THE SO-CALLED "BABYLONIAN EPIC OF CREATION."

By G. B. Michell, Esq., O.B.E.

SCHOLARS have assumed too hastily and on insufficient evidence that the Babylonian Epic beginning with the words Enuma elish was meant to be an account of the first creation of the world and of man. My object in the present essay is to show that it is nothing of the sort, but that, on the contrary, it is a mythological description of the devastation of the Babylonian system of land-irrigation by the Flood, and of its reconstruction after that disaster.

I attach less importance to the fact that the words "create" and "creation" do not occur throughout the Epic than I do to the facts that (a) the Babylonians had other accounts of a long previous creation which are incompatible with the Epic; (b) the "building" of a man to restore the worship of the gods is a minor incident, quite subordinate to the main purpose of the Epic; and (c) this main purpose has nothing to do with the primeval Creation.

1. To begin with, the Babylonian word banah, translated "to create" in the versions of the Epic, has not that significance either in the Babylonian or in any of the Semitic languages.
It signifies merely the mechanical operation of building, with no reference to the intellectual conception of the pattern or plan which must precede the mechanical operation, and which is of the essence of creation. The creation of a work of art is not the mere modelling of the clay, or the laying of pigments on canvas, or the making of black marks on paper, but the genius of the artist manifesting itself in visible or audible form. It is this that is expressed in the Hebrew word bar'a in Gen. i, 1, et al.

2. I have said that the assumption of scholars is based on insufficient evidence. I ought rather to have said on no evidence at all. For Berosus is not evidence. His opinions are but hearsay, at best, and even these are only to be had at third, fourth, or fifth hand, in translations of translations of translations. And "traduttore traditore"! Even if we could be sure that we had the doctrine of Berosus correctly handed down through Polyhistor, Eusebius, Damascius, George the Syncellus, etc., the opinions of a Babylonian priest of the Persian period with regard to matters some two thousand years before his time are no more infallible than those of religious sectarians of the present day. Yet there is no other reason whatever than the citations of Eusebius for supposing that the Enuma elish is an account of the primæval Creation.

3. There is abundant evidence that the Epic, in its present form, is not the original Babylonian theory on the subject.

When I asked Professor Pinches, with regard to his paper on "The Completed Legend of Bel-Merodach and the Dragon," (V.I. Transactions, vol. lix, p. 163), whether the copies made in the time of Assur-banipal (cir. 669—625 B.C.), had been subjected to Higher Criticism I had in mind the notes of Professor Langdon to his edition of The Epic of Creation. So far as I know these notes are the only attempt at such criticism. But they are sufficient to show how necessary it is. For they demonstrate clearly (a) that the Epic is a composite and garbled work, and (b) the dissension between the Sumerian priesthood and the Semitic authorities, civil and religious, with regard to certain points in it. For it contains elements which must be very much older, and of contrasting origin than its final redaction in its present form under a Semitic dynasty. And what evidence we have points to these disparate elements rather than to the complete Epic. Further, it is precisely these elements which relate to the creation of man.
4. That the Epic describes a secondary fabrication of a man after the Flood I do not dispute. But the phraseology of the Epic is ambiguous. It says, Book VI, line 23, "The great gods replied, 'It was Kingu that made war; that caused Tiāmat to revolt and joined battle.' They bound him and brought him before Ea, punishment they imposed upon him, they severed (the arteries of) his blood. With his blood he (Ea) made mankind in the cult services of the gods, and he set the gods free. After Ea had built mankind and (? had imposed) the cult services of the gods upon him." Dr. Langdon's note to this is, "In the Nippur version the mother-goddess Aruru (Mami, Nintud) created man from clay only or gave birth to him directly, but a Semitic legend states that Mami made man from clay and blood at the order of Ea (Enki), who commanded that a god be slain and that Ninharsag 'ina shiri-shu u dami-shu liballil tittum,'" (i.e., "into his flesh and blood should mix clay"). "On the other hand, Marduk in this same Epic, VII, 29, is said to have created man, ibnu ameletu, whereas in reality he only instructed Ea to do it, and a late bilingual incantation also attributes the creation of mankind to Marduk (ameletu ibtani) assisted by Aruru. There were, in fact, two Sumerian traditions, one from Nippur in which the earth-goddess created man from clay, and one from Eridu in which Ea created man in the same manner. The legend of the slaying of a god and mixing his blood with clay is probably later and worked into both versions. Marduk had originally no connexion with the tale. This Assur copy of Tablet VI does not substitute Assur for Marduk, but is a copy from Babylonia. The version of the creation of man in Assyria has no connexion with the Epic of Creation. Here all the great gods assist in making man from the blood of two 'artisan gods' (sons of Ea!). In any case the legend of a god who was sacrificed to create man is extremely old." No doubt it is, but it was Semitic, and new in comparison with the original Sumerian version.

