting Bishop. "Rhinoceros and Wild Ox in China," China Journal, Vol. 18, 1933, pp. 322-330, Shanghai, 1933.

Kao Yü in Pa (Eastern Szechuan), and the Shih Chi in Shu — the central part of the same province. Passages from the Tso Chuan and Tao Tê Ching show that it was compared in ferocity with the tiger. The Erh Ya says: "It is like an ox." The Shih Chi: " that in form it resembles the water buffalo." The Shuo Wên: "that it is like an ox and dark coloured." Bishop ends by identifying the ssu with the gaur or seladang (Bos gaurus), the largest of the existing bovoids. Old bulls of this species sometimes exceed six foot at the shoulder and turn from a chestnut brown to a deep purple brown or black with age (the dark colour of the ssi is often alluded to in Chinese texts). The horns of this species are well developed. Those from a record bull span 47 inches across. These animals require extensive tracts of unbroken forest and, in general prefer hilly country. They have a reputation for ferocity. This species still inhabits parts of Peninsular India, Burma, Indo-China and Malaya, and it also has been reported from Honan. It is possible that Bishop was wrong in selecting this particular bovoid, and that the ssu may have been one of the three forms of extinct water buffalo, of which the remains of one Bubulus mephistophiles have been found at Anyang; and another, Bubulus teilhardi at Chou K'ou Tien nearby,8 while the remains of yet another extinct species of this group were found in the Sungari sands. On a visit to Anyang in 1932 Dr Li Chi told Bishop that he had found there considerable numbers of remains of an extinct species of water buffalo and showed him an incomplete skull with the horn cornes. Dr Li Chi seemed quite positive about their identification with which Bishop agreed; but no mention was made of the discovery of any rhinoceros bones. On these and other grounds we shall investigate, Bishop contends, with some reason, that it was buffalo and not rhinoceros that is referred to in the Shang oracle bones by the character ssi, and that the horn cups referred to in classical literature were of buffalo and not rhinoceros horn.

The character *hsi* presents much greater difficulties because the elements of which it is composed, "ox" and "tail," lead on to the yak, of which the tails have always been prized by the Chinese as fly whisks. But the yak, which is mentioned in at least one text together with the *hsi* and the *ssi*, under the term *mao hsi*, is a highland animal, which could not have tolerated the low altitudes in which, according to Chinese texts, the *ssi* and the *hsi* thrived.

Bishop meets the difficulty by saying: "The hsi, on the other hand, seems not to have been mentioned in the Shang-Yin inscriptions. This may mean that the name was not in use, but introduced by the Chou people after the overthrow of the Shang's in the second millenium, B.C. The Chou's may have known the yak as the hsi, while they still lived in the elevated regions to the North West of China proper. After they entered the plains of the lower Yellow River, where the yak did not exist, it would be natural for them to bestow its now ownerless name upon some animal which they

<sup>7</sup> Shih Chi. Ch. 117, fol. 6B, T'ung Chih edition (Bishop).

<sup>8</sup> Teilhard de Chardin and C.C. Young on The mammalian remains from the archaeological site of Anyang. Palaeontologia Sinica. Ser. C. Vol. XII, fol. 1.

<sup>9</sup> Correspondence, China Journal, Vol. 17, Dec. 1932, p. 272.

encountered there. This would explain the otherwise meaningless composition of the character; its non-appearance in Shang inscriptions; its rather vague connection with the yak, which it seems always to have had, and finally its use to designate an altogether different animal."<sup>10</sup>

Laufer, however, took the exactly opposite view and believed that the term hsi was transferred from the rhino to the yak; of the two theories Bishop's seems to me the more sensible. Like the ssi, the hsi, according to the Kao Yu and the Shih Chi, is said to have been plentiful in Pa and Sung (both parts of Szechuan); in fact, both beasts seem to have inhabited much the same territory, but the hsi's range extended rather further East. Mencius, on at least two occasions, states that Chou Kung at the beginning of the Chou dynasty drove away the ferocious animals, and among them he enumerates the hsi, and as the scenes of his exploits are supposed to have been in Shantung, presumably in his time (circa 200 B.C.), this animal inhabited North West China. The Erh Ya says that the hsi "resembles a pig"; while the Shih Chi says, "it has a single horn on its forehead"; and the Shuo Wên that it is "an ox of the lands beyond the southern frontier, with one horn on its snout and one other on its crown," which suggests that when the work was published in the second century A.D. the hsi had disappeared from what then constituted China proper.

Bishop eventually comes to the conclusion that the *hsi* was the rhinoceros, of which the three Asiatic forms are today trembling on the edge of extinction. The first of these, the Great Indian Rhinoceros (Rhinoceros unicornis) approaches and even exceeds six feet in height at the shoulder and has a single horn, rarely over a foot long, although specimens of twice that length have been known. This animal is nearing extinction owing to persecution for its horn, but owing to protection, still maintains a somewhat precarious existence in Nepal and Bihar and in the Bengal Duars, in the State of Cooch Behar and in a few game sanctuaries in Assam. The second, the Javanese Rhinoceros (r. sondaicus) is another rather smaller, single-horned specimen which once inhabited Siam, Burma, the Malay Peninsula and the hilly forests of Java and Sumatra. And, lastly, there is the small hairy Sumatran Rhinoceros (Didarmocerus sumatrensis) which has two horns, known to reach 2½ ft. in length, of which the longer is in front, which had very much the same range as the Javanese rhinoceros, although its habitat is now confined to Borneo and Sumatra. It has a sub-species Lasiotes.

All three Asiatic species of rhinoceros are far less common and less aggressive than their two-horned African cousins, the Black Rhinoceros (Diceros bicornis), which

<sup>10</sup> Bishop, op. cit., p. 325.

<sup>11</sup> Mencius III, 11.9 (6). (Bishop).

<sup>&</sup>lt;sup>11</sup>a In a note in the Sunday Times of January 15th, 1956, Colonel Boyle, secretary of the Fauna Preservation Society, is reported as saying that only twenty or thirty specimens of the Javanese Rhinoceros inhabiting West Java are now known to exist; that the Sumartran Rhinoceros just survives in Sumatra and Borneo, and that of the Great Indian Rhinoceros only four hundred and forty specimens survive. See also: C. W. Hobley, The Rhinoceros, Journal Society for the Preservation of Fauna. The Empire, Part 14, 18-23 1931.

inhabits with one sub-species, nearly all Africa, south of Abyssinia, and the White Rhinoceros or Burchell's rhinoceros (*Diceros simus simus*), the largest land animal in existence after the elephant, which is now confined to Zululand, and the land enclosed by the Upper Nile; with a sub-species which inhabits Southern Sudan and Uganda, both of whose horns were almost certainly exported to China, as early as the 10th century through Arab intermediaries. But the whole family is distinguished by poverty of intelligence, dullness of sight and bad temper, although their hearing and sense of smell are acute.

It should not be forgotten that, although the rhinoceros is now confined to Africa and Asia, a member of the tribe, the Woolly Rhinoceros (r. antiquata), once inhabited Europe, but became extinct in the glacial epoch.

There is considerable difference of opinion as to when the rhinoceros died out in North China, for in geologically recent times, and even within possibly the early historical period, the fauna of Southern Asia extended further north, and the Yellow River basin was once the home of various species now confined to India, Malaya and Indo-China, among them was the rhinoceros. Andersson notes that several forms of extinct rhinoceros have left their fossilized traces in North China, and that these go back to Pleistocene times and even earlier.<sup>12</sup> Carcases of two species, complete with skin, without folds, two horns and curly hair, which lived in the ice age, have been discovered in the frozen soil of Siberia. The head and feet of one of these finds, which were made on the banks of the Wilui (Vilyui) River in 1771, have been preserved in Leningrad.13 Although rhinoceros were widespread over Asia and have left abundant fossil remains in deposits in China, there seems some doubt as to whether they occurred in Southern China within historic times. 14 & 15 Neither de Chardin nor Creel report traces of rhinoceros bones from Anyang, but Lo Chen-yu in "Illustrations from ancient objects found in the ruins of the Yin dynasty," states that his brother found at Anyang carved tusks of an elephant and bones of a rhinoceros (hsi), but there seems some doubt on this question.16

Bishop, as I have already remarked, makes no mention of these in his visit to Li Chi at Anyang in 1932, when he was shown the buffalo bones, and this question is certain to have been discussed on this occasion. Hopkins assumes that the species became extinct north of the Yangtze in Shang-Yin times, writing: "Whether it was exterminated by the Shang-Yin hunting parties with their predilection for blood sports or lost its joie de vivre, with the slow seepage of the incoming tide of human occupation, which

T. Gunnar Andersson. "Children of the Yellow Earth," London, 1934, p. 84. He mentions two forms of extinct rhinoceros as being discovered from fossil deposits obtained at Ching Yang Fu in Eastern Kansu. See also "Nashörner der Hipparion-Fauna Nord Chinas," Palaentologia Sinica, Ser. C. Vol. 1, Fasc. 4, Peking, 1924.

<sup>13</sup> Laufer, op. cit., p. 157. Footnote 1.

<sup>14</sup> C. M. Allen, "The Mammals of China and Mongolia," 1940, Part. 2, p. 1279-1280.

<sup>15</sup> Hopkins, op. cit., p. 260. See Letter from Dollman of the Natural History Museum.

<sup>16</sup> Bishop, op. cit., p. 325, footnote 1.

destroyed its old haunts we do not know."<sup>17</sup> "It (the Rhinoceros) may have existed in China well into historical times, but by the Chou or Han period it had become rare and shortly afterwards became extinct," says Sowerby.<sup>18</sup> While Laufer was of the opinion that towards the close of the Chou period (in the middle of the third century B.C.) the one-horned rhinoceros was in all likelihood extinct in Northern China, and the two-horned species had taken refuge in the mountain fastnesses of the south-east.<sup>19</sup>

Both the one-horned and two-horned species would, from Chinese representations of the rhinoceros, appear to have once existed in China (Plates 15 A, C and 16 A, B, C). One probably allied to the one-horned Javan Rhinoceros and the other to the two-horned Sumatran Rhinoceros. H. T. Chang probably presents the last word on the subject of the Chinese rhinoceros in his article entitled: "On the question of the existence of elephants and the rhinoceros in Northern China in historical times," in which he writes: "From Hsia to the end of Chou, elephant and rhinoceros were not inhabitants of the Northern region. In late Chou, those which existed must have been confined to south of the Yang-tze," which was to all purposes the boundary of Southern China in Shang-Yin times. He goes on to say that, although traces of numerous species of rhinoceros are recorded from the China of Pleistocene times, no traces of rhinoceros bones have been found on Neolithic sites. But he thinks that it is just possible that rhinoceros still existed in the Ch'u state in the latter part of the Chou period. This was the southernmost part of China at the time and extended in a pocket over and below the Yangtze valley. But even these statements must be accepted with caution.

Whatever happened in the North, where the consensus of opinion seems to be that the rhinoceros may have lingered on into Chou times, it would appear to have survived in the South in parts of Szechwan, Kwangsi, Yunnan and Honan, into the late T'ang and early Sung. "It might seem," writes Laufer, "that the rhinoceros was extinct in China proper in the Yüan period (1271-1367), judging from a remark made by Chou Ta-Kuan in his Memoirs on the Customs of Cambodia,"22 and other equally trustworthy Chinese support the view that these animals persisted in some localities at least as late as the 13th century. Li Shi-chen, writing in the 16th century, still assigned it to the Southern portion of Yunnan, and there is a startling reference in Du Halde, who, when writing his "Description of the Empire of China and Chinese Tartery" in 1738, says of the neighbourhood of Wenchow in Kiangsi, "one meets here the rhinoceros,"22 but one

<sup>17</sup> Hopkins, op. cit., p. 260.

Sowerby. "Chinese Animal Myths and Legends." North China Branch of the Royal Asiatic Society, Vol. LXX, p. 9.

<sup>19</sup> Laufer, op. cit., p. 161.

