

THE COSMIC TEETH

BY LAWRENCE PARMLY BROWN

III. *Lightning Teeth*

IN the fiery nature of lightning flashes or thunderbolts we doubtless have the suggestion for their mythic recognition as the teeth of a storm figure, sometimes a dragon or serpent, which in another view darts out its tongue to produce the lightning—or is conceived as fire-breathing like some of the macrocosmic figures such as Purusha in the *Vishnu Purana* (I. 12).

Tlaloc ("He-who-makes-things-sprout") was the great Mexican god of rain, lightning and thunder; the wide-spread belief that the rain comes from a serpent or dragon probably having suggested the two serpents generally forming the face of this deity with their tails encircling his eyes, their heads meeting at his mouth, and their fangs serving for his teeth.

Antonio de Leon y Gama says that Tlaloc held in his right hand sheets of gold, representing his thunderbolts, or sometimes a golden serpent; that his front teeth were painted red, and that he had three molars (*Descripcion de las Dos Piedros*, 1792, Pt. I, p. 101; Pt. II, pp. 76-79). This description probably refers to representations of Tlaloc with his face in profile and with a large open mouth extending well toward the ear, thus exposing six upper teeth; namely, three anteriors (a central, a lateral and a canine) and three posteriors (two premolars or bicuspid and one true molar, the former of which were known as molars until comparatively recent times). In fact, there can be little or no doubt that all the anthropomorphic figures of Mexico and Central America were conceived to have the same number of teeth as human beings, with six sharp anteriors in each jaw.

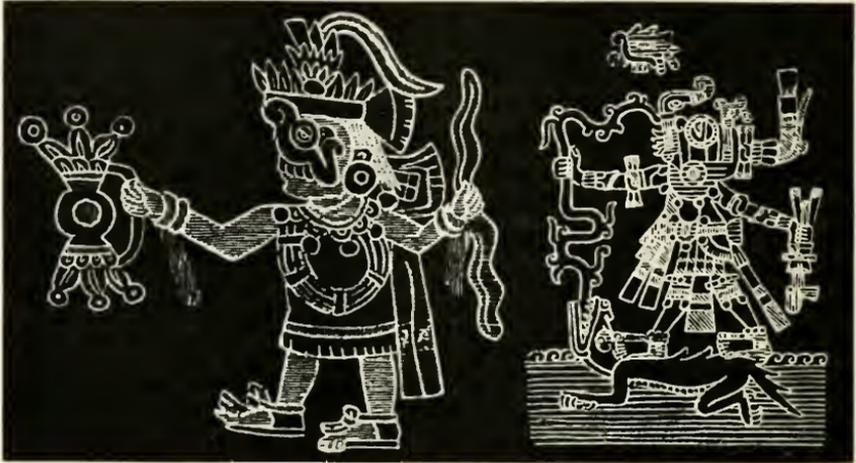
But as the lightning belongs above, only the upper tusk-like teeth

of Tlaloc are generally represented; and they are sometimes six in number, as in two stone images illustrated by Seler, with long tusks on either side, curving away from the median line of the face (*Codex Vaticanus B, Elucidation*, p. 107, figs. 299 and 302); while in the *Codex Borgia* (sheet 16), where the face is in profile, three dagger-like upper teeth are shown, and the god apparently has no lower jaw. Sometimes only two dagger-like teeth are shown with the face in profile and no lower jaw, as in the *Codex Borgia* (sheet 14), while four such teeth appear in two of the stone images illustrated by Seler (*Vaticanus B*, pp. 299, 302, figs. 300 and 301). Again, we find four such teeth with the face in profile and no lower jaw, as in the *Codex Borgia* (sheet 67), or four curved tusks with a profile face and a lower jaw, as in a pictorial manuscript (Seler, *Vaticanus B*, p. 109), or six long teeth with a profile face and lower jaw, as in the *Codex Vaticanus* (sheet 61). Still again, Tlaloc is represented in a highly conventionalized form; with head thrown back and mouth wide open as if in the act of shouting or thundering, and showing four or five long teeth projecting horizontally, while there appears to be no lower jaw—as in the *Codex Vaticanus* (sheet 23, with five blunt tusks, and in the *Codex Fejérváry-Meyer*, sheet 4, with four flame-like teeth).

