## Article V.—ON THE ANCIENT INSCRIBED SUMERIAN (BABY-LONIAN) AXE-HEAD FROM THE MORGAN COLLECTION IN THE AMERICAN MUSEUM OF NATURAL HISTORY.

## By George Frederick Kunz.

## PLATE VI.

With translation by Prof. IRA MAURICE PRICE of the Semitic Department, University of Chicago; and the discussion by the Rev. Dr. WILLIAM HAYES WARD of New York.

This remarkable stone object (a Babylonian ceremonial axe-head) was secured for this collection in 1902 in England. It is one of the oldest known stone objects of a weapon form with an inscription, although copper and metal objects were frequently so marked. It is historic and almost unique.

This axe was obtained by the Cardinal Stefano Borgia while at the head of the Propaganda, but whence or how is not known. (See note at the end.) The Contessa Ettore Borgia, his niece, offered it to the British Museum some ten or twelve years ago, but at so extravagant a value (about three or four thousand pounds sterling) that it was returned to her. It was ultimately acquired for some 15,000 lire by the late Comte Michel Tyszkiewicz,<sup>2</sup> and soon after his death there was a dispersal of his collection of engraved stones, bronzes, marbles, and other antiquities. After the sale, the axe was purchased for Messrs. Tiffany and Co. by the author, and, through the generosity of James Pierpont Morgan, Esq., was presented to the American Museum of Natural History, New York City, on April 16, 1902.

The object measures in length 134.5 mm., width 35.5 mm., thickness 31 mm., and weighs 226.8 grammes.

It is made of banded agate, the layers being very parallel, so much so that it might well be called an onyx. The color is a snuff-brown, really a deer-brown. It is in part spotted and splashed with white, evidently due to contact either with fire, or fire and some alkali, such as soda. This patina covers the larger part of the inscription, and has been produced since the latter was cut. The incising was the result of bow-drill work. The hardness is 7. On the reverse is a letter W, very rudely picked in with a steel tool. But this is evidently of very recent date.

Read before the New York Academy of Sciences, Jan. 29, and Feb. 27, 1905.
 Collection d'Antiquités du Comte Michel Tyszkiewicz, decente par W. Froehner. Paris, 1898. Folio, p. 97, plate xxxii.

This axe-head was first described by Francesco Lenormant, in 'Tre Monumenti Caldei ed Assiri di Collezioni Romane' (Rome, 1879, pp. 19, with plate vi, fig. 1, pages 7-9).

Inscribed stone axes are rare and of great interest; those of metal are less unusual. The votive axe of Thothmes III was so inscribed. (See p. 60, Illustration I, 'The Dawn of Civilization, Egypt and Chaldea,' by G. Maspero, New York, 1894; 8vo, pp. 800.)

The deciphering of this inscription could be done by but few Babylonian scholars in the United States. Prof. Ira Maurice Price, of the Semitic Department of the University of Chicago, very kindly undertook the task. His letter is as follows:



"The little inscription that forms the subject of this note is an intaglio on the side of an axe-head made of banded agate, as seen in the accompanying illustration (Fig. 1). It occupies the space of one inch in length by five-eighths of an inch in width. It consists of three lines written in archaic

Fig. 7. Inscription, actual size (7 in. x § in.). Babylonian characters, of which the accompanying cut is a facsimile reproduction.

"The character of the signs is that current in Babylonia from the earliest times down to 2000 B.C., both on cylinder seals and in larger inscriptions. The language is the primitive form of the cuneiform languages called "Sumerian" by one school, and by another "Akkadian." Its out-standing feature is that it is written largely in ideographs, signs

that designate ideas, rather than syllables. This was the favorite method of marking important documents, or dedicating them to some particular divinity or divinities.

"The accompanying cut (Fig. 2.) is a transliteration of the inscription into the later Assyrian Fig. 2. Assyrian character. character, the form of writing current in Assyria from 1500 to 606 B.C.