<sup>&</sup>lt;sup>20</sup> H. T. Chang. "On the question of the existance of elephant and rhinoceros in North China in historical times," Bulletin Geol. Soc. China 5, pp. 99-106. 1926.

<sup>21</sup> Laufer, op. cit., p. 165, Note 5.

Du Halde, J. B. "A Description of the Empire of China in Chinese Tartary together with the Kingdom of Korea; Tibet; including the geography and history (natural as well as civil) of those countries. London, 2 vols. 1738.

feels he must have been mistaken. It is certain, however, that by A.D. 2 it was an animal of sufficient rarity and interest to be sent as tribute; for one arrived that year as a present from the Huangchih.<sup>23</sup> At least, seven other references occur to rhinoceros sent as tribute between the Han and the T'ang from Szechuan, Tonking, Arabia, Java, and Annam.<sup>24</sup> It is amusing in passing to remember that the first rhinoceros or ganda to reach Europe since the time of Pliny was sent by Muzaffar, King of Gujrat (Cambay) to King Manuel of Portugal and landed in Lisbon on May 20th, 1515,<sup>25</sup> in the tenth year of the reign of the Emperor Chêng Tê. It was made even more famous by being drawn in ink by Dürer, from a sketch supplied by a Portuguese artist, and from Dürer's drawing, which came into the British Museum in the Sloane collection, eight editions of woodcuts were made. Later this unfortunate ganda was sent by King Manuel as a present to the Pope, Leo X, in a harness on a gilt iron chain, with a green velvet collar round its neck, studded with gilt roses and carnations; but the vessel carrying the gift was caught in a storm off the Gulf of Genoa at the end of January, or beginning of February, 1516, and was lost with all aboard.

Representations of the one-horned rhinoceros appear on a Chinese bronze kettle in the Po ku t'u lu,26 attributed to the Shang-Yin period, but by far the most important evidence that the Shang-Yin peoples knew the rhinoceros is provided by the famous bronze Hsi Tsun, in the Brundage Collection, if one accepts Wenley's dating of it to the late Shang-Yin period.27 (Plate 15, C). For it might equally well be of early Chou date. This magnificent bronze modelled in the form of a two-horned rhinoceros, is said to have been obtained with six other bronze vessels from a grave at the foothills of Liang shan, at Shou Chang in Shantung. One wonders whether any of the other vessels discovered at the same time were decorated with rhinoceros motifs? It figures in many Chinese books on bronzes, and was published as early as 1845, when it belonged to the Kung family, descendants of Confucius. It has been in Chinese collections since about 1843, when it was probably unearthed. It is now in the Brundage Collection in Chicago.

There are in the British Museum two bronze lynch pins, probably chariot furniture, modelled in the form of heads of rhinoceros, in high relief (Plate 16, A, Figs. 1 and 2). Both these pieces have been uncertainly attributed to the Chou period, and one of them (Fig. 2) may well be a reconstruction. But it is interesting to learn in this context from the

<sup>&</sup>lt;sup>23</sup> The Ch'ien-han-shu, Ch. 27, B, p. 176 (Laufer). See also D. Duyvenduk. "China's Discovery of Africa," pp. 10-12, and Professor Goodrich's "A Short History of the Chinese People," p. 31.

The Man I sent one of these animals as tribute in 84 A.D.; S. Western Szechuan in 94; Tongking between 166 and 188; Funan (Arabia) in 539; Ho Ling (Java) in 819 and another was sent from Annam in 1809. See Laufer, op. cit., pp. 80 and 81.

<sup>&</sup>lt;sup>25</sup> A. Fontoura da Costa. "Deambulations of the Rhinoceros (Ganda) of Muzaffar, King of Cambaia from 1514 to 1516. Portuguese Republic Colonial Office, 1937.

<sup>26</sup> Laufer, op. cit. p. 130, and Bishop op. cit., opposite p. 323.

A. G. Wenley. "A Hsi Tsun from the Avery Brundage Collection." Archives of China Society of America, Vol. VI, 1932.

Han historian, Ssu-ma Ch'ien,<sup>28</sup> that when the Emperor mounted his chariot they placed on both sides of it the Lords, whose chariots had red wheels; two crouching rhinoceros being represented on each wheel. There is also in the Musée Royaux in Brussels a small bronze rhinoceros, probably a support for an indeterminate object, for there are traces of a hole in the middle of the back, which is said to be Han in date (Plate 16, B).

Apart from the lynch pins, the British Museum has a small stone representation of a rhinoceros, which is believed to date from the late Shang-Yin or early Chou period (Plate 15, A). Unfortunately this piece has been broken about the head and one cannot see whether it was intended to have one or two horns. Among Hobson's papers was the photograph of a pottery tomb figure of a rhinoceros (Plate 16, C). This photograph was sent to him from Tientsin by a German dealer, Paul Dachsel, in 1924. The figure is described in the letter accompanying the photograph as being of hard red burnt clay, covered with a white slip and excavated in Shensi; and dating to any time between the Shang-Yin and Han dynasties. This animal eventually found its way into the Eumorfopoulos Collection, although it is not illustrated in the Catalogue, and from there into the Victoria and Albert Museum, where it is now exhibited with a Han label. It appears to be covered with traces of a greenish brown glaze. To these representations of the rhinoceros can be added that engraved on a pair of silver dishes in the Kempe Collection, illustrated by Bo Gyllensvard and attributed by him to the T'ang dynasty.29 This pattern of a rhinoceros carrying a three-flowered lotus on a saddle also appears on one of the Chinese mirrors in the Shosoin in Japan. Lastly, Mr Low-Beer told me he had once in his collection a small jade rhinoceros of uncertain date.

But the role of the rhinoceros motif in Chinese art is limited<sup>30</sup> and it seems likely that the chief interest the early Chinese took in the beast lay in its hide, which they used for armour plates; the use of its horn for making girdles, amulets and cups is probably a later development. The hide of both the ssi and the hsi was certainly employed in early times by the Chinese for making armour. There is the oft-quoted passage in the Tso Chuan referring to the State of Sung in 600 B.C., which says, "Cattle still have hides and the hsi and the ssi are yet plenty. What matters to throw away the buff coats." And we are told that the people of Ch'u used skins of the hsi and the ssi for making armour "as hard as metal or stone." We have, in fact, records of rhinoceros hide being used to cover a funeral car and parts of the Imperial saddle at an early date. The uses of rhinoceros hide is discussed at length by Laufer in his chapter on "Defensive armour of the archaic period in China.<sup>31</sup>

The horn of the rhinoceros, which is a solid mass of agglutinated hair, which is not

<sup>28</sup> Chavannes. "Les memoires historiques de Se-ma Tsien," Vol. III, p. 214.

<sup>20</sup> B. Gyllensvard. "Chinese Gold and Silver in the Carl Kempe Collection," Stockholm, 1953, Plate 120.

<sup>&</sup>lt;sup>30</sup> Florence Waterbury. "Vestiges and Speculations," New York, MCMXLII, makes no mention of the rhinoceros in her examination of animal motivs in early Chinese art.

See Laufer, op. cit., chapters entitled "Defensive armour of the archaic period," "Defensive armour of the Han period," and "The problem of plate defensive armour of the Tang period."

attached to the skull, has been from at least as early as T'ang times endowed by the Chinese with certain magical qualities. When freshly cut and polished it is of a yellowish colour with grey streaks not unlike bullock horn, but of an entirely different consistency. There is a great variety in the streaking and mottling of the horn, but the golden brown colour acquired by the Chinese rhinoceros horn cups is the result of staining and polishing. Bushell writes: "The belief in the peculiar virtues of the horn is ancient and widespread. Ctesias writing in the fifth century B.C. describes the great one-horned Indian rhinoceros, and the widespread medical properties of the cup made from its horn. brought to China as early as the Han dynasty, and the old writers descant on its prophylactic powers, as well as its decorative value."32 But there is reason to doubt the truth of the passage, and every reason to believe that the quotation from Ctesias is a later For there is no real evidence, of which I am aware, to support the interpolation.33 statement that the rhinoceros horn was exported to China in the Han dynasty. Bushell had said the fifth century A.D. instead of the Han dynasty, I should have had no quarrel with him.

There is little doubt that the Chinese like many other peoples used horn cups, for the radical signifying horn, chio, appears in many characters designating types of ancient Among them is the Kuang, often mentioned in the Shih Ching (The drinking vessels. Book of Poetry), invariably with the ssi character attached to it. Laufer's claim that the cups referred to in these early classical texts were made of rhinoceros horn was questioned And I must confess it seems to me very improbable that the ssu character refers to the rhinoceros, and not to the buffalo, when it appears on the Shang-Yin oracle bones, although both Hopkins and Ingram34 assumed that it did. apart from Bishop's arguments, as Giles pointed out, these early cups were supposed to have held seven sheng (seven pints), and the largest rhinoceros horn cup could not have held more than two shêng, if as much. "And why," says Bishop, "should the Chinese have gone to the trouble of hollowing out rhinoceros horn, when they had always at hand natural cups in the shape of bovine horns of several kinds?" But this objection could be easily answered because the rhinoceros cups alone were supposed to possess anti-poisonous virtues. A further indication, however, that these early cups belonged to bovoids is afforded by the pictures of later bronze imitations of these vessels in the Po ku t'u lu, in which the lower parts are shaped like the head of an ox.35

We do not know exactly how and when rhinoceros horn developed its supernatural

<sup>32</sup> Bushell. "Chinese Art," Vol. I, p. 119. London 1904.

<sup>33</sup> R. Ettinghausen. "The Unicorn," Studies in Muslim Iconography, Washington, 1950, p. 113.

J. H. Ingram. "The civilization and religion of the Shang Dynasty," China Journal of Science and Arts, 1925, pp. 473-483.

Reproduced. Bishop, op. cit. opposite p. 323; Laufer, op. cit., Fig. 23 and 24, pages 168 and 169. Further supports come from Yetts. See his "The Cull Chinese bronzes" London MCMXXXIX, p. 34.

properties, but it seems very probable that these virtues find their original source<sup>36</sup> in the Chinese Taoist writings of the fourth century A.D. Although very curious ideas were current in India and the Near East, where absurd legends sprang up,<sup>37</sup> associating the rhinoceros with the unicorn, it is probably safe to assume that the belief in the qualities of the horn all go back to Chinese sources, which were imported into the Western world and the Near East when Roman and Arabian traders exported the horn to Chinese markets.

One of the first Chinese references to the horn of the hsi occurs in the Bamboo books in the third year of Yang Wang, 311 B.C.,38 but there are difficulties about this passage, which we cannot enter into here. It was Ko Hung, the famous Taoist adept of the 4th century A.D., who died in 330, at the age of 81, who is generally credited with being one of the first, if not the first, Chinese author to impute valuable properties to the horn. It was he who, as far as we know, first drew the attention of the Chinese to the qualities of the t'ung t'ien or "rhinoceros horn communicating with the sky," which if a man carries a small piece carved in the form of a fish in his mouth, he can pass through and under water, and which frightens fowls from meal, and on dark nights burns with a brilliant light. He adds, "the horn is a safe guide to the presence of poison; when poisonous medicines are stirred with a horn, a white foam will bubble up and no other test is necessary; when non-poisonous substances are stirred into it no foam will rise. In this manner, the presence of poison can be ascertained . . . when a man, hurt by a poisonous arrow, is on the verge of dying and his wound is slightly touched with a rhinoceros horn foam will come forth from the wound and he will feel relief. property of the "horn communicating with the sky" of neutralizing poison is accounted fully by the fact that the animal, while alive, feeds on poisonous plants and trees, provided with thorns and brambles, and shuns all smoother vegetable matter . . . other kinds

The origin of the mythical properties of the rhinoceros horn has been discussed by Mr. Ettinghausen in his fascinating work on "The Unicorn." He evidently believes in a Chinese origin for these myths, for he writes: "Lately A. G. Godbey has suggested that the antidotal power of rhinoceros horn may not have been in Ctesias's original account, since neither Aristotle nor Pliny mention this feature, though they were familiar with the text and used it in their writings. It would thus appear to be a later interpolation of the text which is preserved only through quotations in other authors. If this plausible assumption should prove correct (the lack of any reference to it in early Indian literature supports it) the belief in the magical virtue of the horn in Roman times would probably go back to Chinese superstitions which were imparted to the western world when Roman traders imported the horn from Far Eastern markets." Ettinghausen, op. cit., p. 99, footnote.