A Maya war god worshipped at Merida was named Uac-Lom-Chaam ("He-whose-teeth-are-six-lances"). The Hindu Yama, god of the underworld, has two watch dogs, the Saramayas ("Sons-of-Sarama"), who appear to belong to the eastern and western horizons; and they may represent storm clouds, for the more prominent of the two is said to have teeth "bristling like lances" (*Rig-Veda*, VIII, 55, 3, Wilson's trans. De Gubernatis reads: "with reddish teeth, that shine like spears"; *Zoo. Myth.*, Vol. II, p. 23). According to Schellhas, the dog was the Maya bearer of the lightning and a symbol of the death-god ("Deities of Maya Manuscripts," p. 42).

The story-clouds from which come the lightnings is sometimes symbolized by a wild-boar with sharp tusks. In the *Rig-Veda*, Vishnu transforms himself into a wild-boar; and De Gubernatis says: "Vishnu, the penetrator, with his sharp golden tusks (thunderbolts, lunar horns, and solar rays), puts forth such great strength in the darkness and the cloud, that he bursts through. . . ." (*op. cit.*, Vol. II, p. 8, where this writer's interpretation is decidedly hazy).

The Vedic Maruts are generally wind figures, but sometimes they appear to be storm-clouds, for they are conceived as "wild-boars rushing about with iron [i.e., strong] tusks" (*Rig-Veda*, I, 88, 5, Max Muller's translation. Wilson has "iron weapons"). Conversely, the tusks of actual boars are called "lightning teeth (*dentes fulmineus*)" in one of the *Fables of Phaedrus* (I, xxi, 5); and Ovid in his *Metamorphoses* says that "the fierce boars have sharp lightning in their curved teeth" (X, 550; compare his *Ars*



TLALOC

(Pictorial Ms. Florentine Bibliotheca Nazionale. From Seler, *Codex Vaticanus* B., p. 109.)

TLALOC in Conventionalized Form.

(*Codex Fejérváry-Mayer*, Sheet 4.)

Amat., II, 374 and *Fasti*, II, 232). In Elisha Cole's *English-Latin Dictionary* of 1677 we find: "A Boar's Tush: *Dens apri exertilis, fulmen*" (i.e., "A Boar's Tush is a protruding tooth of a boar, and lightning").

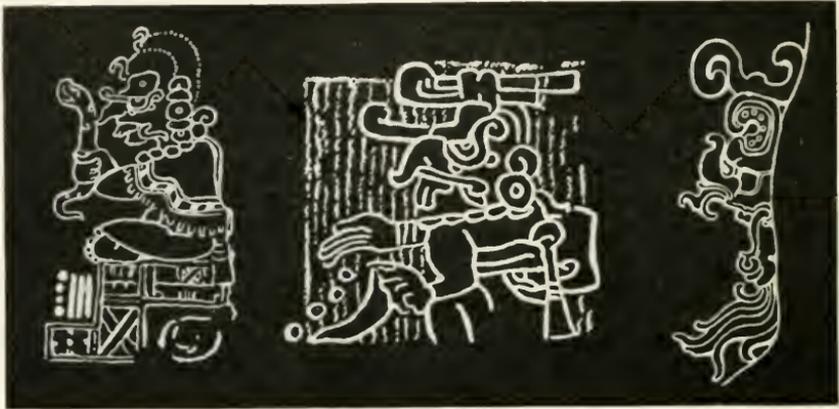
One of the storm-cloud figures of Hindu mythology is the dark and reddish monkey (De Gubernatis, *op. cit.*, II, pp. 99-101); but the comparatively inconspicuous canines of this animal do not seem to have been lightning symbols. The storm-cloud monkey Hanumant (or Hanuman) is not given lightning teeth, but his name signifies "Large-jawed," as suggested by the roaring wind and the thunder; and in the *Ramayana* he is fabled to have been struck by the red

thunderbolt of Indra, which caused him to fall upon a rock and break his jaw (IV, 66). Here we have the conquest of the storm-cloud figure by the lightning, with the breaking of his jaw to account for the cessation of his howling.