"The transliteration of the ancient Babylonian is as follows:—

HA AD-DUG-ISH
PAP SHESH
dingir U ZAL-NI

"The Assyrian equivalent of the text may be indicated in the following form:—

<sup>&</sup>lt;sup>1</sup> Lenormant, F., in 'Tre Monumenti Caldei ed Assiri,' Roma, 1879, pl. xiv, gives a transliteration into Assyrian of this inscription, but he misread the first two signs in the first line, and the first two in the third line. He finds the god Ramman, however, and gives an appropriate description of his

duppi Ad-dug-ish
asharidu
ilu Shamash baru-shù
"The translation of the text as just transliterated is:—
The inscription of Ad-dug-ish
the governor
(dedicated) to the god Shamash, his benefactor.

"This small inscription, like most of those written in the so-called Sumerian language, is capable of more than one rendering. The one presented above is based in part on a fragment of a syllabary found in 'Cuneiform Texts of the British Museum,' Vol. XII, plate 31, No. 38182. There we find HA =nu-u-nu (='fish'); du-up-u (='tablet' or 'inscription'); pu-ra-du, whose meaning is uncertain. It is also possible to read the first line in the inscription as the proper name, thus: 'Haddugish, the governor, (dedicated) to the god Shamash, his benefactor.'

"Another possible rendering is to take the first sign in the first line as naming a particular stone, the determinative sign usually found before such words in prose being omitted. This omission, especially before signs whose character can be otherwise determined, is frequent in the so-called Sumerian inscriptions. The syllabaries (Brünnow, No. 11822) designate a fish-stone (=aban nûni), which has been thought by some scholars to be os sepiæ, (='cuttle-fish bone'). May it not be that this first sign in the first line designates a stone, which, because of its banded character, is likened to a fish? Hence it could be read 'the precious stone of Ad-dug-ish,' etc.

"In some of the combinations of signs, where the first sign in the first line is an element (cf. Brunnow, Nos. 11843, 11845) we find such a meaning as 'defense,' 'protection.' It is not impossible that such a meaning may be attached to this axe-head, used as a symbol of defense against an enemy. If such a sense were possible, then the last line might be read 'To the god Adad, his lord.' The entire inscription would then read 'The defense of Addugish, the governor, (dedicated) to the god Adad, his lord.'

"It seems evident from the usual custom in the use of such inscriptions that the first sign should designate something relative to the object on which it is found. Hence the designation 'stone,' or ('precious) stone,' indicated in the suggestion made above, may be the true meaning for this bit of an inscription. The last line contains first the designation of a divinity, probably either Shamash, or Adad, the archaic small circle being used for the usual sign U in later

Assyrian. Shamash seems to be appropr ate, for he was the sun-god, whose warm light fed the life of man, beast, and vegetable, and made the earth bring forth in abundance to feed man and beast. The signs translated 'his benefactor' might be more fully rendered by a paraphrase, 'the one who supplies him with abundance.' On the other hand, Adad was the weather-god, the thunderer, who poured out the floods, and who appeared as a warrior with a weapon in one hand and a thunderbolt in the other. On seals he often leads a bull by a leash. If the god in the last line of this inscription should be read 'Adad,' then there may be some reason in translating the first sign as 'defense,' 'weapon,' making the axe-head supply a symbol of the principal attribute — the war-like one — assigned to the god Adad. The last two signs may then be read as 'his lord,' 'his conquering one,' etc.

"An alternative reading for the inscription would then be:-

The (axe-head) stone of Ad-dug-ish the governor, (dedicated) to the god Adad, his lord.

"The governor' was a 'leader' or a 'prince' of the first rank, in authority. In fact, it is an epithet which some of the divinities assign to themselves as indicative of their rank. Therefore this axe-head was the possession of an official of high authority,— and of one who was devoted to his god as his benefactor, or his conquering lord."