<sup>&</sup>lt;sup>37</sup> Its hatred of the elephant; its supposed fondness for music and perfumes, and its amorous qualities towards virgins; were dwelt upon by Arab writers, and also its prickly tongue, which was remarked upon by Marco Polo. The supposed lack of joints to its legs, necessitated it was believed that it should sleep leaning against a tree in a standing position. It was, they said, most easily captured by using a young man, highly perfumed and dressed as a virgin, as a bait, or by inducing it to lean against half sawn through timber, which gave under its weight; for when it fell down it was supposed to be unable to rise. If tree'd a hunter could always put it to flight by urinating into its ear!

<sup>38</sup> Laufer, op. cit., p. 74.

of rhino horn are also capable of neutralizing poison, without having however the wonderful power of the  $t^{\epsilon}$ ung  $t^{\epsilon}$ ien variety."<sup>29</sup>

This belief appears to have been held in the Near East, Africa and Europe, all of which probably derived their sentiments from China, and it was certainly still alive in England in the 18th century, for a Dr Brookes could write of one of these cups in 1763 "When wine is poured therein it will rise, ferment and seem to boil; but when mixed with poison it cleaves in two, which experiment has been seen by thousands of people."40 I have not conducted any experiment with rhinoceros horn to discover the truth of this superstition but I should not be surprised to discover that rhinoceros did react to certain acids in a curious way. Mr Casal states that this belief is partially substantiated by modern therapeutics.<sup>41</sup>

The Ling piao lu i chi incorporated into the Pen ts'ao, and according to Bretschneider by Liu Sun of the T'ang dynasty discussing the design on the cut and polished rhino horn says: "If the stripes are deep in colour, the horn is capable of being made into girdles, plaques and implements; if the stripes are dispersed and light in colour, the horn may be employed to advantage in making cups, dishes, utensils and the like. Then there is the frightening fowl horn with a white silk-like thread; placed in rice, it scares the fowls away. The dust dispelling horn is utilized to make hairpins and combs for women; it keeps dust out of the hair. As to the water dispelling horn; this one when put in a dark house emits its own light. Of all the various horns I know of only from hearsay, for I have not been able to procure or see them." Other Chinese writers speak of the cold dispelling horn, of a golden colour, which was once sent as tribute from Tongking, and the heat dispelling horn obtained by the Emperor Wên Tsung of the T'ang dynasty, who reigned from 827-840 A.D., and the wrath removing horn, from which official girdles were made, which causes men to abandon their anger.

As time went on, the supernatural qualities of the horn became magnified and all sorts of fabulous properties were attached not only to it, but also to the blood and various

From the chapter on the rhinoceros in the T'u shu tsi ch'êng by Ko Hung, introduced by the author's literary name Pao p'u tse. Transl. by Laufer, op. cit., pp. 138-139.

<sup>40</sup> Frank-Evans Beddard. Mammalia, London, 1900, p. 255.

<sup>41</sup> H. A. Casal. Cultureel Indie, Vol. II, pp. 212-216, an article on Rhinoceros horn cups. Leyden. 1940. The "Encyclopedia Britannica" quotes a reference to the effect that one of these cups was submitted to the Royal Society for experiment (no date given) who completely disposed of the superstition!

<sup>42</sup> The P'ei wen yün fu, ch. 8, p. 87b (Laufer 143).

<sup>&</sup>lt;sup>43</sup> The P'ei wen yün fu quoting from the Po K'ung lieu t'ie (Laufer 152).

<sup>44</sup> P'ei wen yün fu, op. cit. (Laufer 152).

parts of the carcase of the rhinoceros.<sup>45</sup> Worst of all for the rhinoceros, its horn acquired a reputation in China as an aphrodisiac, for which purpose it is still held in great demand by the Chinese. And it is the Chinese market <sup>46</sup> for the horn, more than anything else, which has led to the animal's destruction, both in Asia and Africa by native hunters and which but for official protection will lead without doubt to the ultimate extinction of the species.

According to Hirth, objects carved in rhinoceros horn were traded to China from the Roman Orient and India as early as the 5th century A.D.<sup>47</sup>; one rhinoceros horn tribute from as far afield as Persia, in 730 A.D., is mentioned by Chavannes.<sup>48</sup> The Arab, Suleyman, to whom is attributed one of the earliest narratives concerning the Chinese trade, gives rhinoceros horn as one of the chief imports of Canton,<sup>49</sup> and Mas'udi, a native of Bagdad, who died in 956, the author of a work entitled "The Meadows of Gold" says that, in his time, there was a great trade in rhinoceros horn with China from Ralima in India, which was probably Dacca or Arakan;<sup>50</sup> while in the annals of the Sung dynasty it is mentioned in a list as among the principal articles of trade in or about 999.<sup>51</sup>

Chou Ju Kwa, Commissioner for foreign trade in Chuan Chou, Fukien, in 1226, in his Chu Fan Chi, written in 1228, which throws a most valuable light on the trade in the Far East in medieval times, presents us with a picture of the localities which supplied the horn to China in the 13th century. He says it is the product of Kiau Chi (Tongking), Chan Ch'ong (Annam), Sho-p'o (Java), San-fo-tsi (Palembang in Eastern

- <sup>46</sup> Its blood, according to the *Pen ts'ao*, was to be taken for fever, small pox, ophthalmia, parturition, and by frightened children. Ettinghausen, quoting from Arab writers, says: "Its gall is used for fumigations to dispel evil smells, the left eye for slaking fever, and the stings of scorpions; while the right eye is a talisman against pains, ginns and demons. The most effective part of the body is the horn, especially its legendary protuberances. It is a remedy against labour pains, epilepsy, paralysis, spasmodic contraction of the muscles. It helps against the evil eye, unties knots, makes hot water cold and prevents a horse from stumbling." Ettinghausen, *op. cit.*, p. 57. See also B. E. Read, *Chinese Materia Medica*. *Animal Drugs*, No. 355, Peking, 1931 and Nardkam, *Indian Materia Medica*, Bombay, 1927, p. 1417.
- Mr. Stransom of Puddefoot, Bowers and Simonett, writes to me: "Usual prices for rhinoceros horn to-day are about 45/- to 50/- a lb. Probably the highest they have ever reached . . . in my experience since 1909, and that of many others before me. The price of these things has varied directly with war (up) and peace (down) . . . They are sold as an appendage to the quarterly ivory auctions and a hundredweight or so appears regularly there and also at the half-yearly ivory auctions at Antwerp. They are eagerly snapped up and are worth far more than ivory . . . They are sold in bulk to China where I have always understood they are ground to powder, mixed with some edible substance and taken as an aphrodisiac. My experience has been with African horns. Indian ones are not imported here."
- 47 Hirth. China and the Roman Orient, p. 46.
- 48 Chavannes. T'oung Pao, 1904, p. 51.
- 49 Hirth and Rockhill. Chou Ju Kua, St. Petersburg, 1911, p. 16.
- Mas'udi. "Les Prairies d'Or," I. 385. Text in French by Barbier de Meynard and Paul Cortet, Paris, 1864.
- 51 Sung Shi. 186. 18b (quoted by Hirth and Rockhill, op. cit., p. 19).

Sumatra), Tan-ma-ling and Ling-ya-ssi-kia (parts of the Malay Peninsula), Ta-shi (Arabia), T'ien-chu (India), K'un-lun-ts'ong-k'i (Islands of Pemba and Madagascar), but the finest and largest horns and, incidentally, the best ivory and the thickest tortoiseshell came from Pi-p'a-lo (The Berbera Coast of Africa).<sup>52</sup>

It is difficult to discover, as in the case of ivory, exactly when the African trade with But it was probably not until the early years of the China in rhinoceros horn began. Ming dynasty when the Chinese junks began to visit the coasts of Africa, and to trade directly with that continent and not through the Arab intermediaries, that it reached China It would be interesting to know whether as I suspect, the bulk, on an extensive scale. of Ming and Ch'ing rhinoceros horn cups were made of African and not Asiatic horn, and whether the Chinese preferred the African to the Asiatic horn. certainly believed in the superiority of African over Asiatic ivory as early as the Sung period, and the bulk of Chinese ivory carvings of the Ming and Ch'ing were almost certainly of African origin. Unfortunately it is impossible to distinguish the one ivory from the other once the tusks have been barked and carved. This, I am told, also applies to rhinoceros horn, except when the outline of the original horn has been preserved, as in the case of the giant cornucopias, covered in open work with Taoist designs, deeply undercut, which because of their size can only have come from the great white rhinoceros of Africa. These pieces are of nineteenth century Cantonese craftsmanship and were Some of these African horns may run to four feet in length, and weigh made for export. The Asiatic horns are small and unlikely to weigh more than 3 or 4 lbs, as much as 25 lbs. and in their original state are "ribbed" upwards from the base. African horns can also be small, so that size alone does not provide any guide nor does texture or colour. Today however, all three Asiatic species have become so rare that their horns cannot play any part in the traffic in this commodity.

In the P'ei Wên Yün Fu will be found a host of references to objects made from rhinoceros horn and hide in Chinese classical literature and poetry. Many of these are difficult to identify, from the rather vague literary descriptions, sometimes of an allegorical nature. Among them are references to armour, shields, and even boots of rhinoceros hide. Rhinoceros horn toilet boxes, hairpins, combs, writing brush handles, beads (for rosaries), bracelets, and the top of a cap, are all mentioned. There are other references to a rhinoceros horn vase, a rhinoceros horn sceptre (?); scroll ends, paper weights, weights for curtains, box covers, flagpoles, cart handles (? tips for the shafts of a cart), a tablet, and even to rhinoceros horn cash, with the emblems of a tree upon it, which, according to the poet Su Tung-p'o, were used as currency inside the Palace in the Sung period.

According to Ssu-ma Ch'ien, author of the *Shih Chi* in the Han period, Chou Hsin, the dissolute and extravagent last Emperor of the Shang Yin dynasty had a jade bed with rhinoceros horn ornaments. This was probably a bed inlaid with jade, and we do not

<sup>52</sup> Hirth and Rockhill, op. cit., p. 260.

know whether the rhinoceros ornaments were inlay or, as is more probable, weights to the bed curtains, which are so frequently referred to at a later date.

From another source we hear that the great reformer, Ch'in Shih Huang Ti (221-209 B.C.) who burnt the books and built the Great Wall of China decreed that treasured things used as objects made of rhinoceros horn should not be kept in his house! From the Han Shu, we learn that Wang Ming (B.C. 33 to A.D. 23) went to worship at Taoist temples, and "that in the Palace were all sorts of things, together with bones of storks, tortoise shell and rhinoceros horn, well polished, which were used as offerings to the Immortals, following the tradition of the Yellow Emperor."

We are told by the same source that the Hsiung Nu (the Huns) used gold belts with rhinoceros horn buckles; while in the Fei Yen Wei Chian there is a reference to the Emperor Ch'êng Ti (B.C. 32-A.D. 5) of the Han dynasty drawing a rhinoceros ornament (from his hair?), and beating time with it on a jade bowl, while the famous beauty Fei Yên (the Flying Swallow) danced before him.