5. It is all very well to charge the mystagogues of Babylon with a ruthless confusion of the ancient myths. It is much more satisfactory to try to put ourselves in their position, to seek to divide out the primitive elements, and to ascertain if there is no way of reconciling them on reasonable grounds. It seems to me that my theory does this. That is to say that the myths regarding Ea refer to the original creation of man before the Flood, while that regarding Marduk's making of man from
the blood of Kingu is an exaggerated term for the restoration of civilization in Babylonia after the Flood. It may be that they were content with the story of Gilgamesh (*Utu-napishtim*), as recounting the escape of man in a "ship" from the Deluge, being probably unaware that that legend related to a very much more ancient episode, viz., to the last of those post-glacial floods which Professor Myres describes in the *Cambridge Ancient History*, vol. i, p. 42.

6. It seems to me clear that the two ancient Sumerian traditions refer to the original creation of man from clay, whether by the Earth-goddess or by the Water-god, whereas the Semitic versions refer to a second "making" of man after the Flood. For that is the theme of this Epic. The latter was probably in order to induce the all-powerful Sumerian priesthood to admit the claims of Marduk, and so ascribe the initiative in the matter to the Sumerian deity, Ea. But it was the Semites who introduced the sacrifice of a god and the mixing of his blood with clay. To them also was due the idea that it was to "purchase their ransom."

7. Yet the mystic meaning attached to the episode by the Sumerian hierarchy, in order to admit it, would doubtless be in harmony with the rest of the myth. Thus, the "blood" of Kingu would signify the mud, or perhaps bitumen, ejected and stirred up by the earth movements, but disseminated over the land and stilled by Marduk, so that man might carry on the work of irrigation. For I have no doubt that this is the significance of the phrases "that he might purchase their ransom," and Ea "made mankind, in the cult services of the gods, and he set the gods free." Marduk, or whatever god it was, having overcome the rebellious powers of nature, "the gods" might now rest, and it devolved upon mankind to develop the system in peace, and to worship the gods in the proper manner. Note that it was Ea, the Water-god, who was really the agent at work in this, though the Semitic versions intrude the names of Marduk and Ashur into it. I think, then, that we can take Ea as the link between the ancient Sumerian philosophy and the upstart Semitic system which the political supremacy of the "First (or Canaanite) Dynasty" of Babylon imposed upon the old conservative hierarchy. The join was somewhat clumsily made, but, under the circumstances, it was difficult to satisfy all parties more skilfully than was done.
8. The Babylonians were perfectly familiar with a story of a great flood in which all the living people were drowned, with the exception of certain persons in a ship. They had accounts of this in documents which have survived, and the story was well known down to the latest times. Yet the *Enuma elish* does not allude to this story in the most distant way. But if it recounts the first creation of man where does the flood of Gilgamesh (or Utu-napishtim) come in? After the building of Babylon and its great temple E-sagila, which is described in the same book, the VIth, as the making of man? No hint of it is given. Yet Babylon and its temple existed continuously. They are never mentioned as having been subjected to a deluge, unless this Epic be the account of it. On the theory of the original creation of man the Epic has no meaning, it is contrary to the history as we know it, and to the records of the Babylonians themselves.

9. Then there is a second disparate element, which is much more ancient, of different origin, and in reality quite irreconcilable with the theory of an "Epic of Creation." I refer to the ancient myth of the contest between Ninurta and the dragons, especially the Storm-bird Zu. Here again the object is manifest, viz., to identify Marduk with the ancient theology, and so to remove an objection to his inclusion in the pantheon.

10. But this identification throws a light upon the meaning of the Epic which is not apparent on the surface of it.

The myth of Ninurta, of Nippur, the god of the spring sun (the old Sumerian war-god, and identical with Lugal banda of Erech and Ningirsu of Lagash), and Zu, is based upon the conflict between the spring sun and the demons of the winter period of storms and darkness. This myth could not, therefore, have originated in Babylonia, where there is no winter period of storms and darkness. It must have arisen in the mountainous districts from which the Sumerians originally came.

