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MAP TO ACCOMPANY M. RASSAM'S PAPER READ BEFORE THE VICTORIA INSTITUTE.
ORDINARY MEETING.

THE PRESIDENT, SIR G. GABRIEL STOKES, BART., M.P., P.R.S.,
IN THE CHAIR.

The Minutes of the last Meeting* were read and confirmed, and the following Elections were announced:—

LIFE ASSOCIATE:—Rev. J. Boyle, Brazil.


HON. COR. MEMBER:—J. Armstrong Smith, Esq., Government Educational Department, Honolulu.

The following paper was then read by the Author:†—

THE GARDEN OF EDEN AND BIBLICAL SAGES.
(WITH MAP). By HORMUZD RASSAM, Esq.

In coming to address you this evening upon most difficult and intricate subjects in connexion with Biblical Sages and, their races, together with some disputed ancient sites, I do not wish to enter into any religious or scientific discussions, but merely to explain certain facts founded on my geographical knowledge and historical research. In doing so I must say a few words by way of preface as to the motive which actuated me in taking upon myself the formidable task of contesting certain theories which have been started with reference to the Sacred rivers of Eden and Abraham's and Job's countries and nationalities.

In quoting some passages from Scripture I do not wish to appeal to Holy inspiration in connexion therewith, but I want merely to make use of it in a historical point of view, inasmuch as the points I am going to argue are recorded wholly and solely in the Bible and nowhere else.

Doubtless every person has a right to have his own peculiar theories in spiritual as well as temporal matters, but when important publications, such as Encyclopedias, Dictionaries

* Last Meeting, 25th Session.
† The Author has not desired to fix the site of the Garden of Eden of Genesis, but to contest the truth of a theory that it was in Southern Babylonia, some writers having argued from this theory that the Babylonian Garden of Eden was the one described in Genesis. The accompanying map is corrected to May, 1892.
of the Bible, and school books, follow certain mistaken and
doubtful conjectures just because certain literary men and
scholars of note have entertained new notions in their
minds, it becomes rather serious and misleading to those who
have not studied the subject well, especially in regard to
known geographical positions.

From time immemorial the site of Eden, or Paradise, has
been disputed, argued, and speculated upon without a
tangible result; but of late years it has been almost unhesi-
tatingly believed that not only the Garden of Eden but the
supposed lost two sacred rivers, the Pison and the Gilmon,
have been identified in a certain locality in Southern Meso-
potamia!

There have been so many errors committed by eminent
scholars in their theories about ancient histories, that I now
feel quite reluctant to believe mere conjectures and pro-
blematic geographical positions in connexion with Biblical
lands.

Whether in the Encyclopedia Britannica, Smith's Dictionary
of the Bible, or the commentaries, the site of Sepharvaim or
Sippara is put down at Mosayib, a town on the right bank of
the Euphrates, on the way from Baghdad to Karbela, and
about 30 miles above Babylon, whereas I discovered it, in
1881, 30 miles further north, about five hours' journey to
the south-west of Baghdad.

The mound, now called by the Arabs Babel, on the
northern limit of Babylon, was also fixed upon as the site of
the temple of Belus, but I have found it to be that of the
hanging gardens.

No one who knows anything about the structures of
Assyrian and Babylonian palaces and temples would think
for one moment of fixing on Mosayib as the site of Sippara,
because in both of those ancient kingdoms no palace or
temple was ever erected excepting on artificial mounds, of
which Mosayib is destitute for miles around.

The land and nationality of Abraham have also been un-
compromisingly disputed from time immemorial, but now we
are assured, on mere conjecture, of the very spot in Southern
Babylonia—that is to say, in the supposed Babylonian site
of the Garden of Eden, where he was born and brought up,
because, forsooth, an inscription was found in a mound in
the outskirts of the Arabian desert, called Mackayir, or
Magayir, in which then ame of a city of Uri, or Uru, exists.
This has been construed by some Assyrian scholars to mean
the exact Ur of the Chaldees out of which Abraham was
ON THE GARDEN OF EDEN.

called forth by Divine Will. As I have, however, to enter more fully hereafter into the history of Terah's migration, I will begin with the disputed site of the Garden of Eden and explain the geographical position of the four rivers mentioned in Genesis.

It is not easy to determine which of the three ideas is most fantastic: the stretch of pious imagination of the Fathers who gave a mystical interpretation to the existence of Eden, the notion of Josephus and others that it denoted the whole sphere of the earth, or the modern thought that Paradise was situated in the hottest part of Southern Mesopotamia, and the rivers Pison and Gihon were merely canals or artificial cuttings from the Euphrates in ancient Babylonia.

I have, in the first place, to describe the different ideas that have been mooted with reference to the lost site of Paradise; secondly, to contest certain theories which have been adduced in support of the Mesopotamian theory, and lastly, to try and prove from my geographical knowledge that the only part of the world that could be assigned for the ancient site of the Garden of Eden would be the country that surrounds Lake Wan, in Armenia.

The site of the Garden of Eden has been located by different writers in several parts of the eastern hemisphere, from Scandinavia to the South Sea Islands, from China to the Canary Isles, and from the Mountains of the Moon to the coasts of the Baltic. The great rivers of Europe, Asia, and Africa have in turn been brought forward as the identical two of the four sacred rivers, the Pison and the Gihon, and it may be that we have yet to learn that the Garden of Eden was situated either in America or in the Antipodes!

Before enumerating the different ancient and modern opinions as to the locality of Paradise, it is necessary that I should quote what the most primitive record discloses to us regarding the Garden of Eden, in order that we might judge how far the different opinions agree therewith.

The allusion to the four sacred rivers in the first book of the Pentateuch (Genesis ii, 10 to 14) reads thus:—"And a river went out of Eden to water the Garden, and from thence it was parted and became into four heads. The name of the first is Pison; that is it which compasseth the whole land of Havilah, where there is gold; and the gold of that land is good: there is bdellium and the onyx stone. And the name of the second river is Gihon; the same is it that compasseth the whole land of Cush. And the name of the third river is
Hiddekel; that is it which goeth toward the east [or in front] of Assyria. And the fourth river is Euphrates.”

No one can dispute that these words are quite plain, and do not require much learning to understand, whether they are read in Hebrew, Aramaic, or any European language. The theories I am going to refer to must strike even an unpretending scholar to be inapplicable to the simple meaning of the text.

The first idea that was started contrary to the plain words of the tenth and following four verses of the second chapter of Genesis was by Josephus, who said that “the garden was watered by one river which ran round about the whole earth, and was parted into four parts. And Phison, which denotes a multitude, running into India, makes its exit into the sea, and is by the Greeks called Ganges. Euphrates also, as well as Tigris, goes down into the Red Sea.” Now the name Euphrates, or Phrath, means either a dispersion or a flower; by Tigris, or Diglah, is signified what is swift, with narrowness; and Geon runs through Egypt, and denotes what arises from the east, which the Greeks call Nile.”

Philo, contemporary to Josephus, gave an allegorical meaning to the existence of Eden, which he interpreted as pleasure, a symbol of the soul that sees what is right, exults in virtue, and prefers our enjoyment, the worship of the only wise, to myriads of men’s chief delights. The four rivers he explains to be prudence, temperance, courage, and justice, while the main stream of which they are branches is the virtue and goodness which go forth from Eden, the wisdom of God.

Origen considered Paradise to be heaven, the trees angels, and the rivers wisdom.

Ambrosius placed the terrestrial Paradise in the third heaven, in consequence of the expressions used by St. Paul in his second epistle to the Corinthians xii, 2 and 4.

Amongst the Hebrew traditions, mentioned by Jerome, is one that Paradise was created before the world was formed, and is therefore beyond its limits.

Moses Bar Cepha assigns it a middle place between the earth and the firmament.

Others affirm that Paradise was on a mountain which reached nearly to the moon, while other writers held that it

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* Josephus does not mean by the Red Sea as it is understood now, but all the South Sea, which included the Red Sea, the Gulf of Aden, and the Persian Gulf, as far as India.
was situated in the third region of the air, and was higher than all the mountains of the earth by twenty cubits, so that the waters of the flood could not reach it.

Bar Habraeus regarded it as a description of the human body.

Of recent writers upon the same topic Major William Sterling believed in the idea, which he published in 1855, that Malwa in India was the site of Paradise and that the lost rivers, the Pison and the Gihon, were the Nerbudda and the Taptee. That the land between these two rivers, resembling Mesopotamia, was Abraham’s country!*

The latest and most quaint theory regarding the site of the Garden of Eden was promulgated by no less a distinguished personage than the lamented General Charles George Gordon, of China and Khartoom renown. He harboured the idea that the Seychelles was the place where Adam ate of the forbidden fruit, which he considered to be the "Caco-de-Mer," or the double cocoa-nut, that abounds on those islands. This strange discovery has been noticed in the Universal Review, and it may not be uninteresting if I quote a few passages of the article bearing on the point. The writer says:—

"The discovery was that of the identity of the Seychelles Islands with the Garden of Eden, and the evidence of which he (Gordon) sought to prove it was the chart of the Islands, the correspondence of the four rivers mentioned in the Bible with those of the Seychelles, and the identification of the 'Caco-de Mer,' or double cocoa-nut, with the forbidden fruit by which our first parents fell.