There are also a few references to rhinoceros horn beads (or it could be beads the colour of rhinoceros horn). In one of them, Kung Kuei, when he was appointed Viceroy of Kwangtung and Kiangsi (the date is not given) was presented with some rhinoceros horn beads. "The Viceroy did not accept them and those who offered them were dismissed;" while another virtuous official, Li Mien, after he had held an important office for several years ended by having nothing to show for it—for the rhinoceros beads (a symbol of the perquisites of his office) had been thrown away. In a poem by Kung Shih T'ai of the T'ang dynasty, "at a banquet given by the Emperor, the beautiful wine was floating over the rhinoceros horn cups, and all the guards were in shining armour." While we are told that the Sung Emperor Jên Tsung (1023-1063) was so good a man that he actually gave the people of his capital two rhinoceros horns to make into medicine to cure them of cholera.<sup>53</sup>

There are a number of allusions to rhinoceros horn curtain weights. A T'ang poet, Li Shang-yin, speaks of "the ivory bed with the gauze-like curtains and the rhinoceros horn weights." Another T'ang source dwells on "the rhinoceros horn curtains moving and producing a murmuring sound." And yet another T'ang poet describes how "the guests sat down with their backs to the bautifully carved screens and brocaded silks on the table seats with rhinoceros horn sword weights at their ends." This custom evidently had a long life because the poet Tu Mu of the Sung dynasty also speaks of: "The curtains lined with gold tissue and rhinoceros weights (hanging down)." The character used to describe these weights is Chên. So far, none of these weights have come to my notice. There is a reference in the works of Wen Pu, yet another T'ang poet, to "holding the rhinoceros horn brush and spreading out the white paper with the

<sup>53</sup> China Review, Vol. XIV, p. 359.

<sup>54</sup> See Appendix.

fish designs upon it." These writing brushes with rhinoceros horn handles were, it seems, also used in the Sung period. And a Sung beauty is represented as having "a rhinoceros comb slightly slanting on her flat hair, which looks like floating clouds with streaking colours." Lastly, there are several references to rhinoceros horn belts. One of them is in the Biography of one Ma Chih "who when he was made minister of the Imperial Household was friendly with another minister who had been a favourite of the Emperor, Hsüan Tung (1217-1222). This Emperor had given the latter a rhinoceros horn belt "communicating with the sky," which, when this official was in disgrace, he gave to Ma Chih. The Emperor saw this belt and asked Ma Chih how he had obtained it. When he heard; Ma was dismissed." Another of these belts "communicating with the sky," is mentioned in the T'ang Shu as belonging to the prime minister, Liang Ssu; and in the I Hsien Chih there is a reference to a rhinoceros horn belt decorated with a design of a deer with a ling chih (sacred fungus) in its mouth. Yet another of these belts with a design, which looked like "a stork in the clouds," belonged to one of the Sung Emperors, which when he wore it parted the waters.

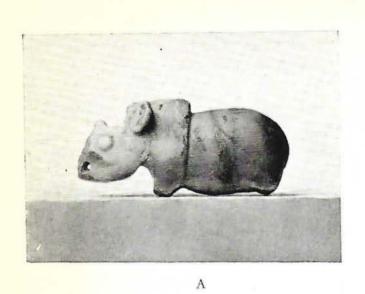
The earliest surviving documented rhinoceros horn objects from China are in the Shosoin in Japan. This wooden structure standing within the original demesne of the Todaiji temple at Nara contains the possessions of the Emperor Shomu, dedicated to the Great Buddha by his widow at his death in 752 A.D. Without question, the main body of this collection has remained intact since the day of dedication. The structure is divided into three sections—North, Central and South—but it does appear that the South Section, which was under the supervision of the Todaiji temple, and not, like the North and Central sections, guarded by the sanctity of the Imperial seal, 55 has had objects added to it and others withdrawn.

Among the objects in the Shosoin are the remains of two of these rhinoceros horn belts. The most complete of these, on the upper floor of the North section, is five fragments of a moleskin girdle, which belonged to the Emperor Shomu, with rhinoceros horn plaques affixed to the leather by means of gilt nails. Of these horn plaques, only four square and six elliptic ones remain. [6] (Plate 17, C and D). The leather of the girdle is lacquered black and it was fastened with a silver buckle. According to the Kenmotsucho (deed of gift), six tosu (knives) and a brocaded medicine bag were once attached to this girdle, but now only two tosu remain. Three other spotted rhinoceros horn fragments, described as originally ornaments on a girdle, and presumably part of a second belt, are preserved in the Middle section of the lower floor.

These two girdles must have been originally examples of the rhinoceros horn girdles

<sup>55</sup> Sir P. David. "The Shosoin." Trans. of Japan Society, Vol. XXVIII, 1930-31, pp. 44-95.

This is described by Jiro Harada in the English Catalogue of the Treasures of the Imperial Repository Shosoin, Tokyo, 1932, on pp. 19 and 20. A similar girdle with lapis lazuli plaques is illustrated on Pl. LVIII. Seventeen volumes of the Shosoin Gomotsu Zuroku have been published with elaborate illustrations, for those who wish to examine the Shosoin Collection in detail.



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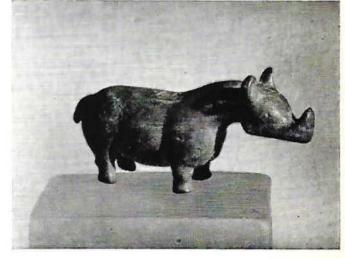
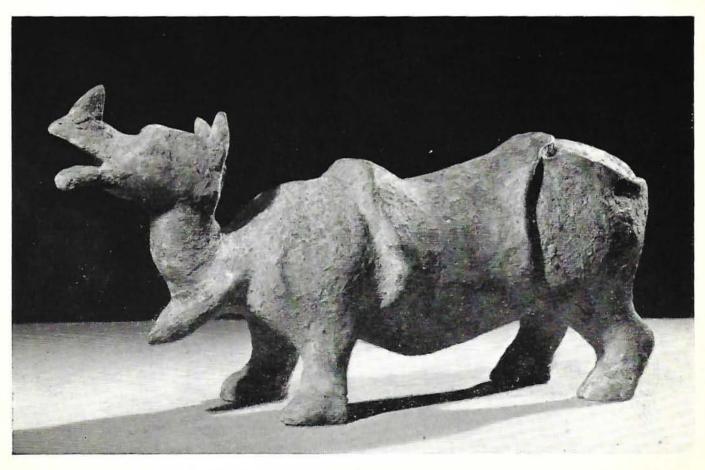
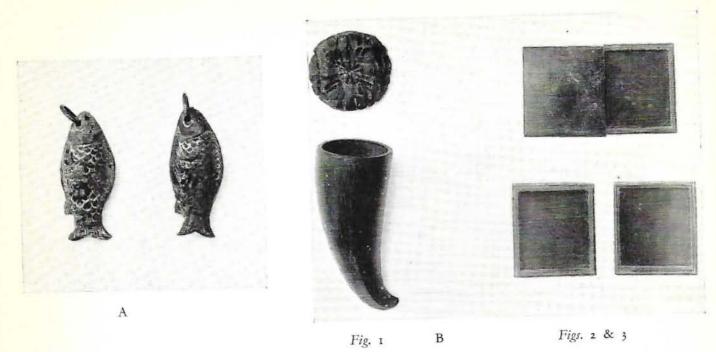
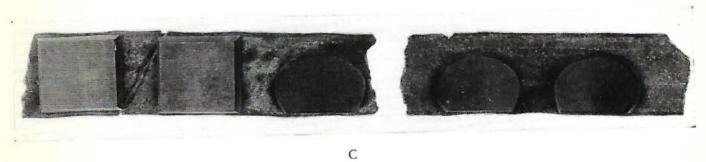
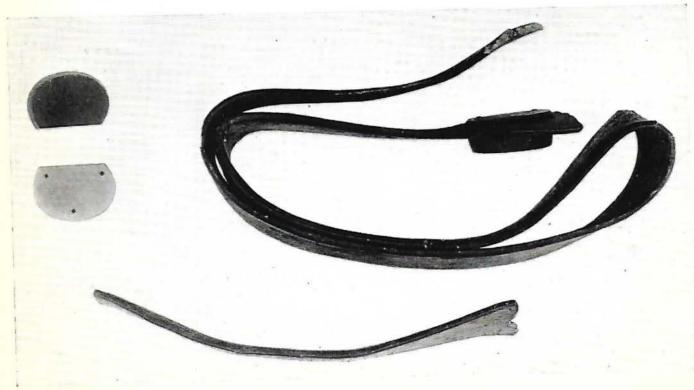


Fig. 1 A Fig. 2 B

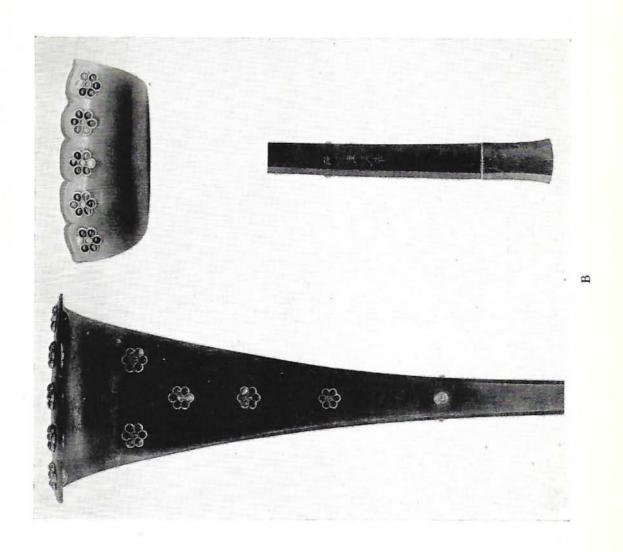


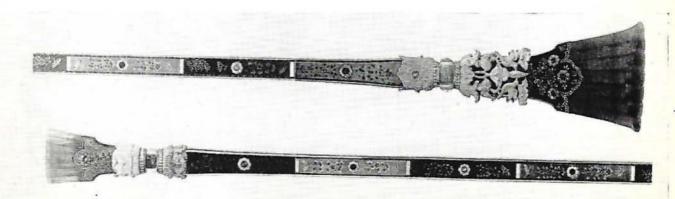


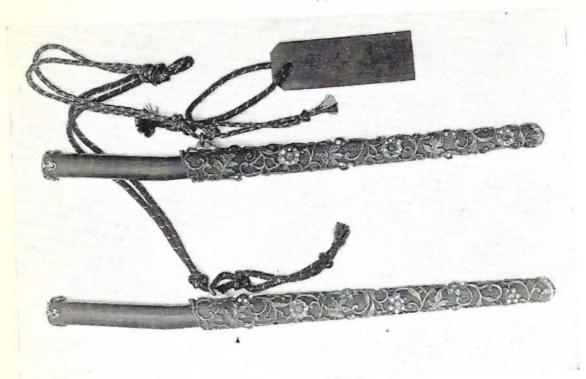


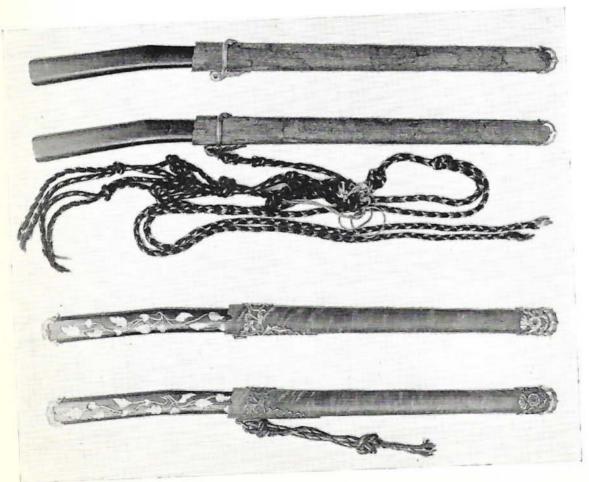


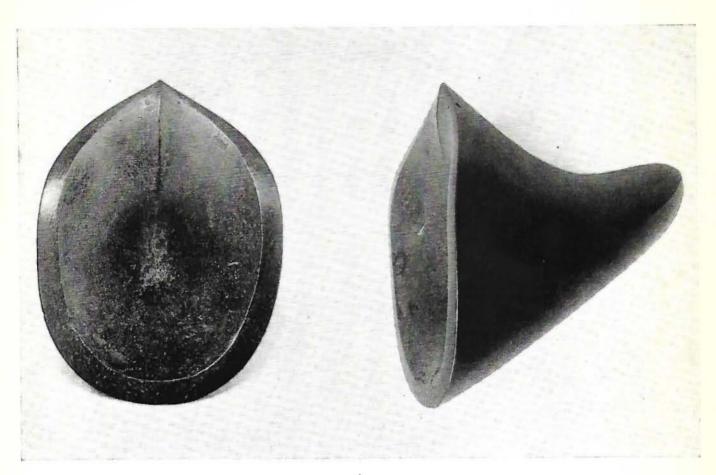












Α



Fig. 1

В

Fig. 2





В















В



D



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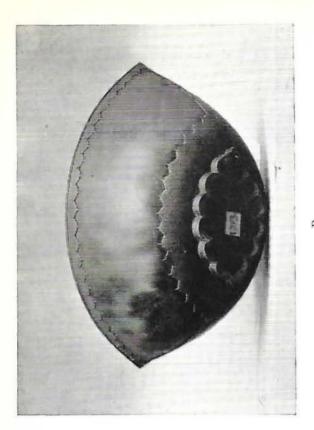