In regard to the use of the axe in early Babylonia, Dr. W. Hayes Ward says:

"Axes or celts, whether of stone or copper, are extremely rare from the region of primitive Babylonia, although celts are not infrequent in Asia Minor. The axe was, however, perfectly well known from the

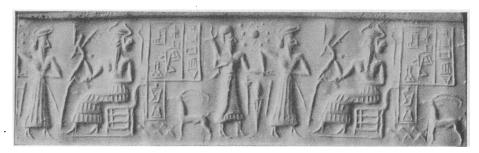
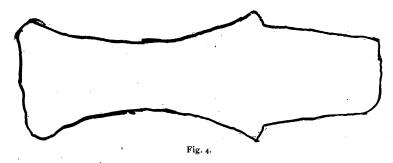


Fig. 3

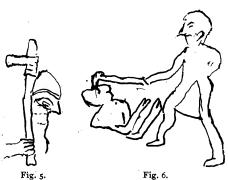
earliest times in Babylonia, and is figured both on the cylinders and on bas-reliefs. On a cylinder in the Berlin Museum, V. A. 243, the three weapons more usual on the cylinders are drawn, in the field, side by side, between the two standing figures, thus (Fig. 3):

"This is the usual appearance of the axe on the cylinders, but it is not a frequent weapon, the poniard, and especially the club, being more frequent. In De Clercq's 'Catalogue methodique et Raisonné,' pl. 21, Ramman is figured with a weapon thus (Fig. 4):



"In the archaic 'Stele of Vultures' of about 4000 B.C., or earlier, is a figure of a king seated in his chariot, carrying a quiver with

arrows, and what may be a peculiar bow, but looks more like a boomerang. Following him are his soldiers armed with spears and battle-axes shaped (Fig. 5): (See De Sarzec, 'Découvertes en Chaldée,' pl. 3 bis. See also pl. 5 bis, 3 b, for similar axes). But that the double axe was known is shown by a terracotta votive axe, ib., pl. 45, 5.



"In the bas-relief of Naram-Sin, King of Agade, in Babylonia,



Fig. 7.

generally supposed to have reigned about 3750 B.C., the king is armed and followed by his soldiers, who are armed, in part, with axes. For the shape of the axes see De Morgan, 'Délégation en Perse,' I, p. 150.

"Babylonian axes are not to be found, I

think, in the art after perhaps 3000 B.C., until we come down to

the axes of the northern region, which came in with the two-edged *bipennis* axe carried by Adad, or the chief god of the Hittite region. There it was a frequent object, and is found in Cretan art.

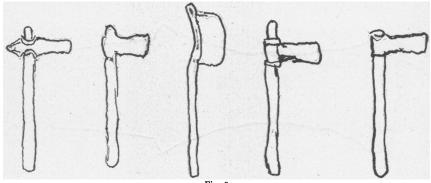


Fig. 8.

"Among the cylinders showing the axe is that of the goddess attacked under a tent-tree (Fig. 9). (See Sarzec, 'Découvertes en



Fig. 9.

Chaldée,' pl. 30 bis, 17 b.) Here the shape of the axe wielded by the god who hacks at the tree is (Fig. 9):

"In the case of the 'British Museum Cylinder Migration Scene,' two of the men carry an axe on their arm shaped (Fig. 10):

"In the Bibliothèque Nationale, Paris, is a cylinder drawn with an axe in the field, between the two central standing figures, thus (Fig. 11)."

Lenormant is uncertain as to the translation of the first two lines of the inscription; the third he renders 'To his god,' probably Ramman, the Rimmon of the Bible (2 Kings v, 18), the god of



Fig. 10.

thunder, lightning, and all atmospheric phenomena. He figures the inscription, on page 7, enlarged, and transliterated into the later cuneiform, as in Prof. Price's second figure; but regards the language as a very archaic Sumerian or Accadian form, of agglutinated character and almost impossible to render with any certainty, in the absence of some bilingual inscriptions as a guide. He points out



Fig. 11.

that the object was strictly votive, or religious, in its nature,—a symbol and not a weapon,— and was connected with the widespread early veneration for celts and stone hammers, as supposed to have fallen from the gods; whence for votive purposes a stone object was made in preference to a metal one.