"It is easy to laugh or sneer at such a theory; it comes, it may be, a hundred, or so, years too late; but there is little that is really laughable therein when we consider that the man (Gordon) would fight and prevail, secure in his religious belief, against the most overwhelming odds; that he inspired such confidence and trust in his men that those he led were almost invincible; that he did justice and hated iniquity throughout his life; that he left his name as one of the proudest; that he died in a last supreme unselfish effort.

"That he should have dreamt, in one of the brief resting-spaces of his life, this dream of having found man's first habitation and the cause and manner of man's first sin, in these strange far-away Islands of the Seychelles, is but one

more proof of his single-heartedness, of the literal acceptation of Scripture by which his bravest deeds have been rendered possible."*

I must confess that this is one of the most astounding ideas that have been mooted regarding the lost site of Paradise; and, coming from a firm believer in the Bible, it makes it the more surprising that General Gordon should have conceived such a thing. Had the theorist been an unbeliever, or a doubter, or even one of those who try to explain away difficult passages in the Old Testament to suit their learning and scientific knowledge, I could have easily understood their hypothesis; but such a notion coming from a man like the late guileless Christian, Gordon, who was, as I know, a thorough believer in the literal wording of the Pentateuch, has certainly bewildered me. He seems to have overlooked the fact of the mention of the two well-known historical rivers, the Euphrates and the Tigris, together with Assyria and Mesopotamia which they skirt.

I could quote many others who have, from time to time, tried to interpret in their own peculiar fashion the meaning of certain parts of the Biblical narrative, or strain their geographical knowledge to suit their ideas; but I think I have adduced sufficient authorities for our purpose to show you what conflicting and startling sentiments have been brought forward, from time to time, by theologians, eminent scholars, and deep thinkers, about the lost site of our first parents' habitation.

I have now to take up the prominent, and what seems to me, at present, the most accepted problem, of fixing the position of the Garden of Eden in Babylonia.

Among other writers, Calvin, Huet, and Bochart place Eden in Southern Mesopotamia, on the supposition that the Pison and the Gihon are the two channels by which the united rivers Euphrates and Tigris, now called Shatt-al-Arab, enter the Persian Gulf.

Hopkinson considers the Pison to be Nahr-Malka, the largest artificial canal which joined, in the days of yore, the Euphrates with the Tigris near the ancient Seleucia and Ctesiphon; but Grætius made it to be the Gihon. Even those commentators who agree in placing the Garden of Eden on Shatt-al-Arab, the river formed by the junction of the Euphrates and the Tigris, do not agree as to which of the branches the two lost rivers represent.

* The Universal Review, No. 8, Dec. 15th, 1888.
There are at present a number of eminent scholars who support the Babylonian theory, the latest of whom is my friend Dr. Friedrich Delitzsch, Professor of Assyriology at Leipzig, whose arguments, set forth in a work he published in Germany,* I shall try to prove quite untenable when compared with the plain words of Holy Writ which I have already quoted.

Although I do not presume to stand on a level with their learning, I will nevertheless dare to contest, on geographical, historical, and trigonometrical grounds, every point that they have adduced in support of their hypothesis.

I cannot boast of being an Assyrian or Akkadian scholar, but I know enough of Semitic languages to convince me that certain mysterious words that have been found amongst the inscriptions discovered in Babylonia have no more connection with Hebrew or Aramaic than with Persian or Turkish. If, as we are made to understand, the "Gan-Dunias" of the Akkadian inscription can be harmonized with the Hebrew words יֵדְוַע (Garden of Eden), then we could easily render from the Hebrew the English word "garden," because it begins and ends with the same letters י yamal, and י noon, or g and n. The word Dunias might also be construed to mean in Arabic the "world," because in that language it is written دنيا, and جنّة Jenna, which means "garden" in the same language, could easily be turned into ganna, by pronouncing the g as in gum, as they do in Egypt; and so both words could then be interpreted into the "Garden of the world," as some men have supposed the Garden of Eden to mean.

If we trust to conjectures and coincidences, nothing can be more tangible than to suppose that Tally-ho, the cry of the fox-hunters in this country, is derived from Chaldean or Aramaic, because פָּלַל talla, means fox, and לָה ha, behold in that language, that is to say behold the fox.

Also, that the word Europe is derived from the same language, because פְּאָר Hor, means white, and פָּרappa, face, in Chaldean, so both would sound like Europa from horappa.

Moreover, no Assyrian scholar can say that the Gan-Dunias, in the cuneiform characters, represent the Hebrew text, either in idiom or construction, and the fact that an allusion is made to such words by a Gentile scribe, without believing or

* Wo lag das Paradies?
knowing the sacred narrative, does not prove to me that they have any connexion with it.

In communicating with my friend Mr. Theophilus G. Pinches of the Department of Egyptian and Assyrian antiquities at the British Museum about the Babylonian theory concerning the site of the Garden of Eden, he replied as follows:—

"With regard to the site of Paradise, as explained in Genesis, I am in favour of Armenia. I made a few remarks upon the subject as early as December, 1881 (see the "Proceedings of the Society of Biblical Archæology" for that date*) in consequence of my discovery that the district now known as Cappadocia corresponded, either wholly or in part, with the Kusua of a Cappadocian tablet and the Kûsu of the Assyrian horse-tablets, &c. This, of course, would correspond with the land of Cush of the Bible. I do not now recollect, however, why I added the footnote (note § below) on page 30. I suppose that I either wished not to commit myself to any definite expression of opinion, or that I meant to say: 'The most likely position of the Babylonian Paradise is the region

* The remarks which Mr. Pinches alluded to above are the following:

"The question of the situation of the land of the Kusâa, as well as that of the form of the name when used to denote the country itself, seems to be set at rest by one of the tablets from which the above list of names of towns is taken. This tablet, which is the first published on Plate 53 of the work above referred to (the 2nd vol. of The Cuneiform Inscriptions of Western Asia), contains, in the second column of the obverse, the names of the cities and countries in the neighbourhood of the Taurus range of mountains, and includes (1.13) the land of the Kûsu† (𒂗𒇷𒇷𒈠 KU-SUŠ), mdt Ku-u-su). It is evident, therefore, from the connection in which it occurs, that we are to understand by this Cappadocia, and not Ethiopia. This identification sheds at once a new light on two important passages in the Book of Genesis the first of which is in chap. ii, v. 13, where the River Gihon, which "encompasseth the whole land of Cush," is mentioned; and the other in chap. x, v., 8, where is recorded the fact that Cush begat Nimrod. Now, in both these passages it has been supposed by some scholars that the land of Cush here mentioned is the same as Ethiopia; but it seems to me much better to identify it in both cases with Cappadocia. The question of the position of Paradise is also connected with these identifications,§ on account of the removal of the river Gihon up thither.

† The word "the" seems to be due to a misprint—read "the land of Kûsu."

‡ The word is given here in its simple geographic form, but on the "horse-tablets" (Assyrian tablets referring to the transport of horses) it always occurs in the "gentilic" form Kusâa, "Cushite."

§ The most likely position of Paradise is the region of the Persian Gulf ("the remote place at the mouths of the rivers").
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of the Persian Gulf’—the place to which Ûm-napistîm, the Chaldean Noah, was translated, as to a paradise (see the Chaldean account of the Deluge). It is not improbable that the Babylonian idea of the position of Paradise should have been, that it lay somewhere in their own native land. This question, however, is quite distinct from that of the position of the Biblical Paradise, as described in Genesis.

“You will see on p. 30 of the ‘Proceedings of the Society of Biblical Archaeology,’ December, 1881, that I have pointed out the duality of names which formerly existed in the ancient East, places at a distance from each other being designated in the same way. Thus we have the Musri, to the north of Assyria, and the name Musur (Misir) applied to Egypt; the Cush, Cappadocia and the Cush, Ethiopia; the Makan and Melûha in Babylonia and the districts of the same name to the south-west of Babylonia, formerly regarded as names of districts of Egypt, but now supposed to designate the peninsula of Sinai; and, finally, the use of the ideogram for Akkad (‘िय) to designate both Armenia and the northern part of Babylonia—all these peculiarities have a meaning, and seem to me to bear upon the question of the position of Paradise, which, as I have said, the Babylonians seem to have wished to locate in their own country.* There is another duality of names, however, which seems to me to be of very great importance—Delitzsch has pointed out in his Parálies, that the cuneiform inscriptions inform us that the non-Semitic name of the Araxes was Guhândê, a name which he identifies with Gihon. He does not, however, draw the obvious conclusion that this may be merely copied from the Armenian Gâiûn-er-Râs—‘the Gihon-Araxes,’ with a folk-etymology thrown in.† The Babylonian Guhândê=Araûtû is therefore a reflection only of the Armenian Gâiûn (Gihôn) er-Râs (Araxes).”