The Maya God B has a long, probosis-like nose; his symbols indicate that his abode is in the air, with the rain, the storm-clouds and the lightning, and he is often associated with the serpent, being pictured with a serpent's body in the Maya *Dresden Codex* (35 b, 36 a). Schellhas calls him "the God with the Large Nose and Lolling Tongue," and describes him with "a tongue (or teeth, fangs) hanging out in front, and at the side of the mouth" (Deities of Maya Manuscripts," p. 16). Spinden says of this god that his "mouth shows a flame-shaped tooth at the front, and frequently a somewhat similar object at the back" (*Study of Maya Art*, p. 63). In all probability his face is figured like that of the conventionalized serpent of Maya art, which has the tongue hanging from the back part of the mouth, and a curious bifurcated upper tooth protruding in front (see Spinden, *ibid.*, p. 40, fig. 30; p. 117, fig. 152, and compare God B in figs. 74 and 75, p. 63); and it is also probable that this "flame-shaped" tooth was originally the bifurcated tongue of the serpent, representing the forked lightning as the celestial counterpart of the split flame.

We saw above that one of the names of the Mexican fire-goddess is Quaxolotl ("split-at-the-top"); and in the Chaldean tablet of *Bel and the Dragon*, seven thunderbolts are employed by the solar Bel-Merodach against the storm-dragon, one "with double flames," as well as quadruple and septuple bolts (*Records of the Past*, Vol. IX, pp. 135-140). A forked lightning flash was sometimes called a *bidental* ("two-toothed") in the new Latin of the Middle Ages (Du Cagne, *Glossarium*, s. v. *Bidental*); and in classical Latin a place struck by lightning is a *bidental*, probably having been so called originally from a bifurcated thunderbolt conceived as two-toothed (See the Andrews-Freud *Latin-English Lexicon*, s. v. *Bidental*, where this probability is noted as a possibility). But the sheep sacrificed at a *bidental* was called a *bidens* (earlier *duidens*) because it was required to be of the age (about two years old) when two of its lower anterior teeth are longer than the other six (Like all other ruminants except camels, sheep have no upper anteriors);

and this led some of the Romans to suppose that the place *bidental* was so called from the sheep, but no explanation was offered as to why such a sheep was chosen for this sacrifice. (See Festus, *De Verb. Signif.*, p. 27, who in another place, p. 5, explains the *bidens* sheep as one whose two rows of teeth are complete, although it really has no upper anteriors). Aulus Gellius (XVII, 6) preserves several other unsatisfactory opinions on the subject, one of which



THE BIFURCATED TOOTH OF THE MAYA GOD B.

(a) from the *Dresden Codex*; (b) From the *Codex Tro-Cortesianus*; (c), the head of God B. in Conventionalized ornamentation. From Spinden *Maya Art*, p. 63, fig. 75.

is that of an unnamed lecturer, according to whom *bidentes* are sheep so called because they have only two teeth; and Pliny says that the she-goat has no upper teeth except the two front ones (*H. N.*, XI, 37), which erroneous statement regarding a ruminant may have been suggested by the recognition of the she-goat as a storm-cloud figure with two imaginary upper anterior teeth for the two-pronged thunderbolt—but it is possible that the animal was recognized by some as a lunar or luni-cosmic figure with two such teeth.