There is, however, other and better evidence that this element in the Epic is far more ancient than the redaction of the Epic itself. In a footnote to page 19 of his edition, Professor Langdon says: "The place of the mysterious bird-god Zu, the lion-headed emblem of Susa and Sumer, in Sumerian mythology is obscure. From the evidence adduced in the text above this mythological monster figured in the Sumerian and Semitic Epic of Creation as a monster in the host of Tiâmat, and as a constellation he was identified with Pegasus. . . . Scholars agree
in explaining the location of this star to the identification of the 'Storm-bird' Zû with the winter sun, for this constellation rises heliacally in the stormy season. . . . It is, therefore, certain the mythical storm-bird was associated, in astronomy at least, with the winged horse Pegasus.” In fact, the evidence is complete that this episode, at least, in the Enuma elish is nothing but an attribution to the Semitic god Marduk of the ancient Sumerian myth of the victory of the young god of the spring sun, Ninurta, son of the earth-god Enlil, over the stormy and dark period of winter, typified by the "storm-bird" Zû, the constellation of Pegasus, which rises heliacally in the stormy season of the northern and eastern mountains. This episode, in any case, in no way refers to the original creation of the universe, but is a mere solar myth, which recurs every spring season.

There is also astronomical evidence of a much earlier date for this element in the Enuma elish. This is given in p. 19 of Dr. Langdon's work—supported by a note to p. 26, regarding the heliacal rising of the constellation of Taurus at the spring equinox, that is, before 1900 B.C. “Naturally the star Aldebaran was associated with the beginning of spring before 1900 B.C.,” when he is of opinion that the epic was written. “Later the mean solar year was fixed by the rising of Alpha in Aries. But the date for the festival remained unchanged.”

No doubt the Semitic legends which were afterwards worked up into this Epic existed as early as the First Babylonian Dynasty. But I can find no evidence that the Epic was written so early as 1900 B.C. I think Dr. Langdon founds his opinion of this date on evidence that applies rather to the Sumerian element. He states (p. 11), “The reaction of the Epic upon art in all periods after its composition, about the twenty-second century, is undeniable. The problem here is chronological, and from this point of view the reliefs of Agum-kakrime are important. They constitute at present the only direct evidence of the existence of this great poem before the actual texts which contain the legend. There is in the literature of the First Dynasty no reference to the Epic at all. But an earlier Sumerian poem of a similar kind existed, which inspired the Semitic poem, a problem which remains to be examined.”

I bow with great deference to the authority of Dr. Langdon. But here I venture to point out that the reliefs of Agum-kakrime are far from conclusive proof. This king, who reigned from
about 1648 B.C. for an unknown period, was a Kassite, not a Semite. The priesthood was Sumerian, and the reliefs relate to the ancient, Sumerian, parts of the legend. They afford no evidence of the Semitic parts of it. Indeed, we have nothing to show that the Epic existed in a form from which the Creation story in Genesis could have been borrowed already in the middle of the fifteenth century B.C., the time when Moses wrote the Pentateuch.

13. The conclusion is then, I think, imperative, namely, that the theory that the Enuma elish is an "Epic of Creation" is founded on a confusion between the conflict of the "upper" and "lower" gods, as related in it, and the much earlier, and totally irrelevant, conflict between the spring sun and the stormy and dark period of winter, which occurs annually, and which could not have arisen in Babylonia, where there is no stormy and dark winter.

14. I come, then, to the alternative suggestion that the Epic relates, in fact, to the destruction of the system of land-irrigation in Babylonia by the Flood, and its subsequent restoration by "Marduk."

15. To my mind this word "restoration" is the key-note of the whole Epic. It occurs in Tablet IV, lines 11 and 12, where it is stated of Marduk, "restoration is the need of the chambers of the gods. (And so) thy place has been fixed wherever there are shrines. Thou Marduk art our avenger." But, before restoration there must be some account of the events which have made restoration necessary. So we have the preliminary narrative of the great attack of the "lower" gods on the "upper" gods and the dismay produced in the latter by the havoc wrought.

16. Positive and material evidence of an immense and long-lasting inundation of the lands lying about the Lower Euphrates has at last been discovered, which completely and finally sets at rest all doubt of the historicity of the Babylonian records of a great flood. Whether the Flood, the vestiges of which were found in 1928 and 1929 by Messrs. Woolley and the Oxford Field Museum Expedition at Ur and Kish respectively, be that of Gilgamesh, as appears to be likely,* or that of Noah, which I

* See R. P. Dhorme’s article on "Le Déâuge Babylonien" in the Revue Biblique for October, 1930, pp. 481 ff.
doubt,* the fact remains the same that an inundation occurred in Chaldea which utterly destroyed the whole of the civilization then existing there, and that it was followed long afterwards by a reconstruction on new lines. *All this was within historical times,* and, therefore, certainly ages after the first “creation” of man, whether according to the Babylonians themselves, or according to the Hebrew Scriptures.