It is necessary that the number, direction, and names of the four rivers which rose from one source, i.e., the river of Eden, must first be proved to exist in Babylonia before we can be made to believe that the Garden of Eden was situated in Southern Babylonia. All I can say is, if the Babylonians fancied that a Gan-dûnas was localized in their marshy country, it had no connexion whatever with the Hebrew Eden, out of which issued a river which was divided on entering

* It is the Babylonian Paradise which Delitzsch has found.
† Guhândê is an Akkadian word, meaning “let him speak.”
the Garden, (rendered in the Septuagint, Paradise) into four heads or Rasheem. As a matter of fact the Rasheem or heads in this instance mean neither more nor less than chief or principal rivers, and not artificial canals or offshoots caused by the overflow of a river. These latter in this instance cannot be called Rasheem or heads, as understood in the Hebrew, רַשֵּׁע, Rasheen in Aramaic, and رُوُس Roos in Arabic, though in other applications Rash may mean differently.*

With reference to the contention of Dr. Delitzsch that Babylonia represented the Garden of Eden on account of its fertility, the abundance of the water supply, and the richness of its productions of cereals and the palm, I wish he had visited the sources of the Euphrates and the Tigris before he came to that conclusion. I feel confident that on examining the country which I have traversed, where the sources of those two rivers rise, in the highlands of Armenia, and comparing it with Babylonia, he would without the least hesitation pronounce in favour of the former for beauty, grandeur, and productions, as the most likely spot where our fallen parents first dwelt.

Had Babylon been such a magnificent country, and redundant with beautiful landscape, one of its famous kings would not have troubled himself to erect an artificial mound and plant it with all kinds of trees to resemble a mountain scene to please his Median consort, who had sighed for her beloved highlands.

According to Berosus, the Chaldean historian, as quoted by Josephus,t the then monarch of Babylon "erected very high walks supported by some pillars, and by planting what was called pensile Paradise, and replenishing it with all sorts of trees, he rendered the prospect of an exact resemblance to a mountainous district. This he did to please his queen, because she had been brought up in Media, and was fond of a mountainous situation."

As regards the canals of which Professor Delitzsch tries to create an existence to the Pison and Gihon, all I can say is that the conjecture is futile both in fact and theory; because, we are told plainly in the Sacred Record, that a river went

* In pronouncing Semitic words like the Hebrew, Aramaic, and Arabic, I follow those who read them as their living tongues, and not as those who only study them as dead languages. Nor do I read them according to the points invented in late years, but simply pronounce them in the same way as those whose language it is, without the vowel points.

† Josephus against Apion 1, 19.
out of Eden to water the Garden which was **portioned**, or divided, and **became into four heads**, one of which was called **Euphrates**, and not that the Euphrates was divided and became into three rivers. The canals which the learned Professor mentions are merely artificial branches dug out from the Euphrates about 900 miles below its source, and it is quite a mystery to me how any one can make them correspond with the two rivers Pison and Gihon, which sprang from the same source as the other well-known Biblical rivers, the Hiddekel and Euphrates. The four rivers must have branched off simultaneously from the same quarter and run down their respective courses.

Professor Delitzsch also brings forward another argument in support of his Babylonian theory regarding the site of the Garden of Eden, that the word נָהַר Nahr in the Semitic languages means both a natural river and artificial canal. He is right in one sense if we take the Nahr to mean a **stream**, whether it is the Mississippi or any of the English artificial canals, but he seems not to know that in all Biblical lands there are local names to distinguish the difference between a great river and a canal. For instance, rivers like the Euphrates, Tigris, and Nile, are either called the river or they are mentioned by name. Supposing we take the Thames and the London canals as an example, the former would be designated either as the river or the Thames, and the latter as the Paddington, the Regent, or the Surrey, with or without the addition of river to them. Thus the Euphrates would be called in Babylonia either the Shatt, the Nahr, or the Firath (the Arabic word for Euphrates), while the artificial canals would be styled by their proper names, or with the word Nahr attached, like the Mahhaweeel, or Nahr-al-Mahhaweeel, the Hindia, or Nahr-al-Hindia, the Tahrizzia, or Nahr-al-Tahrizzia, and so forth. Besides the Euphrates, the Neel canal and the river Hai are called Shatt, because the former was named after the great Egyptian river, and the latter a natural outlet from the Tigris, opposite Coot-al-Omara, which runs into the Euphrates a few miles above Souk-ash-Shiokh.

Moreover, if we refer to the Hebrew Scripture, we shall find the word **Nahr** was very seldom used for any other stream but a natural river. For instance, in Ezra, which is written in Chaldee, the Euphrates is always called there by the word נָהַר, Nahr, but when Daniel wrote about his vision at Elam, he called rivers of Ulai **עֲבָלָה, Abbal**, or **עֲבָלָא, Obbal**.
It will also be seen from what is recorded in the 25th verse of the 37th chapter of Isaiah, when Sennacherib’s boasting was referred to, the mention of the “rivers” there evidently meant canals, and written in Hebrew יְרוֹמָה, Yaoree, and not יְרוֹם, Nahrouth.*

The Neel canal, which Professor Delitzsch identifies with the River Gihon, is of a recent construction. I mean it was dug since the Arabian conquest by one of the Arab caliphs who came from Egypt, and gave it the name of An-Neel, in remembrance of the African Nile, and this is the reason why it is called Shatt. It is the same as the Hindia canal, the source of the Pallacopas, which was repaired by an Indian prince, who gave it the name of India. On examining the Neel it would be found that it had been dug through and over other ancient canals, and in comparison to other cuttings, it looks quite a third-rate channel. All the great canals are blocked up, and their grandeur can only be known now from the huge embankments thrown up from the old diggings.

The Pallacopas, which the same author identifies with the Pison, is partly artificial and partly natural. It is dug out of the right bank of the Euphrates, halfway between the Mahhaweeel Canal and Mosayib. After it passes in a regular course for about fifteen miles, it pours into the lake which skirts Birs Nimroud, and reaches as far as Kufa, a distance of about 35 miles, and from what Arrian, the historian of Alexander the Great, says, even at his time it was not mistaken for a regular river. His account of it is as follows:

“But, in the meantime, while vessels are being constructed, and a harbour dug at Babylon, Alexander was conveyed by the Euphrates from Babylon to the river Pallacopas. This is distant from Babylon about 800 stadia. Moreover, this Pallacopas is a channel cut from the Euphrates, not a river rising from springs, for the Euphrates, flowing from the mountains of Armenia, flows during the winter between banks, inasmuch as it has not much water, but when spring sets in, and much more under the heat of summer, it increases greatly, and, overflowing its banks, inundates the plains of Assyria. For then the snows, melting in the mountains of Armenia, increase its waters in a wonderful manner, and thus

* “I have digged, and drunk water; and with the sole of my feet have I dried up all the rivers of the besieged places,”—or according to the revised version, “with the sole of my feet will I dry up all the rivers of Egypt.”
raised to a great height, it overwhelms the whole region adjoining, unless any person turning it aside should discharge it through the Pallacopas into the lakes and marshes, which, indeed, by the entrance of this channel, even to the region neighbouring on Arabia, and from thence into stagnant places, and at length, by many and unknown windings, is carried to the sea. But when the snows are dissolved, especially about the setting of \textit{vergiliae}, the Euphrates grows small, but nevertheless, a great part of it is drained by the Pallacopas into the marshes. Unless, therefore, some one should again block up the channel of the Pallacopas, so that the water, repulsed near the banks (dams), remains in the channel, it may so greatly drain the Euphrates into it, that thus the fields of Assyria cannot be irrigated by it. Wherefore, a governor of Babylonia, with much labour, blocked up the exits of the Euphrates into the Pallacopas (although they are not opened with much difficulty), because in those parts the soil is marshy and for the most part muddy, seeing that it is well washed by the water of the river; it may allow of the less easy shutting out of the water, so that they may have occupied more than 10,000 Assyrians three whole months at this work. When these things were told to Alexander, they incited him to meditate something to the advantage of Assyria. Therefore, at the point where the flow of the Euphrates is drained into the Pallacopas, he resolved to dam its mouth firmly up. When he had proceeded thirty stadia, the ground was observed to be rocky, of such kind that if a cutting were carried to the ancient channel of the Pallacopas, the water might be prevented from overflowing by means of the firmness of the soil, and that its escape might be able to be effected without difficulty at a stated period of the year. Therefore Alexander both sailed to the Pallacopas, and descended by it to the marshes, into the region of Arabia. There, having fixed on a certain convenient locality, he built a city, and surrounded it with walls, and conveyed to it a colony of Greek mercenaries, volunteers, and others, who, by reason of their age or any debility, had become useless in war.\footnote{Arrian, \textit{De. Exp. Alex.}, lib. vii., c. 21.}

Arrian, however, was in error when he said that the mouth of the Pallacopas was 800 stadia or 90 miles above Babylon, as the Hindia is not more than fifteen miles distant from the ruins, unless he mistook another canal for it higher up, which started about twenty miles below Heet, the ancient Is, and
irrigated the alluvial soil to the west of the Euphrates as far as Nijif.