The mythical dragon has always been the most popular of all storm figures. It is often conceived as a lizard-like or crocodilian monster, but the Greeks generally figured it as a gigantic serpent. It is sometimes conceived as fire-breathing, as suggested by the

lightning; and sometimes has wings to indicate its celestial character.

A lost Phoenician myth of the slaying of the storm-dragon, and the knocking out of its lightning teeth by the sun-god, in all probability reappears in an altered form in connection with both Kadmos (Cadmus) and Jasōn in Greek mythology; the solar character of these heroes being generally recognized. There was probably no connection between the two Greek stories in the time of Euripides, who is our earliest authority for them (fifth century B. C.) In his *Phoenician Maidens* he makes the chorus of the tragedy refer to the story of Kadmus as well known at the time. According to this chorus, Kadmus came from Tyre in Phoenician to Boeotia in Greece to found the city of Thebes; counselled by Pallas (Minerva, goddess of wisdom), he succeeded in ploughing a field with a heifer which no one else could manage, and slew the dragon of Aries (Mars, god of war) by hurling a rock upon its head; apparently at the same time knocking out the monster's teeth, which he scattered in the ploughed furrows, whereupon "mail-clad warriors" sprang up from the teeth and proceeded to mutual slaughter, which a few survived (638-675). Further on in the tragedy, these warriors are called "the race of the seed of the teeth"; "a golden-helmed harvest of sown ones" and simply "the sown," and also "the dragon-brood that cleft the womb of earth" (820, 939, 1008). Euripides recognizes some of these warriors as the founders of Thebes and the ancestors of the Spartans; but this fanciful derivation of the Spartans (*Spartoi*) from the "sown" (*spartoi*) seems to be an element that originated with the Greeks, and the same may be said of the counsel of Pallas-Minerva as the goddess of wisdom.

In his *Medea* (478-482), Euripides alludes to the following details in the variant story of Jasōn: While on the Argonautic Expedition, and as counselled by Medea, Jasōn ploughed a field with fire-breathing bulls; slew the sleepless dragon that watched the (solar) Golden Fleece, and sowed "the fatal seed," the monster's teeth.

The two stories, as connected and developed by the later Greeks, are set forth at length by Apollodorus. He tells us that Kadmos (for the sun) was led to the site of Thebes by a cow (for the moon); that the dragon had slain most of those whom the Phoenician hero had sent to draw water from a spring, and that according to Pherecydes (fifth century B. C.), the hero threw stones among the

“sown” warriors, who supposed they were pelting one another and therefore began the mutual slaughter, with five survivors¹⁴ (*Bibliothēcē*, III, iv, 1). In connection with the Jasōn story, Apollodorus says that Aeētes had received from Athena “half of the dragon’s teeth which Kadmus sowed at Thebes” and promised the Golden Fleece to Jasōn on condition that he would plough with “the brazen-footed and fire-breathing bulls,” and would sow the teeth; and according to the same authority, after the teeth were sown and the warriors sprang up, Jasōn pelted the latter with stones; they slew another, and Medea lulled the dragon to sleep with drugs; whereupon Jasōn obtained the Fleece (*ibid.*, I, ix, 23; compare Apollonius Rhodius, *Argonaut*, III, 407-421; Hyginus, *Fab.*, 178; Ovid, *Met.*, III, 26-130). Obviously the original story of Jasōn, in which he slew a dragon, was thus altered so he could be given half the teeth of the dragon slain by Kadmus.

There was a white mark representing the full moon on each flank of Jasōn’s cow, according to Pausanias, (IX, XII, 1; cf. Hyginus, *Fab.*, 178); and we can scarcely doubt that the same lunar animal appears as the heifer with which Kadmus ploughed the furrows that in all probability originally represented the path of the moon (this heifer being replaced by bulls in the extant Jasōn myth). The plural “furrows” perhaps loosely refers to the path of the sun as well as that of the moon; for in south-western Asia the ecliptic (sun’s path) was sometimes regarded as “the furrow of heaven,” ploughed by the sun-god or by the Bull as the leading sign of the zodiac. (See R. Brown, *Prim. Constel.*, Vol. I, p. 338; R. H. Allen, *Star Names*, p. 1).