Since the entire habitability, and consequently in a still greater degree the civilization, of Mesopotamia depends as much on *irrigation,* and the curbing and canalization of the Euphrates and the Tigris as Egypt depends on the Nile, it would be strange if the local populations, while they conserved records that show how deeply they were impressed by the disaster, preserved no account whatever of the enormous operations involved in its repair. I maintain that we have this in the *Enuma elish,* which was an important factor in the long New Year’s festival of Nisan at Babylon.

17. The fact that some fifteen feet of mud was piled up by the deluge to which I refer in the last paragraph is sufficient proof that *the Rivers Euphrates and Tigris had even at that time no outlet to the sea.* This latter fact had already been established by Sir William Willcocks.† The huge bank built up by the Rivers

* While the story of the escape of Gilgamesh in a “ship” is obviously derived from that of Noah and the Ark, the *Flood* in question was, I think, an earlier one, of far longer duration. I found this opinion on the Biblical chronology. This places the Deluge of Noah at 2522-1 B.C. and it lasted only 358 days, from the beginning of the rain to the drying of the ground. Mr. Woolley places the inundation of Ur before the thirty-eighth century B.C. Père Dhorme agrees with M. Weidner that the data on which Woolley bases this estimate should not be dated earlier than the twenty-eighth century. Dr. Langdon is more moderate in placing the inundation of Kish at about 3300 B.C., and Père Dhorme agrees with him. I am absolutely certain of the accuracy, to a year, of the Biblical chronology set forth in my *Historical Truth of the Bible.* It has never yet been seriously examined, much less refuted, and it harmonizes exactly every item both of the Biblical and the secular history, and fails in none. It is surprising to me that lovers of the Bible should neglect so sure a test of the truth.

† See his *From the Garden of Eden to the Crossing of the Jordan* (E. & F. Spon, London, 1920). The argument from the present rate of deposit of alluvium, calculating from the foundation of Mohammerah in the time of Alexander the Great, is perfectly worthless. For that city was built on *Karun* mud, and is situated on the Karun itself, and the alluvium deposited in the delta at the head of the Persian Gulf was brought down by the Kerkha and Karun from the opposite direction from the Euphrates. The mud of the latter river, and of the Tigris, was left behind in Babylonia, and nothing was left to build either a bar or a delta.
Karun and Kerkha from the mountains on the east and north-east effectively prevented the outflow of water from the low-lying marshes of the district about Ur and Eridu into which both the Euphrates and the Tigris then emptied themselves. The Tigris then flowed down what is now the Shatt el-Hai, or Gharraf, and fell into the Lower Euphrates at Ur. It was comparatively lately that it broke through the bank at Kut el-Amara and took its way into the great Susiana marsh, or shallow lake, through which it now flows. Consequently, neither “Tiâmat” nor “Apsû” can possibly stand for the salt sea. Tiâmat stood for the subterranean depths from which the springs were supposed to be derived, and Apsû for the surface floods.

18. The following is a plain, common-sense interpretation of the whole myth.

The poem opens with a description of the early conditions, under the figure of “gods,” derived from the union of the work of the subterranean waters, “Tiâmat,” and that of the surface floods, “Apsû.” At first, the waters were free and unrestrained and there were no products of civilization. They produced the lazy, indifferent, god, Lakhmu (Arabic لحم), and his female counterpart. But these, in turn, produced Anshar and Kishar, “the host of heaven” and “the host of the earth.” These, again, produced Anu, the heaven-god, Ea (or Nudimmud) the water-god, “equal to Anu,” and Enlil, the earth-god (though this latter is not mentioned in this part of the poem). In time these gods began to organize things in Mesopotamia, commencing by restraining the annual inundations (Apsû), to their own great satisfaction (line 24), but to the great indignation of the waters thus held in check. The floods had been in undisputed possession. The inundation and the noisy elements (“Mummu”) are represented as going to the underground sources, “Tiâmat,” from which they derived so much of their force, to complain of the disturbance of their universal sway (lines 29-40). “Apsû the flowing and ebbing but limitable fresh-water lake, appeals to Tiâmat the illimitable and ever moving flood, to help him to overthrow the beneficent work of the gods, who were so ordering the world that such rest as he took was banished from him!” (Willcocks.)