Herodotus gives another version of the origin of the Pallacopas, and as his account is also interesting I will quote what he says on the subject. His words are these:

"The city (Babylon), as I said, was divided by the river into two distinct portions. Under the former kings, if a man wanted to pass from one of these divisions to the other, he had to cross in a boat; which must, it seems to me, have been very troublesome. Accordingly, while she was digging the lake, Nitocris bethought herself of turning it to a use which should at once remove this inconvenience, and enable her to leave another monument of her reign over Babylon. She gave orders for the hewing of immense blocks of stone, and when they were ready and the basin was excavated, she turned the entire stream of the Euphrates into the cutting, and thus for a time, while the basin was filling, the natural channel of the river was left dry. Forthwith she set to work, and in the first place lined the banks of the stream within the city with quays of burnt brick, and also bricked the landing-places opposite the river gates, adopting throughout the same fashion of brickwork which had been used in the town wall; after which, with the materials which had been prepared, she built, as near the middle of the town as possible, a stone bridge, the blocks whereof were bound together with iron and lead. In the daytime square wooden platforms were laid along from pier to pier, on which the inhabitants crossed the stream; but at night they were withdrawn, to prevent people passing from side to side in the dark to commit robberies. When the river had filled the cutting, and the bridge was finished, the Euphrates was turned back again into its ancient bed; and thus the basin, transformed suddenly into a lake, was seen to answer the purpose for which it was made, and the inhabitants, by help of the basin, obtained the advantage of a bridge." *

It also appears from the account given by Herodotus about the capture of Babylon by Cyrus that he had used the Pallacopas for his stratagem by turning the bulk of the Euphrates into it, which enabled his army to enter the city by the bed of the river. The narrative of Herodotus is so interesting that I am tempted to quote it:

He says that "Cyrus had placed a portion of his army at the point where the river enters the city, and another body

* Rawlinson's *Herodotus*, Book I., chap. 186.
at the back of the place where it issues forth, with orders to 
march into the town by the bed of the stream as soon as the 
water became shallow enough; he then himself drew off 
with the unwarlike portion of his host, and made for the 
place where Nitocris dug the basin for the river, where he 
did exactly what she had done formerly: he turned the 
Euphrates by a canal into the basin, which was then a 
marsh, on which the river sank to such an extent that the 
natural bed of the stream became fordable. Hereupon, the 
Persians, who had been left for the purpose at Babylon by 
the river-side, entered the stream, which had now sunk so as 
to reach about midway up a man’s thigh, and thus got into 
the town.”*

When Babylonia was at the zenith of its prosperity no 
country could have surpassed it in the system of its irriga-
tion, as the whole alluvial soil between the Euphrates and 
the Tigris, a distance of about 300 miles in length, and 
varying between 20 and 80 miles in width, was intersected 
with huge canals supplying hundreds of other watercourses, 
which ran in all directions to complete the water communi-
cation between all parts of the province. Four of the largest 
canals, whose mountainlike embankments, produced by the 
deep cuttings, appear to have joined the two rivers, so as to 
be utilized from either when the Euphrates and the Tigris 
overflowed their banks. The gradient between them is so 
slight that any extraordinary rise from the Euphrates or the 
Tigris would answer the purpose for which the canals were 
intended.

The great rise which takes place periodically does not 
occur, generally speaking, in both rivers at the same time, 
consequently I have often seen the Euphrates overflowing 
its left bank and inundating the plain eastward, and at other 
times the Tigris rose to such a height near Baghdad that it 
spread over its right bank and took a westerly and south-
westerly direction.

So little rain falls in Southern Mesopotamia that if it were 
not for the rivers of Armenia that tract of land would be a 
mere waste and a howling wilderness. There is no natural 
river to the south of the Khaboor, which is about 300 miles 
above Babylon; nor are there any tributaries to the Euphrates 
after the said Khaboor joins it, but there are no less than five 
large rivers that pour into the Tigris after it passes Nineveh. 
The great Zab, or Zabatus, of Xenophon, which I consider

* Rawlinson’s *Herodotus*, Book I., chap. 191.
to be the Pison of the Bible, as I shall try to prove presently, joins the Tigris a few miles below Nimroud, the supposed Calah mentioned in the tenth chapter of Genesis as having been founded by Nimroud, "the mighty hunter before the Lord."

The greatest objection, I think, to the theory that the situation of the Garden of Eden was at the junction of the Euphrates with the Tigris, is the difficulty of harmonizing the description of the countries encompassed by the rivers of Pison and Gihon with the land of Shinar.* We are told that the River Pison encompasseth the land of Havilah, when we know that the kingdom of Nimroud contained these provinces, namely, Babylou, or Babel, Erech, and Accad; and if Havilah existed there also, the same sacred writer would have included it in it. Then the Gihon is said to have compassed the whole land of Cush, and not of Nimroud, when Shinar was well known in those days, and which was really encompassed by the Euphrates and the Tigris, and not by the Pison and Gihon.†

Having disposed of the Babylonian theory regarding the Garden of Eden, I must now submit to my learned fellow-members my own opinion of what I consider to be, according to Biblical account, the legitimate site of the long-lost earthly Paradise. In doing so, I crave your indulgence in what might seem tedious quotations from different authorities for the purpose of substantiating certain problems which I have to lay before you with regard to the sources of the four rivers of Eden, and I trust that I may be pardoned if I should commit any error in my geological calculations, as my scientific knowledge on that head is somewhat meagre. I merely refer to what other more competent authorities have said about the effects of earthquakes upon terrestrial waters in different parts of the world, even to this century,

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* Genesis x., 10.
† It is mentioned in Faussett's Englishman's Bible Cyclopædia that "the Primitive Eden was somewhere in the locality containing the conjoined Euphrates and the Tigris (= "Hiddekel"), which branch off northward into those two rivers, and southward branch into two channels again below Bossara before falling into the sea, Gihon the east channel and Pison the west. Havilah, near the west channel, would thus be northeast Arabia; and Cush (= "Ethiopia") near the east channel would be Kissia, Chuzestan, or Susiana. The united rivers are called the Shat-al-Arab." Knowing the country as I do, I must confess the foregoing is quite unintelligible to me, and it is doubtful if any one else can quite comprehend this imaginative description of the site of the Garden of Eden.
when subterranean convulsions have changed mountains into valleys and valleys into mountains, deserts into lakes and lakes into deserts.*

It has been the fond desire of commentators, whose object it was to put a literal construction on the passage that "a river went out of Eden to water the garden," to find two streams to correspond with the Pison and Gihon, which, together with the Tigris and Euphrates, formed a common origin; and thus the difficulty experienced in determining upon the exact spot has led many theologians and linguists to wander from the plain meaning of the narrative.

Reland, Brugsch, and other writers have identified the Gihon with the Armenian Araxes, called by the Turks and Persians Aras, which rises at Erzeroom, and, after uniting with the Kyros, flows into the Caspian Sea. They make the Pison either the Phasis, which issues in the Caucasus and flows westward into the Black Sea, or the old Armenian Kyros, the present Kur, which rises westward of Kars. This last opinion, which was shared by Kurtz and Bunsen, was regarded by the late Dr. Franz Delitzsch, the father of the present Professor of Assyriology at Leipzig, as the most acceptable.

The Araxes may or may not be a portion of one of the four rivers of Paradise, because in olden times the changes that took place in the courses of rivers through the effect of volcanic eruption and violent earthquake convulsions all over the world, as illustrated by geological research, might have happened in Armenia also and destroyed the common source of the four rivers and caused them to flow in different directions; but why the Phises or the Kyros, two insignificant rivers, have been chosen for the Pison when there are more important rivers in the neighbourhood is a puzzle to me.

My own opinion is the two rivers mentioned in the second chapter of Genesis are now existing, though not in the same condition as they were when they first parted from one source, together with the Hiddekel and the Euphrates. The last-named river having been simply mentioned as the Prat, or Euphrates, without a distinctive peculiarity, indicates that it was well known to the Israelites, from their ancient association with that great river through the emigration of Abraham and the sojourn of Jacob in Padan Aram.

* Luther Clericus and others, and more recently Baumgarten, have inclined to the supposition that the flood had altered the course of the streams, and thus rendered it impossible to identify the locality of Eden from the description given in Genesis.
The Pison, which I take to be the great Zab, was outside or eastward of the Tigris, as the Gihon was outside the Euphrates to the west, in the form of the human body; that is to say, the legs answering to the Euphrates and Tigris, and the arms to the Gihon and Pison. The sources of the Pison rise in the Albae district, on the border of the Turco-Persian boundary, about fifty miles to the south-east of Lake Wan. It passes through the Assyrian and Coordinistan mountains, and after it proceeds about 90 miles southward, as far as Bet Kara, a Nestorian village in Chall, it disappears. It then reappears near the village of Mender, in the Sharwan district, after having run underground for more than 30 miles, when it proceeds on its course for 70 miles further, and joins the Tigris about 22 miles below Mossul.*

Not a little discussion has taken place amongst eminent scholars as to the countries the rivers Pison and Gihon encompassed, and what was the meaning of Havilah, and the products that it contained, namely, the bdellium and the onyx stone. Learned philologists have puzzled their heads from time to time to suit their imaginations by twisting and distorting certain words which might have had quite a different signification to what they thought them to be; just as we have now some words in the English language which express two and sometimes three distinct meanings.