He cites an Assyrian bas-relief (from Layard), in which the statue of Ramman is carried in procession. He has four horns on his head, at his feet are the thunderbolts, and he carries a hammer in his hand. This hammer in the hands of Ramman had among the Babylonian Chaldeans the same significance as the hammer of Thor in the

Scandinavian mythology. The general credence was that the bolts from the god fell on earth in the shape of hammers of stone. Therefore, the dedication to the god found a greater significance in the shape of a stone hammer or battle-axe than in one of metal. ('Tre Monumenti Caldei ed Assiri': pp. 8, 9.)

The literature teems with curious and interesting accounts of the varied and widespread superstitions relating to prehistoric stone implements of all kinds, throughout Europe and Asia. Celts and stone

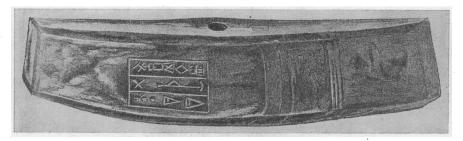


Fig. 12. Chaldean Hammer bearing an inscription.

hammers were believed almost everywhere to have fallen from the sky in connection with thunderstorms; and arrow-heads were called 'fairy darts' and 'elf darts'; and all were supposed to have potent influences as charms. E. F. Stevens relates many singular superstitions about elf-darts in Ireland, Scotland, and Scandinavia, and even as far as Japan, where flint and obsidian arrow-heads are thought to be used by spirits. These were believed to fly through the air in storms, and to drop their weapons on the earth; and the people go out afterwards and look for them on the ground. In Ireland and Scotland they were worn upon the person as charms; and they are sometimes found in ancient Greek or Etruscan jewelry, as pendants. The belief that stone axes were connected with thunder was widespread; they were known among the Greeks as astropelekia, i. e., star-hatchets, and keraunia, thunder-stones. In Europe in the Middle Ages, they were supposed to be always discoverable at the roots of a tree that had been struck by lightning, or beneath a house so struck, and were credited with all manner of virtues,—to protect a house from lightning, to cure diseases in men and animals, to give strength and victory in Such an axe was hung round the neck of the ram or contests, etc. goat that led a flock, to preserve the whole of them from accident or the 'evil eye.' The Scandinavian folk-lore and Sagas tell of 'victory-stones' 'Thor-stones,' worn by chieftains, which rendered

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them secure and successful in combat. Two such narratives may be cited, from the Bern's Saga, one of King Nidung, and the other of

Sigurd, who were made victorious by such stones, which were undoubtedly amulets of this kind. ('Flint Chips,' pp. 873–890.) Galba, when general, found twelve celts in a small lake which he drained when that was struck by lightning, and believed he was to be

a great man. The modern archæologist knows that it meant that Galba had found the site of an ancient Lake Dwelling.

Maspero refers to this very specimen, in speaking of ancient axes. He says: (The Dawn of Civilization, p. 755):—

"A few examples, it is true, are of fairly artistic shape, and bear engraved inscriptions: one of these, a flint hammer of beautiful form, belonged to a god, probably Ramman, and seems to have come from a temple in which one of its owners had deposited it. It is an exception, and a remarkable exception. Stone was the material of the implements of the poor—implements which were coarse in shape and cost little; if much care were given to their execution, they would come to be so costly that no one would buy them, or, if sold for a moderate sum, the seller would obtain no profit from the transaction. Beyond a certain price, it was more advantageous to purchase metal implements

"It was found in the ancient collection of Cardinal Borgia, and belonged some years ago to Count Ettore Borgia. An engraving of it was given in Stevens, 'Flint Chips,' p. 115, and a facsimile of it by Fr. Lenormant, 'Tre Monumenti Caldei,' etc., 1879, pp. 4–9, and pl. vi., 1; Cartailhac, 'L'Age de la Pierre en Asie,' in the Troisième Congrés provincial des Orientalistes, tenu à Lyon, Vol. I., pp. 321, 322, has reproduced Lenormant's notes on it.

"Drawn by Faucher-Gudin, from the illustration Thothmes III. published by Fr. Lenormant, 'Tre Monumenti Caldei,' etc., pl. vi., No. 1." (*Ibid.*, foot-note.)

He also says of ancient axes in general (ibid., p. 60, foot-note):-



"Finally, the crook and the wooden-handled mace, with its head of white stone, the favorite weapon of princes, continued to the last the most revered insignia of royalty.