But Ea, the wise and skilful god of irrigation, perceived the plan of Apsû and Mummu (line 60), overcame and slew them both,
and fixed upon Apsû his dwelling (line 71). This is, no doubt, primarily a reference to the temple at Eridu.

Tiâmat, finding that her sway was disputed and her consort Apsû was subdued, rebels against the restraint and organizes the constellations that were supposed to rule the atmosphere, and to produce rain, hail and thunderstorms (lines 128 to 145). She then exalts "Kingu" and takes him as her second husband. "Kingu" I take to be earth-movement, such as the geology shows to have occurred at Hit, spreading mud and bitumen over the land. "All the fountains of the great deep were broken up." Anshar, "the host of heaven," is depicted as unable to cope with this emergency, so he sends his son Anu (II, 71-80) to remonstrate with Tiâmat. The heaven-god, however, flees in terror. Ea too, the water-god (in the character of Nudimmud) (II, 58), cannot face her. Eventually Marduk, the young god of the spring sun, typifying, of course, evaporation, gains the victory, but not until the floods have been stopped by embankments. Book IV describes his weapons and then the great combat.

In line 35 there is, perhaps, a reminiscence of the rainbow. Lines 95 to 122 describe the combat and the victory of Marduk. "The lord spread out his net and enmeshed her." That is to say, he made a network of canals and dykes which broke up the floods, so that they could be dealt with piece-meal. Taking advantage of the winds (lines 42-49, and 98-100), when they blew against the current, he made dams to hold up the water and turn it into other channels. Thus, by splitting it up into various streams (lines 101, 102), he overcame the force of the rushing rivers. "They were encircled by restraint, so that it was not possible to flee. He bound them and broke their weapons. Into a net were they thrown and in the snare they sat down." Line 119, "And Kingu who had become chief among them he bound and he counted him with the god Diggu" i.e. Nergal, the god of the underworld. Then "unto Tiâmat whom he had bound he returned again. The lord trod upon her hinder part, with his toothed sickle he split her scalp. He severed the arteries of her blood. The north wind carried it away into hidden places." That is to say, he constructed the great dam across the Tigris so that the upper waters were held up and turned over the conglomerate and down the Shatt el-Gharraf, while the lower waters, cut off and driven by the north wind, were lost in the marshes to the south-east.
Line 137. "He split her into two parts like a mussel. Half
of her he set up and made the heavens as a covering. He slid
the bolt and caused watchmen to be stationed. He directed
them not to let her waters come forth.” In these poetic terms
we have the dividing of the waters of the Euphrates from those of
the Tigris by the great dam across the Sakhlawia branch—a dam
which, of course, it was of the utmost importance to keep in
repair.

After crossing the skies and pacing out the spaces, apparently
as an abode for the heaven-god, Anu, he set out the foundation
of a temple on the water-level, or “face of Apsû,” at Eridu, as
the abode of Ea-Nudimmud (line 142). As a counterpart of
the same, of identical dimensions, he fixed a temple, “E-sharra,”
at Erech, as an abode for Enlil.

Eridu and its temple were built in the midst of the wide
overflow of fresh water when the Euphrates was flowing wide
like a sea, as it traversed the great overflow. The beginning of
habitable earth in it was ushered in by the growth of reeds in
the open water and the appearance of marsh-land. Then the
work of land reclamation was begun in the overflow by the
placing of bundles of reeds on the face of the water, and the
piling up of earthen banks behind them, in order to form
enclosures within which the water dried up. The land was
then cultivated, and irrigated by free flow. This, of course, is
that which is typified by that part of the ritual of the fifth day
of the New Year celebrations which consisted of laying a bundle
of reeds in a trench in the temple court. See Langdon’s Epic of
Creation, pp. 26, 30, and probably also the “muddy waters”
of pp. 45 and 55 (23). Langdon notes that the “E-sharra,”
i.e., “House of the Universe,” at Erech is a name for the Earth,
and a synonym of E-kur, and later a part of it, the temple at
Nippur. Thus Marduk caused the Great Three, Anu, Enlil and
Ea, to occupy each his own abode.

Thus, it seems to me, Dr. Langdon’s commentary on the
Epic is the satisfactory explanation of its purpose and sources,
while my own theory, based on that of Sir William Willcocks,
is the common-sense view of its meaning and doctrine, and offers
the solution of its discrepancies.