It is my earnest desire to try and show from personal observations and late discoveries where, most probably, the Pison and Gihon were flowing in their primitive existence, and why their common source is now difficult to trace.

In entering into the controversy of the whereabouts of the four rivers of Paradise, their sources, positions, and directions must be taken into account, inasmuch as the countries mentioned in the sacred narrative, which they traverse, ought to prove in a great measure in what part of the globe they are to be found.

We are told that “the name of the third river is Hiddekel, that is it which goeth towards the east of Assyria”; or, as the revised has it, which goeth in front of Assyria. The words before and front in Hebrew and Chaldee or Aramaic, are represented by יָפָא Kdaam, or front, and in this sense it means neither more nor less than front or before, though different scholars have cavilled at the real sense, as if that

* It is an interesting fact that the Nestorian Chaldeans consider the Zab to be the Pison, and their Patriarch dates his official letters from "the bank of Pison, the river of Eden."
would make any difference to the course of the Tigris. There is no doubt that the writer meant to say that the third river, after having separated from the river of Eden, flowed down in front of Assyria, the same as an Englishman might say that the river Thames runs in front or towards the east of Middlesex.

The Assyria of the Hebrews had a limited sense; that is to say, to that part of the country which was immediately in the neighbourhood of Nineveh. It is surprising to me how any one can find it difficult in understanding the passage with regard to the flow of the Tigris in front of Assyria. At all events this is one of the rivers of the Garden of Eden, the existence of which, together with the Euphrates, already alluded to, is not doubted.

The river Pison, which, as I said before, I identify with the great Zab, was said to compass "the whole land of Havilah, where there is gold; and the gold of that land is good"; there was also "bdellium and the onyx stone." So far as the land of Havilah is concerned, it is now quite impossible to say exactly where it lay, and what were its limits; but from the description of its productions we might fix upon the upper part of the Zab for its locality. Those mountain regions abound with all kinds of metallic mines, whether of copper, iron, or lead. Sir Henry Layard, who visited that country in 1846, discovered an old copper mine in the neighbourhood of Asheetha, and not far from Hairamoon and Gairamoon, into which he and I penetrated for some distance.* His opinion is that, according to sacred and profane authors, it was collected in such extraordinary quantities in Nineveh and Babylon that as it is generally included in the Egyptian inscriptions amongst metals brought from that part of Asia, so it is to be presumed that mines of it were once worked within the Assyrian dominions.†

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* Sir Henry Layard's account of that mine is so interesting that I must quote his own words in full. He says: "At a distance from the entrance copper ores were scattered in abundance amongst the loose stones. I descended with some difficulty, and discovered many passages running in various directions, all more or less blocked up with rubbish and earth, much of which we had to remove before I could explore the interior of the mine. The copper runs in veins of bright blue, in small crystals, in compact masses, and in powder, which I could scrape out of the cracks of the rocks with a knife. I recognized at once in the latter the material used to colour the bricks and ornaments in the Assyrian palaces" (Nineveh and its Remains, vol. i, 223).

† Sardanapalus is said to have placed one hundred and fifty golden beds, and as many tables of the same metal, on his funeral pile, besides gold and
I have no doubt if a well organised geological survey be conducted in that country there would be traces found of that precious ore. Whether we read of the golden beds of Sardanapalus, the fabulous treasure found in Nineveh when it was captured, the massive golden statue of Jupiter and its altar in the temple of Belus, and the image which Nebuchadnezzar set up in the plain of Dura, three score cubits in height, and six in breadth, we cannot but conclude that gold must have existed in abundance somewhere in the Assyrian and Babylonian Dominions.*

We now come to the bdellium that existed in Havilah and about the meaning of which there has been much discussion amongst the learned; but one thing is certain that the majority of commentators have agreed that it was a kind of gum or resin. With reference to this I can point out two kinds of valuable secretion of trees which are to be found in the country compassed by the Zab or Pison. The first is the Mann-as-Samma (two Arabic words which mean Manna of Heaven). It is collected at a certain time of the year from off rocks and trees and taken to Mossul for sale. When it is melted together it becomes like toffee and is very much appreciated both in Mesopotamia and Assyria.†

silver vases and ornaments in enormous quantities, and purple and many coloured raiments (Athenaeus, lib. xii). When Nineveh was taken it contained, according to some absurd tradition, £26,000,000,000 sterling in gold !—Nineveh and Its Remains, vol. ii, 416.)

* Herodotus mentions in his account about the temple of Belus in Babylon thus: “Below in the same precinct, there is a second temple, in which is a sitting figure of Jupiter, all of gold. Before the figure stands a large golden table, and the throne whereon it sits, and the base on which the throne is placed, are likewise of gold. The Chaldeans told me that all the gold together was eight hundred talents’ weight. Outside the temple are two altars, one of solid gold, on which it is only lawful to offer sucklings; the other a common altar, but of great size, on which the full-grown animals are sacrificed. It is also on the great altar that the Chaldeans burn the frankincense, which is offered to the amount of a thousand talents’ weight, every year, at the festival of the god. In the time of Cyrus there was likewise in this temple the figure of a man, twelve cubits high, entirely of solid gold. I myself did not see this figure, but I relate what the Chaldeans report concerning it. Darius, the son of Hystaspes, plotted to carry the statue off, but had not the hardihood to lay his hands upon it. Xerxes, however, the son of Darius, killed the priest who forbade him to move the statue, and took it away. Besides the ornaments which I have mentioned, there are a large number of private offerings in this holy precinct. (Rawlinson’s Herodotus, Book i, 183.)

† The idea that exists at Mossul and its surroundings in regard to the production of Mann-as-Samma is, that during the summer months, whenever heat lightning flashes at night, the whole mountainous district below
The second is mastic, a valuable mercantile commodity exported in great quantity to Europe and used as a stringent, and in drying varnishes. Why should not either of these productions be the bdellium mentioned in Scripture?

The second produce which existed in Havilah, according to sacred record, was the onyx stone or beryl. Commentators have also differed in opinion upon the nature of this stone; but according to the Septuagint it was supposed to be the latter, of light green colour. Be it as it may, it is not improbable that the highlands of Assyria and Coordistan, in the vicinity of the Zab, contain such sort of minerals as the onyx and beryl. Mr. William Ainsworth, the eminent geologist and botanist, who was attached to the Euphrates expedition under General Chesney visited that country in 1837. He found on “the banks of the Zab, and for one or two miles on the plain of both sides, a deposit of rolled pebbles of limestone, diallage rock, serpentine, hornblende; rock quartzes, jaspers and Lydian stone.”

I believe turquoise has also been known to exist in some parts of Coordistan bordering on the Zab. May not this be the נֵבְשׁ Shaahm of the text?

As regards the Gihon it is merely referred to in the second chapter of Genesis as the river which “compasseth the whole land of Cush” (rendered in the Septuagint as Ethiopia). It was natural when Ethiopia was considered formerly to be in Africa, certain writers inclined to the belief that the Nile represented the Gihon; and others being convinced that there was another Cush in the neighbourhood of the Persian Gulf did not hesitate to place the second river of Paradise somewhere there. Now, however, as I said before, through the decipherment of a cuneiform tablet the indefatigable Assyrian scholar, Mr. Pinches, has discovered that there was another Cush, existing formerly to the south-west of Armenia, known to the Greeks as Cappadocia, which goes now by the name of Roomalee.

* Ainsworth’s Assyria, Babylonia, and Chaldea, page 256.
It may be remembered that on a former occasion* I had to bring to the notice of this Institute the valuable and most important discovery which was made by the above-named scholar of another Cush around which ran the river Gihon. He proved then and since, before the "Society of Biblical Archeology," † that this Cush was the country mentioned in Genesis ii, 13, and consequently the river that compassed it must have been the Gihon, the second river of the Garden of Eden. Now to find that identical river is the difficulty; but if we take it for granted that some unnatural causes, such as earthquakes, volcanic eruption, or even upheaving of terrestrial bodies had taken place at the sources of the Euphrates and the Tigris, then the obscurity which hangs over the river of Eden would vanish.‡

The river Gihon I take to be the ancient Pyramus, now called by the natives of Asia Minor Gehan (a corruption of Gihon) which rises almost from the same spot as one of the tributaries of the Euphrates named Tookma; and after it is joined by another river at Maraash, called in Turkish "Aksoo" (or white water), which flows down from three small lakes called also in Turkish "Maadan-Gool" (or the Mine's-lake), it runs into the gulf of Alexandretta, a distance of about 200 miles.