The number of the dragon’s teeth in the myths under consideration is not stated by any ancient writer; but they probably were conceived as quite numerous, like the teeth of crocodiles or serpents. Nearly all serpents have two outer rows (one above and one below) and also palatal teeth in varying numbers and arrangements; and doubtless some of the ancients supposed that these creatures had three rows of teeth. Thus according to Ovid the dragon slain by Kadmos had three rows of teeth and three tongues (*Met.*, III, 34; Nikander long before (fifth century B. C.) had described the con-

¹⁴ The survivors represent the five (hypothetical) houses of the ancient Spartan nobility of Thebes, according to F. G. Welcker (*Kret. Kol.* 78; compare T. Keightley, 1883, *Mythology of Ancient Greece*, p. 291).

stellated Dragon with teeth "in three-fold rank" (*Theriaca*, 441); Statius (first century A. D.) gives three rows of "hooked teeth" and a three-fold tongue to the earth-born dragon sacred to the Thunderer and slain by Kapaneus (*Thebaidos*, V, 510); in Homer the monster Scylla has three rows of teeth in each of her six heads (*Odyssey*, XII, 90), and very curiously, the Chians said that Hercules had three rows of teeth, according to Pollux (*Onomasticon*, II, 95).

But in the old French *Fais du Chevalier Jason* (translated and printed by Caxton as the *History of Jason*, circ. 1477), that hero



GORGONES

(From Roscher's *Ausführliches Lexicon der Griechischen und Römischen Mythologie*, Vol. I, Col. 1716.)

is said to have torn twelve teeth from the dragon's mouth some little time after he had slain it; and when the teeth were sown, twelve giants sprang up (Reprint, 1913, p. 138). It is not improbable that these teeth were identified with the twelve varieties of thunderbolts recognized by the Etruscans, who allotted three of them to their chief god, Tinia (Seneca, *Quaest. Nat.*, II, 41). The Etruscans, followed by some of the Romans, also held that the lightning and thunder of the night were sent by Summanus, while Jupiter was the Thunderer of the day only (Pliny, *H. N.*, II, 53). The Hindus recognized two kinds of lightning, the moist and the dry (*Ramayana*, I, 39); and the ancient Japanese had eight gods of thunder who probably

belonged to the eight points of the compass (W. E. Griffis, 1895, *Religions of Japan*, p. 64).

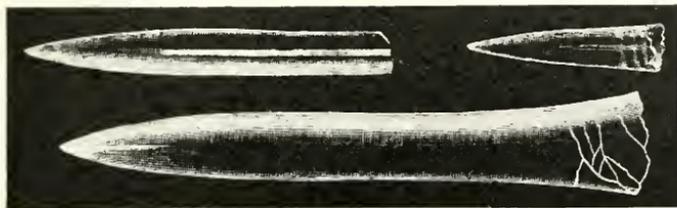
The interpretations thus far suggested indicate that the celestial ploughing by the solar and lunar figures was not originally connected with the slaying of the storm-dragon whose lightning-teeth are knocked out at about the time of his death—properly before his death, which represents the termination of the storm. But in all probability the ploughing had been transferred to the earth in the original (Phoenician) myth of the dragon slain by Kadmos and by Jasōn (in connection with whom the Greeks finally gave the whole story a terrestrial setting), for the production of human beings from the dragon's teeth sown in the ploughed field evidently belongs on earth. Therefore, it is equally probable that the originals of the sown teeth should be sought among the terrestrial objects mistaken by the ancients for fallen thunderbolts, and there is a further probability that the first earth-born individuals of some race of human beings (perhaps the Phoenicians) were originally fabled to have been produced from these material tooth-thunderbolts, as plants are produced from seeds.