Discussion.

The Chairman (Mr. W. Hoste), in proposing a vote of thanks
to the author of the paper, regretted his absence in Canada. He
thought he seemed to have made out a good case for his view on some points. He wished, however, that that distinguished Assyriologist, our vice-president, Dr. Theophilus Pinches, had been present, to check some of the statements. Dr. Pinches had read papers before the Society on the Babylonian Epic, and clearly held to its reference to Creation. After all, perhaps it did not much matter to the ordinary layman, but the paper contained some important deductions, as, for example, that with reference to the burning question whether Genesis is of Babylonian origin. “Indeed, we have nothing to show that the epic existed in a form, from which the Creation story in Genesis could have been borrowed already in the middle of the fifteenth century B.C., the time when Moses wrote the Pentateuch.” That this was so, however, is axiomatic with the Higher Critics, or at any rate, that Genesis i is based on the Babylonian story. Genesis i is, accordingly, relegated to the Priestly Code, supposed to have been written by “P.” during or after the Babylonian captivity; for how else explain the presence of the alleged Chaldaicisms in the chapter?

The ambiguity of the Babylonian Epic seems against the theory. If even experts cannot agree whether the epic describes Creation or the Flood, it is difficult to see how the clear, succinct account of Genesis i could have been derived from it. No one, at any rate, could affirm that Genesis i describes the Flood. The total lack of moral power in the epic points to the same conclusion. No one could find comfort or spiritual edification from it. Then the incongruity of the two documents hardly argues for the Higher Critical thesis. How could the majestic, monotheistic account of Genesis i be derived from the polytheistic conglomeration of gods and goddesses, mostly wicked, engaged in bloodshed, murder, and internecine warfare, of the epic? If so, then Job was wrong, and a clean thing has been brought out of an unclean. Polytheism might evolve into Pantheism, but Monotheism never. The Chaldaicisms, if such there be, in Genesis i, could be otherwise explained, as the late Professor Naville, of Geneva, points out. Abraham came from Ur of the Chaldees, and it is highly probable that he brought with him historical records from the earliest times, and that on cuneiform tablets. If such were used in whole or in part by Moses—and there is nothing in the fullest belief in divine inspiration
to negative this, the Chaldaicisms might well be found in Genesis i. Professor Albert T. Clay, of U.S.A., a noted scholar and critic, goes further than this. In a paper on the early civilization of the Amuru, read before the Institute in 1925, he made the following statement with reference to Genesis i. "In spite of all the claims of Pan-Babylonists, this story as preserved in the Biblical version, and in the Greek, contains absolutely nothing that is Babylonian. There is not a semblance of an idea that can be proved as such. This refers to the colouring of the narrative, the names, foreign words—in fact, everything." May we not then possess our souls in patience, and know that "great truth will prevail"?

Mrs. Maunder said: There are doubtless many variants, some very ancient in date, of the struggle between the hero and the dragon, but she would like to point out that the 5th and 7th tablets of the Enuma elish show that they at least are of a date no earlier than the 7th century B.C. In the 5th tablet, ll. 3-7, it states of Marduk: "(3) He fixed the year, he appointed the limits thereof. (4) He set up for the twelvemonths three stars apiece. (5) According to the day of the year he . . . figures. (6) He founded the Station of Nibir, to settle their boundaries. (7) That none might exceed or fall short." Now the Babylonian year was a luni-solar one; that is to say, the months were actual lunations and the year consisted of 354 or 384 days, according as this included 12 or 13 of these. The statement in the text of the 5th tablet implies that the limits of the year were fixed by observations of the equinoxes or of the solstices.

Of the equinoxes we find observations which were made in Mesopotamia in the 6th and 7th centuries B.C.; so far, the speaker knew of none earlier. But of the solstices observations have been made by the Indo-European nations, which in one case at least was as early as 3000 B.C. The year as determined by observations of the equinoxes or solstices is a solar year, and is incommensurable with "lunations." The "twelve months" of which the 5th tablet speaks are therefore twelve arbitrary months, divorced from connection with the moon (just as our months are), and they correspond in the tablet to twelve equal divisions of the zodiac, that is to say, to the "signs" and not to the actual "constellations" (irregular in shape.
and size). We know when this change from "constellation" to "sign" took place, for a star which was near the intersection of the equator and ecliptic, at the time of the change, was still accounted in men's estimation as marking the place of the equinox among the constellations right down to the time of Hipparchus. This star is Hamel, the Chief Star in Aries, and it is just about 8° from the boundary of the constellation Aries. That is to say, the boundary of the "constellation" Aries continued to coincide with the boundary of the "sign" Aries, until astronomers came to realize with Hipparchus that the signs move through the constellations because of the precession of the equinoxes.