It has been erroneously alleged that the word Gehan was the common name amongst the Arabs for a river. It is not so, because Gehan is not an Arabic word, but Turkish and Persian, which means a Universe and applied by the Turks, generally, to all great rivers, just like the Arabs of Mesopotamia call all large rivers Firra, a corruption of the word Firrath or Euphrates. It is most probable that the Pyramus (a Greek appellation) was known formerly by its primitive name Gihon, and was corrupted in after time by the Tartars into Gehan, that is to say, the Universe.

With reference to the influence which volcanoes and earthquakes have had on rivers even up to late years, I cannot do better than refer to well-known geological authorities who have written on the subject.

* Babylonian Cities, read before the Victoria Institute, see vol. xvii.
‡ There is a remarkable allusion made in the Book of the Prophet Joel, regarding the Garden of Eden, in connexion with God’s terrible judgment upon Zion. In the 3rd verse of the 2nd chapter it is prophesied thus: "A fire devoureth before them; and behind them a flame burneth; the land is as the Garden of Eden before them, and behind them a desolate wilderness; yea, and nothing shall escape them." (Note p. 119.)
In Lyell's *Principles of Geology* we find the following:—

"Vivenzio states, that near Sitizzano a valley was nearly filled up to a level with the high grounds on each side, by the enormous masses detached from the boundary hills, and cast down into the course of two streams. By this barrier a lake was formed of great depth, about two miles long and one mile broad. The same author mentions that, upon the whole, there were fifty lakes occasioned during the convulsions, and he assigns localities to all of these. The Government surveyors enumerated 215 lakes, but they included in this number many small ponds.

"Such lakes and ponds could only be permanent where rivers and brooks were diverted into an entirely new course, whether into some adjoining ravine or into a different part of the same alluvial plain. In cases where the new barrier obstructs the whole of the drainage, the water flowing over the dam will gradually deepen a new channel in it, and drain the lake.

"From each side of the deep valley or ravine of Terranuova enormous masses of the adjoining flat country were detached, and cast down into the course of the river, so as to give rise to lakes. Oaks, olive trees, vineyards, and corn, were often seen growing at the bottom of the ravine, as little injured as their former companions, which still continued to flourish in the plain above, at least 500 feet higher, and at the distance of about three-quarters of a mile. In one part of this ravine was a mass, 200 feet high and about 400 feet circumference at its base, which had been detached by some former earthquake. It is well attested that this mass travelled down the ravine nearly four miles, having been put in motion by the earthquake of February 5. Hamilton, after examining the spot, declared that this phenomenon might be accounted for by the declivity of the valley, the great abundance of rain which fell, and the great weight of the alluvial matter which pressed behind it. Dolomien, also alludes to the fresh impulse derived from other masses falling and pressing upon the rear of those first set in motion.

"The first account sent to Naples of the two great slides or landslips above alluded to, which caused a great lake near Terranuova, was couched in these words:—"Two mountains on the opposite sides of a valley walked from their original positions until they met in the middle of the plain, and there joining together, they intercepted the course of a river,' etc. The expressions here used, resemble singularly those applied to phenomena, probably very analogous, which are said to
have occurred at Fez, during the great Lisbon earthquake, as also in Jamaica and Java at other periods.

"Not far from Soriano, the houses of which were levelled to the ground by the great shock of February, a small valley, containing a beautiful olive grove, called Fra Ramondo, underwent a most extraordinary revolution. Innumerable fissures first traversed the river plain in all directions, and absorbed the water until the argillaceous substratum became soaked, so that a great part of it was reduced to a state of fluid paste. Strange alterations in the outline of the ground were the consequence, as the soil to a great depth was easily moulded into any form. In addition to this change the ruins of the neighbouring hills were precipitated into the hollow and while many olives were uprooted, others remained growing on the fallen masses and inclined at various angles. The small river Caridi was entirely concealed for many days; and when at length it reappeared it had shaped itself a new channel."

It is said again that—"On the mainland near Lima and on the neighbouring island of San Lorenzo, Mr. Darwin found proofs that the ancient bed of the sea had been raised to the height of more than 80 feet above water within the human epoch, strata having been discovered at that altitude containing pieces of cotton thread and plaited rush, together with seaweed and marine shells. The same author learnt from Mr. Gill, a civil engineer, that he discovered in the interior near Lima, between Casma and Huaraz, the dried-up channel of a large river, sometimes worn through solid rock, which instead of continually ascending towards its source, has in one place a steep downward slope in that direction, for a ridge or line of hills has been uplitted directly across the bed of the stream, which is now arched. By these changes the water has been turned into some other course, and a district once fertile and still covered with ruins and bearing the marks of ancient cultivation has been converted into a desert."

In another place it is mentioned that—"At several thousand places in Jamaica, the earth is related to have opened. On the north of the island several plantations with their inhabitants were swallowed up, and a lake appeared in their place, covering about a thousand acres, which afterwards dried up, leaving nothing but sand and gravel, without the least sign that there had ever been a house or a tree there. Several

* Vol. ii, page 129.  
† Vol. ii, page 158.
tenements at Yallows were buried under landslips, and one plantation was removed half a mile from its place, the crops continuing to grow upon it uninjured. Between Spanish Town and Sixteen-Mile-Walk, the high and perpendicular cliffs bounding the river fell in, stopped the passage of the river, and flooded the latter place for nine days, so that the people concluded it had been sunk as Port Royal was. But the flood at length subsided, for the river had found some new passage at a great distance."

My idea is that the Lake of Wan, which is very salt,† was not in existence when the narrative of the Garden of Eden was written; but through either an earthquake or a volcanic eruption it came into existence, together with the conical sublime mountain that lies on its north side, called by the natives Soobhan-Dagh.‡ At the base of that mountain lumps of obsidian are found in great abundance, of which I brought a specimen. To the west of the lake, above Bitlis, there is another mountain called "Nimroud Dagh." or mountain of Nimroud, on the top of which there is a large sweet-water lake containing abundance of fish. According to tradition that lake has no bottom, and it is supposed to communicate with a subterranean, unfathomable abyss!

Not a few lakes and ponds are found in different parts of Armenia and the adjoining districts bordering on it, especially towards the north.

As for rivulets, springs, and natural wells, they are innumerable all over Armenia, Coordistan, and the highland of Assyria. The great puzzle that presents itself to a traveller who has visited the sources and the mouths of the Euphrates, the Tigris, and the Zab, is to account for the consumption of the hundreds and thousands of rivulets that feed those rivers; and yet, when the latter reach the plains of Assyria and Mesopotamia, not a tenth of the volume of water that comes down from the tributaries of those rivers is noticeable below.

Mr. Ainsworth, already referred to, gives a very interesting account of the country around the Lake of Wan, and as his scientific notices about the volcanic nature of the rocks there bear upon the theory I am mooting, it will

* Vol. ii, page 162.
† The country around Wan abounds with salt springs, which, however, do not run above ground.
‡ This name is a compound of two words; the first is Arabic which means "Divine," or "He who is worthy of praise"; and the second is Turkish, Coordish, and Persian, for "mountain."
not be out of place, I think, if I quote his words. He says, "We had to proceed beyond the head-waters, at nearly the same level, to the foot of the Nimrud Tagh, a group of nearly conical mountains, having on this, its southern front, six distinct summits, all essentially of volcanic origin, and in part clad with brushwood of deciduous oak. We then turned to the left over the plain of Tacht Ali (the throne of Ali), when we began our descent towards the sources of the Kara Su, and the extensive plain of Mush.

"Hitherto, as previously remarked, till the publication of the map accompanying Mr. Brant's memoir, the Nimrud Tagh has universally been adopted as the great mountain chain of Southern Armenia; as at once the easterly prolongation of Taurus, and corresponding to the Mons Niphates of the ancients, but it is not so; the great chain here alluded to is the Ali Tagh, the Nimrud Tagh being a local volcanic group rising out of the upland beyond. In Armenia as in Kurdistan, and in Lesser Asia, the great rivers tributary to Euphrates and Tigris, or flowing direct to the sea, as the Seihun and Jeihun, pass through the main chain of mountains, which is here, as just said, the Ali Tagh, and to confound which with the Nimrud Tagh, does not lead simply to a verbal, but also to a geographical error, by which the range of Armenian Taurus is made to course north of Betlis, instead of south of that place."*

In another place the same author says—"Passing the large Kurdish village of Nurshin, we arrived at a kumbet or tomb, standing in an isolated burial-ground. It is a very pretty edifice, with a semi-circular dome, and pointed arched windows, with a bevelled basement of black, the upper part being constructed of red lava. This tomb is erected in the immediate vicinity of a fountain which constitutes the head-waters of the Kara-Su. We were surprised to find a natural artesian spring coming up from a deep circular hollow in volcanic rock. The waters poured out in two abundant rivulets, over the opposite lips of the crater, each stream being upwards of 30 feet in width at its origin, and both uniting shortly afterwards. The crater itself was 220 feet in circumference, and at an elevation of 4,540 feet above the level of the sea. It is curious that Mr. Consul Brant, who must have passed close to this spring, did not hear of it from his guides. The Rev. Mr. Southgate, who also travelled this road, notices, however, a tradition of fountain of unknown

* Ainsworth's *Travels in Asia Minor*, vol. ii, page 374.
depth, said to exist on the summit of Nimrud Tagh, and which communicates with the source now in question. Thus it appears, as is often the case, that local tradition coincides with the results of physical investigation. St. Martin also notices this fountain on the authority of Armenian writers, as being near the Nimrud Tagh, and being very remarkable. The waters at their issue are very clear and pure, but being soon spread over a wide district of marsh, the Kara-Su becomes afterwards one of the few rivers that are so called and are entitled to the epithet.”