"The blade is of bronze, and is attached to the wooden handle by interlacing thongs of leather (Ghizeh Museum). Drawn by Faucher-Gudin, from a photograph by Emil Brugsch-Bey.

"The crook is the sceptre of a prince, a Pharaoh, or a god: the white mace has still the value apparently of a weapon in the hands of the king who brandishes it over a group of prisoners, or over an ox which he is sacrificing to a divinity (Lepsius, Denkm., II., 2 a, c, 39 f, 116, etc.). Most museums possess specimens of the stone heads of one of these maces, but the mode of using it was not known. I had several placed in the Boulak Museum (Extrait de l'inventaire, p. 10, Nos. 26586, 26587, in the 'Bulletin de l'Institut Égyptien,' 2d series, Vol. VI). It already possessed a model of one entirely of wood (Mariette, 'La Galerie de l'Égypte ancienne,' p. 104; Maspero, 'Guide,' p. 303, No. 4722)."

It is certainly a matter for congratulation that this remarkable and almost unique specimen should have been secured for this Museum.

Note.—Stefano Borgia, Italian ecclesiastic (born Velletri, Dec., 1731, died Lyon, 23d Nov., 1804), was brought up by his uncle Alessandro Borgia, Archbishop of Ferno, and in 1750 on becoming a member of the Etruscan Academy of Cortona, commenced at Valletre to form one of the richest collections (private) in the world. In 1750 he was appointed by Benedict XIV governor of Benevento, and in 1770 he became secretary to the College of the Propaganda, which brought him into immediate relations with missionaries to all parts of the world, and enabled him, at comparatively little expense, to enrich his museum with manuscripts, coins, statues, idols, and all other rarities which each country possessed. In 1789 Pius VI made him a Cardinal, and at the same time appointed him inspector general of the foundling hospital, into which he introduced extensive reforms. In 1707 the revolution spirit, which had broken out in France, extended itself to Rome, and the Pope, as the best means of counteracting it, gave all his confidence to Borgia and installed him as director. He was arrested. and after his release was ordered to quit the Papal States. embarking at Lisbon he went to Venice and Padua; returning to Rome, the new Pope Pius VII treated him with the same respect and confidence. He died while accompanying Pope Pius VII to France. He was author of several antiquarian and historical works,

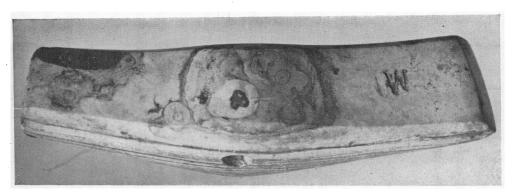
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and deserves honorable mention for his liberal patronage of art and Count Ettore Borgia, a nephew, inherited a part of his collections. But the main portion in archæology is now in the Royal Museum of Antiquities at Naples; the lesser part, containing the books, manuscripts, letters, etc., is in the College of the Propaganda at Rome.1

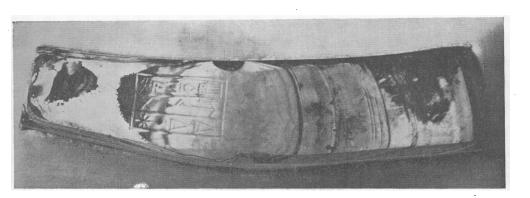
<sup>&</sup>lt;sup>1</sup> Thanks are due to the Rev. William Hood Stewart of the Roman Catholic Church of the Epiphany, New York City, for much of the information in regard to Cardinal Stephano Borgia.



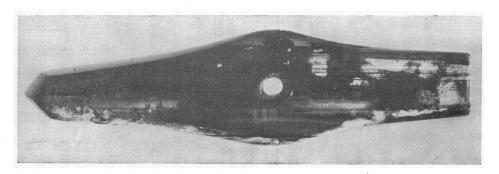
VOL. XXI., PLATE VI.



1. Obverse.



2. Reverse.



3. Edge.
ANCIENT BABYLONIAN AXE-HEAD.