Now the equinox was close to Hamel, 8° from the border of Aries at about 700 B.C. There is a tablet (No. 77,821 [85-4-30, 15]) in the British Museum, giving a list of the names of the signs of the zodiac with a list showing the month that was associated with each star. This is, however, of the Persian period in the time of Darius I, and is a proof of the late date earlier indicated. In this tablet, be it noted, Ninurta (or Pa·Bil·Sag) is allocated to the 8th month, kislimu, which is not a spring month.

WRITTEN COMMUNICATIONS.

Col. A. G. Shortt wrote: The paper covers a very wide field, and it will be necessary to deal with one or two points only.

Para. 15.—The word translated "Restoration" is apparently a little uncertain. Budge renders it "Worship," which, I think, would equally fit the context.

The excavations mentioned in this paragraph require straightening out. The clay deposit at Ur is claimed to be much older than that at Kish, and the pottery recovered is said to bear this out. On the other hand, it is hardly possible that a flood leaving a ten-inch deposit of clay at Kish could avoid leaving an even thicker layer down the river at Ur. It is difficult also to think that the Flood of Noah, lasting only a year, would leave any permanent layer.

Para 10.—I think Professor Langdon has been a little hasty in speaking of the heliacal rising of Pegasus (and also of Taurus and Alpha Arietis in para. 11). Babylonian astronomy was essentially meridional, and heliacal risings were an Egyptian addition, which did not appear, so far as I can ascertain, in Babylon until
the sixth century B.C. It has led him to connect Zu with winter storms, and the lecturer, in consequence, to give the bird a source dating back to before the Sumerians left their original habitat. This is not necessary. Pegasus, if we are to connect him with Zu, was on the meridian at midnight in June-July during the period 4000-2000 B.C., and this is the season of the South-West Monsoon which reached as far as Babylonia. It caused heavy rains and floods from June to August, as stated in an early tablet on astronomy, and it would naturally be represented by Zu the Storm-bird, which spread clouds and obscured the Sun. Budge says that Kingu was Tammuz, but I have not his grounds for so saying. I would suggest rather that it would be to the Monsoon (Zu) to which Tiâmât would look to break up the irrigation system, and that Kingu may possibly therefore be Zu.

Mr. G. Wilson Heath wrote: Believing absolutely in the Bible "Epic" of the earth's first orderly creation (Isa. xlv, 18) and also in the chaotic and water-flooded condition it had been resolved into, as the result of some gigantic catastrophe, as presented to us in Gen. i, 3, and from thenceforward as recorded in that chapter made suitable for man and "the beasts of the earth," and this by the word of Elohim; and further also as a believer in the Noachic flood mentioned in Gen. vii and viii; and that this flood was the last one (Gen. ix, 11)—I can but look askance at mythical stories, such as we have listened to this afternoon, with their gods many and goddesses many, and all their blood-curdling ways. It is to me amazing that strangely conflicting myths, be they Babylonian or Chaldean or "what not," should be ranged side by side with those most clear, straightforward and defined statements found in, say, the first ten chapters of the book called Genesis.

The suggestion which has been made, that the Genesis story was compiled by some very clear-headed writer from, or out of, the confused and muddled stories current among the early Babylonians is, I submit, unthinkable. The imprimatur of the author of the whole Bible is evident in the clear Genesis story, and I submit that the great author of confusion, and of man generally—and we are not ignorant of his devices—is evident in that of every other story. The one is the truth, the others are bad counterfeits. The Genesis
story, or even the Bible generally as we well know, does not pretend to relate the history of the whole human race or to teach physics. But it does give us, from the Divine standpoint, the history of "the seed," from Adam right down the four thousand years to "the Seed" Himself, the Messiah, the Christ. All after this is merely unfolding to us the results following.

The Genesis story, for possibly 2,500 years, was conveyed orally, as we know, from father to son, Patriarch to Patriarch, from Seth and through his line to Moses, and then Moses was instructed to write the records in the parchments which we read as translations in our Bibles to-day. Those old-world Bible stories, and this I suggest is important, whilst they were unwritten, Satan sought to confound and confuse by these Babylonian and other "Epics." I thank God for the Pentateuch and its clear story of the creation by Elohim and Jehovah Elohim (whose name, by the way, finds no place in this "essay" from the first line to the last).