He again writes, with reference to the same subject, thus:—“I have previously remarked that the main features and leading points of contrasted configuration in the great Armenian upland are derived from the alteration produced in a country of recent sedimentary deposits reposing on low hills of schistose rock being broken up by one or more great eruptions of volcanic rocks. The Terktob, or Barmahsiz Tagh, is an example of simple upraised sedimentary deposits; the Chekmah Tagh, of the volcanic rock occurring in dykes in micaschists, even to the crest of the hills, while on the acclivities are upraised and altered limestones. The Bingol Tagh is a vast mass of volcanic rocks, with altered formations.

“‘This Mountain of a Thousand Lakes, concerning which many ridiculous traditions are current among the Armenians, is not so much a distinct mountain, as a long crest upon an upland district. From these circumstances, although at so considerable a height above the level of the sea, it gives no impression of loftiness from the uplands around. Its long continuous crest, protected at the same time by bluff ridges of volcanic rock, is more favourable to the perpetuation of glaciers and snow patches than an isolated cone like that of Supan Tagh,”† which is also visible from Khinis. Hence the Bingol Tagh may be considered as somewhat below the lower limit of perpetual snows in these parallels, although it has snow patches (whence its numerous lakes and water rills) all the year round, while probably the Supan Tagh expresses the height of the same inferior line pretty accurately.”†

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† Soobhan Dagh, vide two pages ante. (Si’pan in Govt. Survey.)
‡ Ainsworth’s Travels in Asia Minor, vol. ii, page 386.

Mr. W. J. Blandford, of the Persian Boundary Commission, mentions in his work on the geology of Persia, that volcanic rocks are of unimportant extent in the southern districts, “but occupy a considerable tract near the Lakes of Wan and Urumiah, and culminate in Mount Ararat.”—Eastern Persia, Zoology and Geology, vol. ii, page 444.
I feel convinced that if a scientific research be conducted in the country that lies in the highlands of Armenia, Asia Minor, and Coordistan, it would be found that the source of the four rivers of Paradise was shattered either by an earthquake or a volcanic eruption, and dispersed the original "heads" into a thousand streams. There is no doubt that the courses of the four rivers below the mountain range are the same to-day as they were when they parted from the main source,—the river of Eden, but through some derangement that took place some time or other at the fountain-head (as it happened at Antioch in 115 A.D.), thousands of streams were created thereby which found their way into new channels.*

The present sources of the Euphrates and the Tigris consist each of two main streams; those of the former start from the north and north-west of Lake Wan, distinguished on the map as east and west Moorad, a name given by the natives, which means "desirable," and those of the latter issue from the west of the lake. The largest which passes Diarbekir rises from within a few miles of the east Euphrates, and the other comes down from above Bitlis, and joins the Diarbekir branch about 20 miles below Saart, at a place mentioned by Xenophon as Centritis, when he, with "the ten thousand" Greeks, was met by a formidable host of Armenians, Mygdonians, and Chaldeans, who opposed their passage.†

There is, on the way between Swairak and Diarbekir, on Karrach Dagh,‡ an old bed of a river which must have passed through that part as tributary to the Tigris or Euphrates, because the latter runs within 20 miles to the south of

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* In a note upon the Rivers of Eden, Genesis, chap. 11, verse 10, Dr. F. Delitzsch makes the following remark:—"That the continents of our globe have undergone great changes since the creation of the human race, is a truth sustained by the facts of natural history and the earliest national traditions, and admitted by the most celebrated naturalists (see the collection of proofs made by Keerl). The changes must not be all attributed to the flood; many may have occurred before and many after, like the catastrophe in which the Dead Sea originated, without being recorded in history as this has been. Still less must be interpreted, chap. xi. 1 (compared with x., 25) as Fabir and Keerl have done, as indicating a complete revolution of the globe, or a geognonic progress, by which the continents of the old world were divided and assumed their present physiognomy."—(Commentary on the Pentateuch. Keil and Delitzsch, vol. i., page 81).

† Anab, Book iv., chap. 3.

‡ Two Turkish words which mean "rugged mountain."
Swairak, on its way down from the highlands of Armenia in most extraordinary circuitous windings, and seems as if it was not following its proper primitive course. It starts about 60 miles to the north of Van, and, after it proceeds almost in a straight line for 180 miles south-westerly, it winds round and takes a south-easterly direction for 60 miles longer to within 20 miles of the Tigris, and then it proceeds on its downward course to the plain of Padan-Aram.* in Northern Mesopotamia, the land of Abraham, the faithful Patriarch's nativity.†

Having now concluded what I had to say about the contested site of the Garden of Eden, I must intrude upon your patience, to bear with me a little time longer, in placing before you some particulars in connection with the disputed landmarks of the native country of Abraham, Job, and Balaam.

Doubtless, you are all aware, that from time immemorial the position of "Ur of the Chaldees" has been shrouded in mystery, as it was only mentioned in the Old Testament in connexion with Abraham's call. In this case also we must take the Sacred Record as the foundation of our reasoning, because all other notices of the land of his nativity were only opinions and deductions arrived at by later critics.

In the 20th verse of the 11th chapter of Genesis we are told that "Haran died before his father, Terah, in the land of his nativity, in Ur of the Chaldees;" and in the 31st verse it is recorded that "Terah took Abram his son, and Lot, the son of Haran, his son's son, and Sarai, his daughter-in-law, his son Abraham's wife; and they went forth with them from Ur of the Chaldees to go into the land of Canaan, and they came into Haran and dwelt there." In the first verse of the next chapter (Gen. xii), it is thus written:—"Now the Lord had said unto Abram, get thee out of thy country, and from thy kindred, and from thy father's house, into a land that I will show thee." We are not told how long Abram remained at Haran before he went into Canaan, but we know from the preceding chapter that he was there with his father, and it is therefore to be taken for granted, that when he was commanded to leave his country, his kindred, and his father's house, that he was not in a foreign land as the case would have been if he had gone there from the neighbourhood of the Persian Gulf, about 700 miles to

* Gen. xxv., 20; xxviii., 6 and 7; xxxi., 18; xxxv., 9, 26.
† Gen. xxiv., 4, 10.
the south-east. For at Haran he left his father's house with Lot, and not in "Ur of the Chaldees," as it is shown by future allusions to Abraham's country. In the 4th verse of the 24th chapter of Genesis, Abraham unmistakably looks upon the country of Nahor as his own, and as that part of Mesopotamia is called variably in Holy Writ Padan-Aram and Aram-Nahraim there cannot be the least doubt that Southern Babylonia could ever have been his native country, as it was not in what was known to the Hebrews as Aram.

Had "Ur of the Chaldees" been situated near the junction of the Euphrates and the Tigris, 200 miles below Babylon, Terah could have travelled about 300 miles along the Euphrates, through fertile and richly cultivated country as far as Heet, the ancient Is, and then branched off at a convenient spot for the Land of Promise, without the necessity of going about 400 miles northward out of his way, seeing that we are not told that he had had any particular object for doing so.