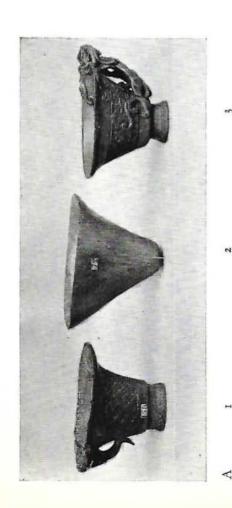
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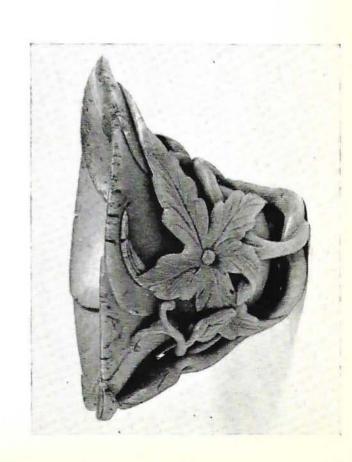


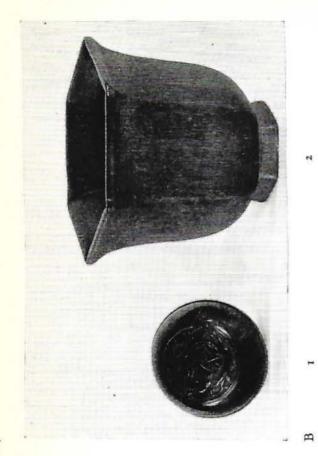
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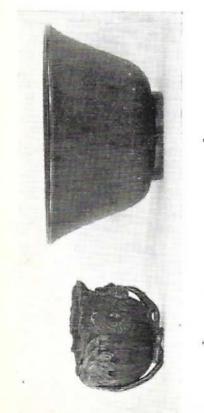














A





В





D



worn in the T'ang period, mentioned by Bushell, who says: "During the T'ang dynasty the official girdle of the period was studded with plaques of rhinoceros horn, of amber or transparent tints, veined with black." Laufer believed that these girdles were limited to Princesses, but Cammann has verified a reference in the T'ang History, which says that on every day, or on informal occasions, officials of the third to sixth rank wore rhinoceros horn belt plaques. But there is a further reference in the T'ang Dynastic Statutes, under the year 710, to the effect that at that date—"For Imperial audiences and State banquets, the first and second rank of officials are permitted to wear carved rhinoceros horn or striped rhinoceros horn." 58

Rhinoceros horn girdles with plaques in the form of cloud dragons are mentioned in the Sung annals as tribute, and one of these girdles was given to one of the Khitan Emperors. They were popular also with the Kin dynasty (1115-1234) and, according to Laufer, remained in official use as late as the Ming<sup>61</sup>; but I have yet to see one of these.

Muhammadan writers were well aware of the fondness of the Chinese for this rhinoceros horn. "The description of China and India" at one time attributed to the merchant Suleyman and written in 851 (The Akhbar al-Sin wa 'l-Hind) was the first of a long line of sources to inform us that the Chinese used it for making highly valued girdles. The quality of the horn depended on the pattern, which might appear as the figure of a man, peacock, fish or other animal, which emerges only when the horn is split and polished.

Mas'udi gives perhaps the most extensive account of these girdles. According to him, the horn is usually white and shows black figures, although occasionally the designs stand out in white against a black background. "With the help of leather straps, girdles are made of these horns on the model of gold and silver ornaments. The Emperors and grandees of China value this adornment above everything else, so that they pay as much as two or even four thousand dinars. The clasps are of gold, and the whole is of an extraordinary beauty and solidity. Sometimes one applies different inlays of precious stones with long gold nails."62

The anonymous author (? Suleyman) of the "Description of China and India" also relates that the inhabitants of China make from this horn girdles reaching to a price of two

<sup>&</sup>lt;sup>57</sup> S. W. Bushell, op. cit., Vol. I, p. 119.

<sup>58</sup> Schuyler Cammann in a letter to Ettinghausen. Ettinghausen, op. cit., p. 54, note 8.

<sup>59</sup> Liao Shi, ch. 10, p. 1 (Laufer), and Sung Shi, ch. 489, p. 2 (Laufer).

<sup>60</sup> Kin Shi, ch. 34, para. 3, p. 7 (Laufer).

Laufer, op. cit., p. 143, refers those who are interested to a chapter on girdles in the Ta Ming Hui Tien, ch. 5, p. 3.

<sup>62</sup> Mas'udi's "Prairies d'Or," Vol. 1, pp. 386-387, quoted by Ettinghausen, op. cit., pp. 53/54.

or three thousand dinars or more, according to the figures found in the horn.<sup>63</sup> And another Arab writer writing at the end of the 11th century observed: "The most highly esteemed ornaments among the Chinese are made from the horn of the rhinoceros which when cut presents the eye with singular and varied figures." K'ou Tsung Shu, a celebrated physician of the Sung period, remarks that this horn could either exhibit objects picked out in yellow on a black ground or objects picked out in black on a yellow ground, and if the background be black and the designs imitating real objects are sharply differentiated, the horn is a real treasure. It should be both smooth and moist if it is of the best quality.<sup>65</sup>

Other rhinoceros horn objects in the Shosoin include goss (small containers used as pendant ornaments). There are three of these in the Middle section of the Shosoin. One is in the shape of a miniature rhinoceros horn, with a shitan wood lid carved in floral design and two are square with lids (Plate 17, B, Figs. 1, 2 and 3). The original silk cord for suspending them from the belt exists. There is also in the same section a pair of fish-shaped pendants of rhinoceros horn, the scales of which are picked out in gold, and the head pierced with a silver ring in the corner of the mouth (Plate 17, A). These were almost certainly suspended from the sash, although I should like to think they were carried in the mouth in the hope that their owner might pass through or under water! These ornaments were probably among the rhinoceros amulets mentioned by at least two Arab writers; one of whom states that the inhabitants of Sandabil (Kanchou in Kansu) wear extraordinary precious necklaces of rhinoceros horn, and the other that the Kings of China hang it upon themselves against evil things.

P. 34. "On leur (i.e. the Chinese) apporte de l'ivoire, de l'encens, des lingots de cuivre, de l'écaille marine—qui est la peau du dos des tortues—et de vichân que j'ai décrit et qui est le rhinocéros : ils font des ceintures avec sa corne."

J. Sauvaget. Relation de la Chine et de l'Inde, Paris, 1948, para. 28. "Dans son pays est le vichân marqué qui n'est autre que le rhinocéros : il a sur le devant du front une corne unique, et dans cette corne est une marque, (à savoir) l'image d'une créature, comme (par exemple) une image à la ressemblence d'un homme. La corne est toute entière noire, et l'image, placée au milieu, est blanche. Ce rhinocéros est de taille plus petite que l'éléphant, et sa couleur tire sur le noir ; il ressemble au bufflet est fort : aucun animal ne possède une force comme la sienne. Il n'a pas d'articulation au genou, ni à la cheville : depuis son pied jusqu'à son aiselle ce n'est qu'une seule piece. L'éléphant prend le fuite devant lui. Il rumine comme les boeufs et les chameaux et (la consommation de) sa viande est licite : nous en avons mangé. Il abonde dans ce royaume, dans les jungles : il existe dans toutes les regions de l'Inde, mais les cornes qui proviennent de celle-ci sont plus belles. Il arrive qu'il y ait dans sa corne l'image d'un homme, d'un paon, d'un poisson ou d'autres images encore : les Chinois en font des ceintures dont le prix atteint, en Chine, 2,000, 3,000 dinars, ou d'avantage, selon la beauté de l'image. On les achète toutes au Dharma avec des cauris, qui sont la monnaie du pays." (Sauvaget identifies the kingdom of Dharma with that of the Pala Empire of Bengal, Bihar and Orissa).

P. 24. "On leur (i.e. the Chinese) apporte de l'ivoire, de l'enceps, des lingots de cuivre, de l'écaille

<sup>64</sup> Ch. Schaffer. Relations des Mussulmans avec les Chinois, p. 10. Centenaire de l'école des langues orientales, Paris, 1859.

<sup>65</sup> K'ou Tsung Shu in the Pen Ts'ao Yei (completed 1116) (Laufer).

<sup>66</sup> Harada, op. cit., p. 110, No. 521.

<sup>67</sup> Harada, op. cit., p. 110, No. 520.

<sup>68</sup> Ettinghausen, op. cit., p. 55.

Rhinoceros horn was also used by the Chinese for the handles of knives which, like the walrus ivory handles of India, were supposed to become moist and agitated in the presence of poison; and beautifully polished pieces of the horn were used in the hilts of Egyptian swords as late as the 19th century. In the Shosoin there are four pairs, and four single, tosu (small knives to stick in the girdle), either with rhinoceros horn hilts or rhinoceros horn sheaths. 69 (Plate 19, A, B, C). There is also in the Middle section of the Shosoin a rhinoceros horn footrule apparently used as a measuring stick and divided into sections, five of which are divided into halves, and each of the other five divided into ten sub-divisions70 (Plate 18, C). And on the upper floor of the South section of the same repository four nyoi (a form of Buddhist sceptre, which looks like a large back scratcher) in part of rhinoceros horn, 71 one (No. 665) with a handle shaped like a bamboo shoot; one inset with glass and crystal balls in gold (No. 669), the handle carved with the word Todaiji filled in in red (Plate 18,B); and one decorated with painting, in gold and silver with a shitan wood handle (No. 663), and the last, most elaborate of all, with an ivory handle stained vermilion and blue, carved in the bachiru style and set with coloured glass balls and pierced work of birds and flowers in ivory on both sides (No. 672) (Plate 18, A). Of the three other published nyoi in the Shosoin, one appears to be made of whale fin (?whalebone) (No. 667), and the other two (No. 674) have palms of tortoiseshell. All these are illustrated in colour in the Vol. II of the Shosoin Gomotsu Zuroku. There are no rhinoceros horn combs in the Shosoin, although Chang Yen Yüan in his "Record of famous painters of all the dynasties" written in 847 compares the crowded parts of a landscape to the teeth of a rhinoceros horn comb with pearl inlay.72

But by far the most important objects made in rhinoceros horn in the T'ang period and under subsequent Chinese dynasties are the rhinoceros horn cups which are probably in origin sacrificial vessels esteemed because of their antidotal qualities and magical powers, and for that reason often decorated with Taoist scenes or emblems suggesting immortality. There are four of these cups in the Shosoin, all undecorated; unfortunately three of them do not appear to tally with the descriptions in the Kenmotsucho, the deed of gift, which contains a detailed description of each article preserved in the repository. But one cup, a curved horn, tapering to a blunt point, with a shallow bowl and a ridge sloping down towards the bottom, from the apex of the leaf shaped mouth, kept on the lower floor of the Middle section, is evidently the piece<sup>73</sup> described in the original deed of gift (Plate 20, A). Two other rhinoceros horn cups described as "yellowish brown with wormholes" are on the upper floor of the North section<sup>74</sup>

<sup>60</sup> Harada, op. cit., Nos. 27, 30, 31 and 32 on pp. 20, 21, 94 and 95.