Kingdoms and thrones may have been reared and overturned worldwide during these many ages, and doubtless were. But such histories the Bible does not record except as they converge on "the seed" line history of Israel, and profane history is about one of the most untrustworthy props any one may seek to rely upon.

LECTURER'S REPLY.

The restrictions of space made it impossible for me to go into the subject of the Flood in greater detail. And my ignorance of astronomy prevented me from criticizing Professor Langdon's views on that subject. I am all the more grateful, therefore, to Mrs. Maunder and Col. Shortt for their valuable contributions on the astronomical evidence for the date of one element at least in the Enuma elish.

I am glad, too, that Mr. Hoste seized on my point that no part of the Pentateuch could have been borrowed from the Babylonian myths. I took the date of the middle of the fifteenth century B.C., though I believe it to be impossibly early for the Enuma elish, so as to be well on the safe side. Some of the elements of the Epic may be as old as that, but, for other reasons besides those supplied
by Mrs. Maunder and Col. Shortt, I do not think its final redaction can be placed much earlier than the seventh century B.C.

The Modernistic Higher Criticism of the Bible is out of date; its "Historical Criticism" is hopelessly behind the times. The principal object of my paper, though not expressed, was to show this in connection with the history of Creation in Genesis i, and further "to hoist the Higher Criticism with its own petard." I agree heartily with Mr. Hoste in his remarks, and with Professor A. T. Clay in the citation given by Mr. Hoste. I do not believe, however, that the few Chaldaicisms in the Pentateuch were brought from Babylonia, but from Harran in Amurru. Near this place was an outlying colony of Chaldeans, at a local Ur, now 'Urfa, hence called Ur "of the Chaldees," to distinguish it from the great Ur on the lower Euphrates. Take the word "gopher" for cypress wood. Père Dhorme traces this word to the Sumerian Gi-par, the Akkadian giparu (tree) of the field, the country, a standing tree, as against beams already cut. This outlying settlement of Chaldeans would well be described as in the Gi-par, the country, and products imported from there, especially heavy timber, which was not to be found in lower Chaldea, would be known as "Gipari," or "gopher," the name having become by Moses' time a technical term for cypress wood.

The statement of the tablet to which Mrs. Maunder alludes, that Ninurta, the Spring-god, was allocated to the 8th month, Kisileu, i.e., November–December, puzzles me. Had this god lost his character by the Persian period, the sixth century B.C.? Or was he never a Spring-god? Or did the Persians, in their new system, disregard the old Sumerian myth?

Col. Shortt's identification of the Storm-bird Zû, with the heavy rains and floods of June–July, caused by the south-west monsoon, during the period 4000–2000 B.C., is interesting. The present total annual rainfall in Babylonia is exceedingly small, an average of about 2.78 inches. Of this, 0.25 in. falls in November, in 4 rains, and 0.77 in. in December, also in 4 rains, mere light showers, but far the heaviest of the year. But according to Professor Huntington, in his World Power and Evolution, and the charts he gives of Pulsations of Climate in California and the Eastern Mediterranean (based on the growth-rings of giant trees, and the
levels of the Caspian Sea), the rainfall was far heavier, and with far greater variations of rain and drought, during the period 1200–200 B.C., than it has been since then. It has been steadily falling. According to him the sixth century B.C. was a time of exceptional drought. Thus Professor Huntington seems to bear out Col. Shortt’s contention. Is it possible that the allocation of the ancient Spring-god to November–December marked the exceptional drought?

With regard to the Flood in question, the Flood of Noah was unquestionably the last great deluge in Babylonia. But it was not the first. I think, therefore, that the Enuma elish describes this flood.

Whether this was the local flood, or floods, the traces of which have been found at Kish and Ur, is a different question, which, as Col. Shortt points out, requires straightening out. I have stated in my paper (para. 16 and footnote), that I think it was not.

The suggestion that the Genesis story was compiled from Babylonian stories was not made by me. My suggestion was the direct contrary. My subject was “The So-called ‘Babylonian Epic of Creation.’” As Elohim (and Jehovah Elohim) finds no place in the Epic, naturally He finds no place in my paper on the Epic. If the Institute desires it, I will gladly write a paper on Biblical History of Creation, in which Elohim fills the whole place.