The ancients sometimes supposed that a fertilizing power subsisted in the lightning, as in the rain; and the earth-mother is inseminated by the lightning or a lightning symbol in some myths. (See the present writers "Cosmic Porthenogenesis," in the *Open Court*, Vol. XXXIV, p. 604). In the original myth of Cadmus (and that of Jason) the storm-dragon probably had the character of a heaven-father in association with the earth-mother, while the lightning-teeth as material thunderbolts represented the inseminating intermedia.¹⁵

Various stones resembling arrow-heads or spear-heads, and sometimes the actual heads of spears and arrows were anciently recognized as thunderbolts and called thunder-stones, thunder-darts, etc. And some such supposed thunderbolts probably were the

¹⁵ Spencer and Gillen, in their *Native Tribes of Central Australia*, tell us that the knocking out of human teeth was practiced by the Arunta tribe immediately after a ceremony for "the making of rain"; while in the War-ramunza tribe, teeth were knocked out at the close of the wet season to prevent the fall of more rain, and always on the bank of a water hole, into which the teeth were thrown (pp. 451, 592-594). Frazer cannot imagine why such tooth extraction was associated with stopping rain (*Magic Art*, pp. 97-99).

original stones from which the first man and woman were produced in the myth of Deukaliōn and Pyrrha, although these stones are identified as the bones of mother-earth (Apollodorus, I, vii, 2; Ovid, *Met.*, I, 260). But in the myth of Kadmos (and that of Jasōn) the sown teeth of the dragon doubtless resembled the numerous teeth of a serpent, and it is not improbable that they were actually some of the cigar-shaped fossils now technically termed belemnites ("dart-ites"), but sometimes popularly known as thunderbolts and thunder-stones. These fossils are the internal shells or solid skeletons of extinct molluscs, three hundred and fifty species of which are found in world-wide distribution. They were first termed belemnites by Agricola in 1546, and first considered at length by Ducrotay de Blainville in 1827 (*Mémoire sur les Belemnites*). Some of them are quite large, as long as eight inches, and



BELEMNITES IN THE FORM OF SERPENT'S TEETH.

(From K. A. Von Zittel, *Text-Book of Palaeontology*, Vol. I, p. 597, Fig. 1241.)

some are comparatively slender, slightly curved and pointed, much like the teeth of serpents (See especially K. A. von Zittel, 1900, *Text-book of Palaeontology*, Vol. I, pp. 594-598, with numerous illustrations.¹⁶

Jane E. Harrison (1912, *Themis*, p. 435) supposes that a snake was the blazon on the Spartans; and that the teeth of the snake or dragon in the Kadmos myth were symbols of reincarnation, because they are "practically indestructible," and perhaps also because they look like "gleaming white seed-corn" (but Indian corn or maize was unknown to the Phoenicians and Greeks, and there is little resemblance between wheat seeds and teeth of any kind).

Leo Kanner has an article on "The Tooth as a Folkloristic Symbol" in the *Psychoanalytic Review* (Jan. 1928, Vol. XV, pp. 37-52).

¹⁶ Among the various unsatisfactory interpretations of the sown teeth of the dragon heretofore suggested, we have space to notice only two of the most recent.

in which he accepts Sigmund Freud's interpretation of teeth as phallic symbols, especially in dreams; and Kanner goes to the surprising extreme of recognizing the same symbolism wherever teeth are found in folklore and in the customs of savages, as well as in the Kadmos myth (the only dental myth he considers). But it does not appear that Freud or any Freudian has recorded any dream in support of this symbolism theory (see the tooth dreams in Freud's *Introduction to Psychoanalysis*, edition 1920, pp. 74 and 157, comp. pp. 129, 136); and Kanner fails to give any convincing evidence in its favor, in connection with dreams or otherwise. On the contrary, the dragon's teeth in the Kadmos myth are also accepted by Kanner as symbols of the inseminating intermedia associated with a heaven-father and an earth-mother; two quite different and mutually-contradictory interpretations of the teeth thus being presented.