<sup>70</sup> Harada, op. cit., p. 78, No. 364.

<sup>71</sup> Harada, op. cit., Nos. 665, 669, 672 and 673.

<sup>&</sup>lt;sup>72</sup> William R. B. Acker. Some T'ang and pre-T'ang texts on Chinese Painting, p. 154, Leiden, 1954.

<sup>73</sup> Harada, op. cit., No. 401, p. 87.

<sup>74</sup> Harada, No. 38, p. 22.

(Plate 20, B, Fig. 1 and 2). One of them, a bowl with a target shaped mouth, is much wider than the other, which has a lobed mouth and ribbed sides, but neither of these cups corresponds in colour or weight to the two cups mentioned in the deed of gift, as contained in this cabinet; one of which was white and the other black; both of which were removed on January 7th, 814. Another rhinoceros horn cup or dish described as a medicine vessel, very flat and shallow in appearance, is on the lower floor of the North section (No. 140). Its shape is similar to one of the Ch'ang Sha lacquer dishes called pi'eh, which are shallow bowls with ears, but it lacks the ears. This piece is inscribed in ink "examined on the 17th day of the ninth month of the 2nd year of Konin (October 7th, 811); (weight) — 12 ryo. 2 bu." But the cup recorded in this cabinet in the Kenmotsucho was much lighter, weighing 9 ryo. 2 bu. Yet the inscription on the cup which remains should date it to the T'ang period, even if it is not the original one deposited in this part of the Repository at its inauguration.

These rhinoceros horn cups were made by the Chinese craftsmen from the T'ang dynasty right up to modern times. Large numbers of them have survived, but the greater part of them are of late date and unmarked, or if they are marked, inscribed with the name of a studio or individual unknown to us, but it may be possible when we have more knowledge, to work out a chronological series illustrating differences of style and cutting. Quite a number of pieces exactly dated with cyclical year marks have survived from the reign of Wan Li (1573-1620) and it is to this reign that most of the oldest pieces in European collections belong, although dated pieces are exceptions to the general rule. Without question these cups were highly valued by the Chinese, for several examples have been illustrated from the Chinese Palace collections. Among them were two exhibited in London in 1936; one of them carved with crawling dragons in high relief,75 which is inscribed on the base with the four Chinese characters Tzu Sun Yung Pao.76 The second shows Chang Ch'ien, a poet of the T'ang dunasty who graduated in 727, but ultimately retired to the mountains to live as a hermit, drifting down the Yangtze in his hollow tree, engraved with a poem from the hand of the Emperor Ch'ien Lung. 76a Yet another carving from the Palace collection depicting Chang Ch'ien in his rustic craft, signed Yu Tung<sup>77</sup>, is illustrated in the Ku Kung.<sup>78</sup> This seems to be a very favourite motif for carvings in rhinoceros horn, for there are no less than three of these pieces of that subject in the Chester Beatty Collection. It also appears in Buffalo horn. third cup, decorated with the eight immortals at a drinking bout under pine trees and

<sup>75</sup> Illustrated Catalogue of Chinese Government Exhibits of the International Exhibition of Chinese Art in London, Vol. IV, London, 1936, p. 61, No. 59.

<sup>76</sup> See Appendix.

<sup>76</sup>a Op. cit. footnote 75, p. 62, No. 60.

<sup>77</sup> See Appendix.

<sup>&</sup>lt;sup>78</sup> Ku Kung. Vol. 27, No. 14.

signed by an unknown craftsman Wen Shu<sup>70</sup> is illustrated in the Ku Kung.<sup>80</sup> Yet another alace cup is reproduced by Ferguson in his "Survey of Chinese Art."<sup>80a</sup>

I cannot, unfortunately, reproduce an entirely reliable example of Sung rhinoceros horn carving, but the simple uncarved cup (Plate 25, A, Fig. 2) with inscribed seal "Hsüan Ho nien chih" (i.e. made in the Hsüan Ho period (1119-1126), the last but one of the seven mien hao of the famous Sung Emperor Hui Tsuing, painter and calligrapher) must either I think, be of the period of the mark, or a careful later representation of a Sung original. And there is in the collection of Sir Chester Beatty a curious cup (Plate 21, B) without any decoration with the surface simulating the bark of a tree with an overlapping fold on one side, inscribed on the base with the same two Chinese characters Hsüan Ho.81 But it is unusual to write a nien hao, without including the words "year" and "made," and one cannot be certain that this is not either a reproduction or some hallmark of a later date, while Doctor Chêng Tê-k'un tells me that he once saw in Szechuan a rhinoceros cup, carved with winged elephants in slight relief, which was ascribed to the Sung dynasty, although this motif is more readily associated on porcelain with the Ch'êng Hua period of the Ming dynasty. No Yüan rhinoceros cups have, to my knowledge, been identified as yet, although it is recorded in the Yüan Shih that a court atelier was established for workers in rhinoceros and ivory under this dynasty.82 seems to have made couches, implements and girdle ornaments for the Royal Household, either of or inlaid with rhinoceros horn. An official was put in charge of this workshop in 1283, who received a further assistant in 1288, and controlled a labour force of a hundred and fifty men. It should be mentioned in passing that the silver representation of Chang Ch'ien drifting down the Yangtze in his log boat, which is reproduced opposite the rhinoceros horn carving of the same subject in the Chinese Illustrated Catalogue of the Burlington House Exhibition in 1936 (see footnote 76a), is dated by the Chinese to the Yuan period, although the Chinese text does not suggest that either of the rhinoceros horn representations of this subject, in the same Catalogue, are of similar date. Another example of this theme in silver belonging to Sir Percival David was shown recently in an exhibition of the Arts of the Mongol period in the British Museum.

The earliest dated Ming piece of rhinoceros horn, which has come to my notice is the boat-shaped cup with a Hsüan Tê mark in the Menasce Collection (Plate 21, C and D). There seems every reason to accept this piece as of the period of its mark, until some good reason appears to disprove it. For it stands quite apart both in shape and carving from any of the other dated Ming cups I have encountered. Sir Percival David, I believe, has a rhinoceros horn bell, with some claims to be of early Ming date, and there

<sup>79</sup> See Appendix.

<sup>80</sup> Ku Kung. Vol. 16, No. 18.

<sup>80</sup>a John Ferguson. "Survey of Chinese Art," Pl. 193.

<sup>81</sup> See Appendix.

<sup>82</sup> Yüan Shih. Ch. 90, p. 5. Ch'ien Lung edition (Laufer).

are in the Nicholas Brown Collection in the Fogg Museum two rhinoceros horn stem cups; one, with a cover which may have been added later, which looks 15th century in shape (Plate 21, A). Many rhinoceros horn carvings dated with cyclical year marks of the Wan Li period have survived. Among them perhaps the best known is a cup belonging to Madame Wannieck of Paris, which is dated by an inscription to the eighth year of Wan Li (1580), and which was exhibited at Burlington House in 193683 (Plate 22, C). This piece has dragon handles. Another cup dated to the same year in the reign of Wan Li is in the Museum voor Land en Volkenkunde in Rotterdam (Plate 22, D and E). While a rhinoceros horn figure of Kuanyin seated on a rock in the Fogg Museum, Boston, is inscribed as a gift by "The disciple Mi Wan Chung joyfully offered to the Chin Kang Tung (temple) in Chiu Hua Shan on the 12th day of the 3rd month of the Chi Hai year of Wan Li," which corresponds to the 26th year of Wan Li, which is 1599 (Plate 22,A). Mr Wan Chung was a well-known painter in the late Ming period, who died in 1628.84 A large number of rhinoceros horn cups found their way to Europe in the 16th and early 17th centuries, and many of them probably belong to the Wan Li period, although the bulk of them are unmarked and uncertainly documented. Amongst the earliest of them must be the cups in the Hapsburg Collections, part of which were brought together by the Archduke Ferdinand of Tyrol (1520-1595) and the Emperor Rudolf II (1522-1612) who collected exotic objects for their "curiosity" cabinets; the former in the Castle Ambras in the Tyrol, and the latter at Hradcany in Prague. Dr Schuselka of the Kunsthistoriches Museum in Vienna informs me that there were among the inventories of these cabinets several references to rhinoceros horn cups, but that the descriptions are so vague, that it is impossible to identify most of them. The greater part of both these collections has passed into the keeping of the Kunsthistoriches Museum in Vienna, where they have been allocated a special room. Among these collections are five rhinoceros horn cups. The first of these<sup>85</sup> (Plate 23,A), which is still at Ambras, Dr Schuselka believes may be identified, almost without question, with cup No. 3732 in the inventory of the Castle Ambras Kunst-Kammer of 1596, folio 358, for there is only one rhinoceros horn cup in this inventory, but little other information about its provenance can be obtained from this quarter, although Dr Schuselka assures me according to the inventory it is of rhinoceros horn, although there still seems some doubt on this point. One English connoisseur who has seen, but not handled it assured me it is of buffalo horn. Wolfgang Born in his article in the Burlington Magazine merely alludes to this cup as a horn vessel, and says that according to the Catalogue it is of Persian 16th century work, which seems very improbable. If this were so it is unique. It has a silver gilt cover chased in relief with birds and beasts on a back-

<sup>83</sup> International Exhibition of Chinese Art, London, 1935/36, No. 2929.

<sup>84</sup> O. Siren. History of Later Chinese Painting, Vol. II, pp. 1-2.

<sup>85</sup> See Wolfgang Born. Some Eastern Objects from the Hapsburg Collections. "The Burlington Magazine," December, 1936, opposite p. 270, Pl. 1.B.

ground planted with vines. A recumbent lion, soldered onto the top as a finial, has been added later. Born implies that the cover is also 16th century Persian work, but *repoussé* work is unknown in the Safavid period in Persia, although the lion finial could be of Persian mediaeval date. South Russian workmanship of the 18th century for both cover and finial seems more probable, whatever the date of the metal foot, which according to Born is of Dutch workmanship of the 16th century.

The second of these cups86 (Plate 23,C) has a silver gilt base of European workmanship of the 16th or 17th century which is probably dated, but the mark has not yet been identified. A bezoar stone is attached to the inside of the goblet. Healing qualities are associated with this stone, which is reputed to have the same antidotal values as rhinoceros horn. The carved exterior of this cup represents a landscape with water birds and flowering trees, which is not uncommon among these cups. Wolfgang Born calls this design a representation of Paradise with the tree of life; "a health bringing design with a mythological origin." Whatever the scene, it is almost certainly Taoist in origin and may represent one of the Isles of the Blessed. Representations of immortals and the Taoist islands of immortality are common motifs on rhinoceros horn cups. These three imaginary islands were supposed to be situated in the eastern seas off the coast of Kiangsu. They were called P'êng-lai Shan; Fang Chang and Ying Chou and they were said to be inhabited by immortals, who fed on the gems scattered along their shores and drank from a fountain of life, which sprang from a jade rock. The sacred fungus or ling chih, the emblem of immortality, grew there in abundance and the long-haired tortoise and the crane lived there, which were other emblems of longevity. "These islands became a favourite theme for artists and poets, who delighted in portraying the mysterious world of fantastic palaces set in romantic scenery and peopled with members of the Taoist mythology."87

Of the other three rhinoceros horn cups in this collection, one has a silver filigree foot of 17th century European workmanship and the body is decorated with a vine in relief<sup>88</sup> (Plate 23, B); whereas the second cup is octagonal in shape, with a shallow carved diaper ground, which according to Born symbolises the earth.<sup>89</sup> (Plate 23,D). The last of the rhinoceros cups in the Hapsburg Collection is translucent in colour with irregular dark brown spots.<sup>90</sup> This cup is lacquered and painted in red and green with a design of cypresses and big leaves and medallions in gold (Plate 24,D). This cup has been described as probably of Indian workmanship, and made in Kashmir from a metal shape. "Cups of this shape," says Born, "are numerous among the

<sup>86</sup> Born, op. cit., Pl. 1.C.

<sup>87</sup> P. Yetts. Symbolism in Chinese Art, pp. 17-18.

W. Born. More Eastern Objects formerly in the Hapsburg Collections. "The Burlington Magazine," August, 1939, opposite p. 69, Pl. II.B.

<sup>80</sup> W. Born. More Eastern Objects, etc., op. cit., Pl. II.E, opposite p. 69.

<sup>90</sup> W. Born. More Eastern Objects, etc., op. cit., Pl. II.A, opposite p. 69.

so-called Bidri works, made of black amalgam, inlaid with gold, silver and precious stones." There were several centres of production of Bidri work in India he says; one at Bidan in Hyderabad and another at Srinagar in Kashmir, where objects of wood or papier maché were provided with lacquer decoration. But the designs on this cup also show affinity to those on some of the Persian slipware dishes of the 17th century and one would be reluctant to dismiss a Persian provenance as a possible alternative. Born dates this cup to the second half of the 17th century, but it may well be later. Unfortunately it is evident that not only are the old descriptions in the Hapsburg inventories too general to permit satisfactory identification from them, but that pieces were added to these collections at a later date. For a Sinhalese ivory fan from the same collection can scarcely be older than the first half of the 18th century. The only other rhinoceros horn cup of Indian origin, which I have seen, is the boat-shaped rhinoceros cup, or almost certainly of Imperial Mogul craftsmanship now in the Sloane Collection in the British Museum (Plate 24,B). In this piece an Indian origin is self evident. One wonders whether this cup has any connection with the boat-shaped rhinoceros horn cupola described in the Memoirs of Babur, Emperor of Hindustan, the great Turk conqueror of Northern India at the beginning of the 16th century, as being in his possession. It is cut very thin, thinner than any Chinese cup I have encountered, and the shape might be easily found in a Mogul jade cup. The dappled colour of the horn gives it the appearance of tortoiseshell when held to the light. mystery why, when there are so many references to the value of the horn in Indian literature, no other Indian cup of this kind is known? But Cammann writes to me, there is in the University Museum Philadelphia a rhino cup decorated with avatars of Vishinu, in small compartments round the border, which he thinks may be of Nepalese or Indian workmanship. There are however, in the Ethnographical section of the British Museum, two small rhinoceros horn cups with stems, which were acquired in Omdurman by Dr N. L. Corkhill of the East Aden Protectorate in 1932 and acquired by the Museum in 1936. These are of a yellowish colour streaked with grey, which is the colour of most rhinoceros horn when it has been recently cut and polished, and before it has acquired the golden tint of old Chinese cups by long polish and use. According to Corkhill these cups are of Arab workmanship and were used as antidotes to poison, in particular snake and scorpion virus. Two larger and rather older looking cups, belonging I think to the same family are in my possession (Plate 26,B, Fig. 1-2). Both these and the Corkhill cups have been turned on the wheel, and must be of no great age. Mrs Webster Plass, whose collection of African Ethnographical specimens is well known, tells me she has seen similar cups to mine in Abyssinia, where they have also acquired the same reputation as antidotes to poison. She was told, she said, that the older specimens were not turned on the wheel, but the more modern ones were.

<sup>91</sup> W. Born, op. cit., More Eastern Objects, etc., Pl. I.C.

Memoirs of Zahr-ed-din Muhammed Babur. Translated by Leyden and Erskine, revised by Lucas King, London, 1921, Vol. II, p. 329.

She thinks that these cups were more likely to have been of Arabian than African manufacture. Unfortunately the Ethnographical Department can find no reference to the use of these cups in any book on the Ethnography of North East Africa and the Sudan.

Rhinoceros horn cups of European craftsmanship are not unknown. One of these, in the shape of a classical vase decorated with swags of grapes carved in relief appeared in Sotheby's sale room on the 17th Feb, 1956, Lot 74 "Curiosities;" this vase (Plate 26,E) is probably of German or Italian workmanship and either late 18th or early 19th century in date. It is now in the collection of Mr Raymond Johnes.

Besides the boat-shaped Indian cup there are three other rhinoceros cups in the Sloane Collection, <sup>916</sup> all of which must date to earlier than 1753 (Plate 24, A, Fig. 1, 2 and 3). One of these, Sloane label No. 158, to which I have already referred, is not unlike one of the Hapsburg cups, for it is also decorated with dragons and a dragon handle, and a lozenge pattern on the body, which has in this case been gilded. The other two Chinese rhinoceros cups in the Sloane Collection are No. 143 and No. 172. Number 172 (Plate 24, A, Fig. 2) is quite simple in shape, but not so carefully or elegantly carved as the piece in the Shosoin, which is of about the same size. It is extremely difficult to date this piece because of the simple shape and lack of decoration, but the other two Sloane cups might well date to the Wan Li period.

Another rhinoceros horn cup with a history attached to it is in the Ashmolean Museum, Oxford (Plate 24, C). It comes from the Tradescant Collection, from a "closet of vanities" formed by John Tradescant the Elder, which was presented to the University by Elias Ashmole in 1683. As John Tradescant died in 1632, this cup might well belong to the reign of Tien Chi (1621-27) or Chiung Chêng (1628-1643), for it is rather more roughly carved and freer in design than the dated Wan Li pieces, which I have discussed. The outside is carved with hibiscus blossom in relief. A not dissimilar cup, with a quite genuine but rather poor Augsburg mount, is in my own collection.

There must have been other cups in England in this period. For there is for instance in the MS Catalogue of an "Inventory of the Kings goods and Furniture sold by the rebels in 1649," under the heading The Tower Upper Jewell House the following—

"178. A Rhinoceros horn cup, graven with figures with a golden foot, weighing 8 ounces, valued att 10£.0.0. Sold Ann Lacy 24th Dec 1649 for 12£."

A large collection of these rhinoceros cups was in the hands of Crown Prince Rupprecht of Bavaria; both these and some others displayed in the Völkerkunde Museum in Munich seem to have belonged to Ludwig I (1788-1868) and so far as I can discover no great history is attached to them, although the owner does not wish them to be published. Yet another two are in the Pitti Palace in Florence. My letter addressed to the Director of the Museum asking for information about them remains up to date

<sup>91</sup>b See British Museum Quarterly, Vol. XVIII, 1953. Oriental Antiquities from the Sloane Collection in the British Museum.

unanswered; but I have reason to believe the register of the Museum does not go back to before 1880, and it is possible that history of their acquisition is not known. His Majesty the King of Sweden tells me he has seen these two cups, but was not able to obtain photographs of them and that his attempts to elicit their history from the Italian authorities have been no more successful than my own. And it is possible that further rhinoceros horn cups which came over to Europe in the early seventeenth century might be run to ground in Portugal or Spain.

Of the more modern European collections there are seventy-seven of these cups in the possession of the Museum voor Land en Volkenkunde in Rotterdam. Dr Dolk informs me that four of them are inscribed. Among them is No. 29367, dated to the 8th year of Wan Li (A.D. 1580) which I have already mentioned. Another cup, No. 29341, is signed Po Hung<sup>92</sup> and a third, No. 29344 "made by Hu Hsing Yüeh." and the fourth cup No. 29364 "Hao Ming precious collection." A most interesting thinoceros horn carving in the same collection of a palace set among rocks, probably again the Taoist Islands of the Blest (No. 29771) is inscribed on the base "the 18th year of Ming Ming," which is the nien hao of Yuan Fa K'iao, the second king of the Ming dynasty in Annam and the date of the piece is 1839 (Plate 22, B).

In America there is a large collection of these rhinoceros cups in the Field Museum of Natural History, Chicago, which came from John T. Mitchel in 1923. Only two of them are inscribed, Mr Kenneth Starr informs me. One with the name of a maker which is difficult to read, and the other, a not particularly attractive piece from the photograph, is in the shape of a bronze chieh with three legs and a handle engraved "the ninth autumn of Chien Lung (1744)" and the words "Liang Kuang Chen Po" which can be translated "bright and splendid precious pearl." (Plate 26, C).

An even large collection was bequeathed by Mrs John Nicholas Brown, to the Fogg Museum, Boston where Mr Richard Edwards has been indefatigable in supplying me with photographs and in reading inscriptions. Among these besides the figure of Kwan Yin dated to 1599, is a cup inscribed "Handed down by Tu Ch'uang," (Plate 25, D, Fig. 1), which is the hao of Wan Ch'ien (1733-1813), a bibliophile and poet and friend of the collector Hung P'ei-lieh. He came from Haining in Chekiang. Another cup is inscribed "Cloud goblet hall." (Plate 25, D, Fig. 2). Two others are inscribed respectively "made by Sheng Fu Kung," (Plate 25, C, Fig. 2) and "by Liu Ssu Nung," (Plate 25, C, Fig. 1), an official title of the Ministry of Revenue. While yet another cup is engraved with a figure holding a flower, perhaps Hsi Wang Mu, Queen of the Taoist fairyland, and phoenix, into which red, green and white pigments have been rubbed. (Plate 26, A). Besides the cups there is in this collection a razor-like instrument with a metal blade, probably a betal nut cutter, with a rhinoceros horn handle carved at the base in the shape of a horse with a monkey for a finial, probably from Greater India. (Plate 26, D). There are also some rhinoceros horn ladles, and chopsticks, the existence of which is mentioned

in T'ang times by Tu Fu, the poet in his poem "The Snare of Beauty." Most of the pieces in this collection belong to the Ch'ing dynasty.

Among some hundred and eighty rhinoceros horn cups belonging to Sir Chester Beatty at the Beatty Library in Dublin, are besides the cup inscribed Hsüan Ho, one inscribed P'ing Yun Ko,99 and another "respectfully offered by your disciple Chiang Jen Hsi."100 There was a Ch'ing carver Chiang Jen, who may have been the man in question. There is also in this collection what appears to be a rhinoceros horn brush pot covered with figures of Immortals under pines in high relief, and with a long inscription on the base to say that it was carved by imperial order, but giving no date or name of the carver.

This piece might belong to as early as the K'ang Hsi period.

As time goes on we shall no doubt be able to identify the carvers of many of these rhinoceros horn cups, whose names and studios are at present a closed book to us. Mr Casal says that the production of these cups continued up to Tao Kuang times (he died in 1850) and then suddenly ceased. But I do not know the evidence for this statement. A great number of these cups, particularly the coarser specimens, which have little merit, are of Cantonese workmanship; for Canton is often mentioned as the centre of the trade, and made pieces both for the home market and for export. We know the Dutch exported Rhinoceros horn to Japan in the 17th century, but I have never heard that the Japanese ever carved cups for themselves. Others again almost certainly come from Foochow, for in this province at Têhua were made large numbers of small white porcelain cups in the shape of miniature rhinoceros horn vessels; many of these must have been made about 1700. But besides the artisan craftsman there were certainly gifted amateur carvers using this medium, and some of the eighteenth century cups are most elaborate works of art. The early cups were without question libation vessels, but by the reign of Ch'ien Lung (1736-96), they had become little more than vehicles for the carver's virtuosity.101

<sup>99</sup> See Appendix.

<sup>100</sup> See Appendix.

The reputation of one of their artists, a Mr. Yu, who lived in the reign of K'ang Hsi (1662-1722) has been recorded as follows: "A certain person surnamed Yu of this district (i.e. Wu-hsi) excelled in carving and engraving rhinoceros-horn, ivory, jade and stone into ornaments and playthings. His brilliant and exquisite workmanship was ranked first in Suchou, Ch'angchou and Huchou. When he was a youth, a relative of his had a rhinoceros horn cup which was greatly treasured. His father admired the cup and borrowed it. It happened that there was a rhinceros horn at hand and the youth made an exact copy but its appearance was not finished and thereupon he pounded the plant balsam and dyed it as one dyes one's finger nails. The imitation became indistinguishable from the original, and when it was taken to his relative, the latter could not see the difference between the two, and accordingly, it was known as "Yu Rhinoceros-horn Cup." In the middle of the K'ang hsi-period he was summoned to the Palace and later on in his old age he resigned and returned home. He said that when he was in the Palace, he was given a pearl, and ordered to engrave the Ch'ih-pi Fu on it. As the pearl was small and hard he thought that it was difficult to do. Then he was given a pair of spectacles, and when he tried to use his knife he could see very clearly and did not notice the small space and he could use his knife more easily than ever before. From the Chung Kuo I Shu Cheng Lueh, ch. 3, p. 17b, written by Li Fang in 1911, reprinted 1914. Unfortunately Yu's work is, as far as I know, unidentified.

I had originally intended, but time does not permit, to close this lecture with a few remarks about Chinese carvings in tortoiseshell and walrus ivory. For these two substances, together with the bill of the hornbill, share the same reputation among the Chinese as rhinoceros horn for their supposed properties in detecting poison.<sup>102</sup> The origin of this superstition, which is common to all three, and the extent to which it was shared by other Near Eastern and Far Eastern peoples would provide a further fascinating study for research by those who are interested in the bye paths of Chinese Art.

What was the origin one wonders of the superstition prevalent in the Near East and Burma and Siam that Celadon dishes were proof against poison? This superstition does not seem to have been held by the Chinese. Why was it held so long in the Near East and when did it die out? As late as 1710 the Nabob of the Carnatic writing to the Governor of Madras, asked for the "dishes called Ghorees, which break when poyson is put into them."

# APPENDIX

54	鎮
76	子孫永寶
77	尤通
79	文框
92	伯弘
93	胡星缶作
94	鶴鳴珣藏
95	兔床所貽
96	觞雲堂
97	盛輔功作
98	劉司農製
81	宣和
99	平雲閣
100	蔣仁錫

# ILLUSTRATIONS

#### PLATE 15

A Stone figure of a Rhinoceros. Possibly Shang-Yin, but probably Chou. Length 2<sup>1</sup>/<sub>4</sub> in. Height τ in.

British Museum Collection

- B The two Chinese characters ssii and hsi which have been applied to the Rhinoceros.
- C Rhinoceros bronze Hsi Tsun, inscribed on the bottom with 27 characters. Late Shang-Yin or early Chou. Length 14½ in. Height 8½ in. Avery Brundage Collection, Chicago

#### PLATE 16

- A Two bronze lynch pins in the form of Rhinoceros heads. Chou or later. Height 4.8 in. The British Museum Collection
- B Bronze figure of Rhinoceros. Probably Han. Length 3 in. Height 1.4 in. The Musée Royaux Collection, Brussels
- C Pottery tomb figure of a Rhinoceros. Han or slightly later. Length 11.5 in. (the horn is restored).

The Victoria and Albert Museum Collection

#### PLATE 17

- A Pair of Rhinoceros horn fish amulets. Scales outlined in gold; mouths pierced with a silver ring. Probably ornaments suspended from the sash. Length 1.4 in. Harada Catalogue No. 250.

  The Shosoin
- B Rhinoceros horn containers (gosn) used as pendant ornaments. Fig. 1 in the shape of a miniature Rhinoceros horn with shitan wood lid carved in floral design. Length about 3 in. Figs. 2 and 3 square, with lids. The original cords used for suspending them from the belt exist. About 1.2 in. square. Harada Catalogue No. 521.

  The Shosoin
- C & D Rhinoceros horn girdle ornaments. Some square and some eliptic, with one side cut off in a straight line, attached to fragments of a moleskin girdle with a silver buckle, which belonged to the Emperor Shomu. No measurements given. Harada Catalogue No. 26.

  The Shosoin

#### PLATE 18

- A Nyoi or Buddhist sceptre with palm of Rhinoceros horn (in two pieces). The ivory handle stained vermilion and blue carved in the bachru style, set with coloured glass balls, and pierced work of flowers and birds in ivory. The lines of demarcation in gold and the edge in marquetry. This, the longest nyoi in the collection, is about 19.7 in. Harada Catalogue No. 672.

  The Shosoin
- B Nyoi of Rhinoceros horn, decorated on both sides with glass and rock crystal balls, with dark blue stone at the top of the handle. The handle carved with the word "To-daiji", inlaid with red pigment. No dimensions given. Harada Catalogue No. 669.

The Shosoin

C Rhinoceros horn footrule, used as a measuring stick. Divided into ten divisions, five of which are subdivided into halves and the other five into ten subdivisions. Engraved lines in red, covered with gold leaf. Length 11.6 in. Harada Catalogue No. 364.

The Shosoin

#### PLATE 19

- A Two pairs of Tosu (small knives to stick in the girdle), with handles of Rhinoceros horn; one with sheaths of jinko wood painted with floral designs in silver, with fragments of original braided cord. No dimensions given. Harada Catalogue No. 432, Nos. 23 and 24.

  The Shosoin
- B Pair of Tosu with Rhinoceros horn hilts, decorated with silver scrolls set with beads and pearls. Wooden tag attached inscribed "dedicated by Tachibana Fugen". Length 9.1 in. Harada Catalogue No. 432, No. 7.

  The Shosoin
- C Tosu with Rhinoceros horn hilt, lacquered mounted in gold with floral scrolls set with rock crystal and glass balls, some of which are new. Length 14.6 in. Harada Catalogue No. 432, No. 7.

  The Shosoin

#### PLATE 20

- A Rhinoceros horn cup in the North case of the Lower Floor of the Middle Section, shaped like a curved horn tapering to a blunt point, with a shallow bowl. Width 2.8 in. Height 3.4 in. Harada Catalogue No. 401. The Shosoin
- B Two Rhinoceros horn cups in the North case of the Upper Floor of the North Section. The Kenmotsucho mentions two Rhinoceros horn cups as being contained in this cabinet, but these do not correspond with them. Fig. 1. Diam. 4 in. Height 1.7 in. Fig. 2 Diam. 6.1 in. Height 2 in. Harada Catalogue No. 38. The Shosoin

#### PLATE 21

- A Rhinoceros horn stem cup and cover with finial, the cover perhaps added later. Total Height 6.6 in.
  - The Fogg Museum of Art, Cambridge, U.S.A.
- B Rhinoceros horn cup with incised mark on the base "Hsüan Ho", one of the nien hao of the last but one Emperor of the Northern Sung dynasty who reigned from 1119 to 1126. Length 6 in. Height 3.7 in.

Sir Chester Beatty Collection

C & D Side view and base of a Rhinoceros horn cup, with the *nien hao* of Hsüan Tê (1426-35); probably of the period of the mark. Length 6½ in. Height 3 in.

George F. de Menasce Collection

#### PLATE 22

A Rhinoceros horn figure of Kuan Yin pouring water from a vase, with attendant figure. Inscribed on the base "Joyfully offered by the desciple Mi Wan-chung to the Chin Kang Tung on Chiu Hua Shan in the Chi Hai year of Wan Li (1599) 3rd. month 1st. day" Length 4 in. Height 3 in.

The Fogg Museum of Art, Cambridge, U.S.A.

B Rhinoceros horn sculpture of one of the Taoist Islands of the Blessed. Annamese work inscribed "18th, year of the Ming Ming" (1839). This is the nien hao of Yuan Fa K'iao, the second King of the Ming dynasty in Annam. Dimensions unknown. The Museum voor Land en Volkenkunde,

Rotterdam

C Rhinoceros horn cup, with key fret border to lip, and bronze pattern on body in slight relief. Inscribed "8th, year of Wan Li" (1580). Diam. 5.5 in.

Madame Wannieck Collection, Paris

D & E Rhinoceros horn cup, inscribed "8th year of Wan Li (1580)" and "treasured in the collection of Fêng Ming". Width 7 in. Height 9 in.

The Museum voor Land en Volkenkunde,

Rotterdam

#### PLATE 23

- A Horn or Rhinoceros horn cup with silver-gilt cover. "Persian work, 16th century, with Dutch mount of same period" (Wolfgang Born). Height 8.2 in. Hapsburg Collection, Castle Ambras, The Tyrol
- B Rhinoceros horn cup, with foot of silver filigree; European workmanship from the 17th century. Cup, Chinese 17th century. Height 2.9 in.

The Kunsthistorisches Museum, Vienna

C Carved Rhinoceros horn cup, with bezoar stone inside and European silver base of the 16th or 17th century. Cup, Chinese 17th century. Height 5.1 in.

The Kunsthistoriches Museum, Vienna

D Carved Rhinoceros horn cup. Chinese 17th century. Height 5 in. The Kunsthistoriches Museum, Vienna

#### PLATE 24

A Rhinoceros horn cups from the collection of Sir Hans Sloane, acquired by the British Museum in 1753.

Fig. 1. Dragon handle and diaper pattern on body in relief picked out in gold. Diam. at mouth 5 in. Height 3 in.

Fig. 2. Undecorated. Diam. at mouth 5\frac{1}{4}in. Height 3\frac{3}{4}in.

Fig. 3. Dragon handle in high relief; body decorated with *t'ao t'ieh* mask in low relief. Diam. at mouth 5.3 in. Height 3.3 in.

B Boat shaped Rhinoceros horn cup of Indian work of the Mogul period. 17th century. Diam. 6 in. Height 2½ in.

Sloane Collection, Btitish Museum, 1753

C Rhinoceros horn cup, decorated with hibiscus flowers and stems in high relief. Diam. 5.3 in. Height 3.5 in. Tradescant Collection, The Ashmolean Museum,

Oxford. Presented, 1683

D Rhinoceros horn cup, painted and lacquered with a cypress tree design perhaps after a Persian slipware dish, in gold, red, green and white. Persian or Indian work, 17th century. Height 3.7 in.

The Kunsthistorisches Museum, Vienna

#### PLATE 25

Rhinoceros horn objects in the Nicholas Brown Collection The Fogg Museum of Art, Cambridge, U.S.A.

- A Fig. 1. Cup carved with twining stem, insect, flowers and leaves in high relief. Height 2.1 in.
  - Fig. 2. Bowl with inscribed seal "made in the period of Hsüan Ho" (1119-1126). Diam. at mouth 4.8 in. Height 2.7 in.
- B Fig. 1. Box and cover. Lid carved with dragons in low relief. Diam. 2.1 in. Height 1.4 in.
  - Fig. 2. Six sided cup, decorated with bands of incised key fret at lip and foot. Width 3.9 in. Height 4.2 in.
- C Fig. 1. Cup with handle, carved in a raised design after a Chinese bronze pattern and inscribed "made by Liu Ssu Nung". Diam. 3.4 in. Height 2.8 in.
  - Fig. 2. Cup on four feet, reminiscent of an archaic bronze *chia*, decorated with dragons and ribs in high relief; body in low relief after a Chinese bronze pattern. Inscribed "made by Sheng Fu Kung". Diam. 3.7 in. Height to top of handle 5.9 in.
- D Fig. 1. Cup, carved with a lotus band round the base in relief, and three dragons, the largest forming the handle. Inscribed "Handed down by T'u Ch'uang." Width at handle 5.1 in. Height 3.8 in.

D Fig. 2. Rhinoceros horn cup with handle of five dragons in high relief. Body decorated with t'ao t'ieh masks and with bands of hanging leaves, in low relief. Inscribed "Cloud Goblet Hall". Width at handle 6.2 in. Height 4.7 in.

#### PLATE 26

- A Rhinoceros horn cup, with design of Hsi Wang Mu with attendant, and a phoenix, in a garden. The outlines picked out in white, red, blue and green pigments. Length 6.8in. Height 7½ in.
  - The Fogg Museum of Art, Cambridge, U.S.A.
- B Two Rhinoceros horn cups, turned on the wheel. Arab work probably from the Sudan. Fig. 2. Width 4.2 in. Height 2.7 in.

  Author's Collection
- C Rhinoceros horn cup in a form reminiscent of a bronze chüch. Inscribed "9th autumn of Ch'ien Lung (1764) made for Imperial use" and "a bright and splendid pearl". Diam. at mouth 4.8 in. Height 3 in.

  The Field Museum of Natural History, Chicago
- D Betal nut cutter, with metal blade attached to a Rhinoceros horn handle in the shape of a horse with a monkey as a finial. Probably from Greater India. Length to finial 5.5 in. The Fogg Museum of Art, Cambridge, U.S.A.
- E Rhinoceros horn urn of Italian or German workmanship late 18th or early 19th century. Height 10 in. Raymond Johnes Collection