As for the idea that, because a certain word pronounced Ur or Uri has been found in an inscription discovered at a mound called Mokayir or Mogayir, in Southern Babylonia, we are to conclude that it meant "Ur of the Chaldees," from where Terah migrated, nothing can be more misleading. For in the first place no Assyrian scholar can definitely declare that the etymology of both is derived from the same source; and, secondly, that this Babylonian Uri was really the Hebrew כָּזָה יָרוֹם "Aor Cashdeem." It is not at all improbable that the fact of Abraham's Aor being called "of the Chaldees," or the "Chaldees Aor," there must have been another Aor in existence, just like saying Richmond of Surrey and Richmond of Yorkshire, or Kingston of England and Kingston of Ireland.*

* In asking Mr. Theophilus Pinches again for his opinion about the word Ur or Uru he replied as follows: "I do not think that it is necessary that this Uru [Moogayir] should be the same as the Hebrew עürnberg. As you know, I have already, in a note to one of your papers (Babylonian Cities), read before the "Victoria Institute," put forward the theory that Ur of the Chaldees was Akkad, that district being called Uru or Uri in Akkadian. It seemed to me that Ur of the Chaldees must have been so called to distinguish it from some other Ur. Now I hold that Ur = מִנְצֶר was neither in Akkad nor in Chaldea. Ancient Chaldea was the district immediately to the south of the city of Babylon. Delitzsch, in his map attached to Wo lag das Paradies? makes Kaṣdu (= Chaldea) to be immediately to the north (or, rather, north-west) of Ur, but he sprawls the
In the Septuagint, instead of Ur of the Chaldees it is translated country of the Chaldees, which agrees with the apology of St. Stephen the martyr, before the High Priest, when he said, "The God of Glory appeared unto our father, Abraham, when he was in Mesopotamia, before he dwelt in Charran, and said unto him, Get thee out of thy country, and from thy kindred, and come into the land which I shall show thee. Then came he out of the land of the Chaldeans, and dwelt in Charran."*

Moreover, in the Book of Joshua (chapter xxiv, 2, 3) it is plainly shown that Abraham had crossed from Mesopotamia to the Land of Canaan; and as I said before that Aram, of the two rivers, was never understood by the Hebrews to mean Southern Babylonia, but merely confined to the land bordering on Assyria, as far as Tikreet on the Tigris, it is contrary to reason to suppose that Aram-Nahraim of the Bible meant the Land of Shinar.†

word Akkad out so that it gets mixed up, so to say, with Sumer (= Shinar).

In my opinion the following terms are equivalent:—

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<thead>
<tr>
<th>Akkadian</th>
<th>Assyrian</th>
<th>Hebrew</th>
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<tbody>
<tr>
<td>Akkad</td>
<td>Šumer</td>
<td>Shinar</td>
</tr>
<tr>
<td>Kingi-Uri</td>
<td>Akkad</td>
<td>Kasdim</td>
</tr>
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</table>

The Hebrews only knew of a city of Akkad, which they described as being in the land of Shinar. This is not quite correct. The city of Akkad was in the land of Akkad, whose southern, or south-eastern boundary was Sumer or Shinar. This error was probably, however, popular and widespread. Šumer or Shinar is always mentioned first in the inscriptions, and this makes it seem as if, at one time, it was the more important district. The Kaldî or Kal’dā (Chaldeans) and the Arāmî (Arameans) occupied, with a portion of the Babylonians proper, the land of Akkad, and Ur-Kasdim. "Ur of the Chaldees" may have been so named to distinguish it from the city of Ur, the [Mokayr] of the present day which in my opinion (and Delitzsch's map rather supports this), was not situated within the borders of Chaldea or of Akkad."

* Acts vii, 2, 3, and 4.

† Dr. Franz Delitzsch, the great Hebrew scholar, is of opinion that ' Ur of the Chaldees' is to be sought in Northern Mesopotamia, and that "it was in Haran that Abram first received the divine call to go to Canaan (xii., 1—4), when he left not only his country and kindred, but also his father's house. Terah did not carry out his intention to proceed to Canaan, but remained in Haran, in his native country, Mesopotamia, probably because he found there what he was going to look for in the land of Canaan. Haran more properly Charan is a place in north-western Mesopotamia, the ruins of which may still be seen, a full day's journey to the South of Adessa (Greek Kappas, Lat. Carrae) where Crassus fell when defeated by the Parthians. It was a leading settlement of the Sabians, who had a temple there dedicated to the moon, which they traced back to Abraham.—(Commentary on the Pentateuch, Keil and Delitzsch, page 179.)
In writing on the antiquity of the Jews, Josephus mentions, on the authority of Nicholas of Damascus, that Abraham came from the land of the Chaldeans above Babylon,* but in the Talmud we are told that he and his family "went forth from Ur Chaldee, from the city of Babel."

There is another remarkable proof that Abraham and his kindred were in nationality Arameans, for not only Bethuel and Laban were called Arameans,† but even Jacob was so styled by Moses, on the occasion of his command to the Israelites when they were to offer "the first of all the fruit" of the earth to the Lord. His instructions were thus: "and thou shalt speak and say before the Lord thy God, an Aramee ready to perish was my father, and he went down into Egypt, and sojourned there with a few, and became there a nation, great, mighty, and populous."‡

There is no doubt that the Chaldeans and Arameans at one time or another belonged to the same race, but through their dispersion and amalgamation with other nations, they inherited other tribal distinctions. I take the Arameans to have been like the Anglo-Saxon race of the present day, who are spread all over the world, and go by the name of Americans, Canadians, Australians, &c., and if we take into consideration the disadvantages the primitive nations laboured under when they were devoid of the art of printing and general culture of our day, it is most astonishing that those ancient people have handed down to us, even in a limited degree, a part of their history, and not an inconsiderable portion of their literature and language. It is worthy of note that the present Chaldeans of the rural districts still retain the primitive Aramean language, akin to the Chaldee of Ezra and part of Daniel, though from long association with the Medes, Persians, and Arabs, their language has been in some measure corrupted, as is the case with other languages.

With reference to the tradition that the Ur of the Chaldees was at Orfa (the ancient Edessa) there are many arguments in its favour, the greatest of which is the position it holds in the country (known in former days as Padan-Aram), and it is well worthy to be the capital of that grain-growing district.

* Josephus, Antiquity of the Jews, I., 7.
† Gen. xxv., 20; xxviii., 5; and xxxi., 20 and 24.
‡ Deut. xxvi., 5. The dubious rendering of Aram into Syria and Aramaic into Syriac by the Greeks, now adopted into the European languages, has created the confusion existing as to the meaning of this strange appellation.
ON THE GARDEN OF EDEN.

The Fathers of the Church knew Orfa by the name of Urhoi, which they identified with Ur of the Chaldees, and there is a ruin of a church there dedicated to St. James of Urhoi. In all what are called Syriac manuscripts the place is designated by that name, and even the Arabs know it by no other appellation than Ur-Riha. Whether this name is derived from Ur or Awraha, which the peasant Chaldeans pronounce for Abraham, is not certain.*

As for the position of Orfa, it is one of the most picturesque towns in Mesopotamia, and had it been under any other government but that of the apathetic Turk, it would have vied in beauty and wealth with the most flourishing cities in the world. Being situated on an eminence with copious rivulets running in all directions and commanding extensive fertile plains, stretching far and wide, its produce of corn and fruit might prove a source of incalculable riches. Its annual export of cereals to Europe even now, when scarcely one-fifteenth part of the land is under tillage, is very great. Nearly ten miles of the soil in front of the town is studded with public and private gardens, and in the town itself there are a number of the houses of the well-to-do inhabitants decked with arbours and orchards.

I believe that Padan-Aram was also the native country of both Job and Balaam, as I shall try to show briefly. They might have been of mixed nationalities, but of Aramean origin, like the Edomites, Moabites, Ammonites, and Ishmaelites; also the sons of Abraham by Keturah, whom their father sent away to the east country.† Most probably Job lived long after Abraham and might have been descended from Nahor and Milcah, as we read that she bore unto him Uz, Buz, and Kemuel the father of Aram.‡ Uz most probably was the founder of the district bearing that name, from where Job was said to have come. Doubtless Balaam had faith in the true God, as Abraham, Nahor,§ and even Laban,∥ though the latter, like the former, through his love of worldly gain, forfeited the divine favour. As for fixing an exact limit to the habitations of the different ancient nationalities it would be utterly useless to do so, because in those days, especially amongst small and unimportant tribes,

* All the Chaldeans pronounce the ד beth in their Alphabet like נ waw unless it occurs in the beginning of a word like ב bar (son). For instance, they pronounce Awa for Abba (father), Awd for Abd (servant), and Kthawa for Ktabba (a book).
† Gen. xxv, 6; ‡ xxii, 20 & 21; § xxxi, 53; ∥ xxxi, 49.
the change of Government and localities must have been so frequent by emigration, wholesale arbitrary deportation, and such like, that at one time a certain people who were occupying one part of the globe would be found some years afterwards in quite a different spot. I have not to go far to prove my argument, as I can point out a few cases by way of illustration to show you how easily the names of nationalities and countries are changed in Asia through either conquests, or mere accident, like the present Coords and Arabs. The mountains of the former were, before the Christian era, part of Media, Assyria, and Armenia; but now that tract of land is called Coordinistan, and its Moslem inhabitants, who are mostly of Assyrian and Median origin, are now known merely by the name of Coords. Then the Mohammedan population of Assyria, Mesopotamia, Syria, Palestine, the three Arabias, Egypt, Tunis, Algiers, and Morocco, all style themselves Arabs, though in reality they are a mongrel race, composed of all kinds of Biblical and other nationalities, not excepting even part of the twelve tribes of Israel. We may enter further into ancient history and find that there were Chaldeans in Southern and North-western Mesopotamia, and in the mountains of Assyria and Media; the Sabeans used to inhabit Padan-Aram; now their name is not even known there, but a small remnant of them are to be found at present in Southern Babylonia; the Arabs, the Midianites, and Aramean races used to be found sometimes near the Persian Gulf, then in Northern Mesopotamia, and in the country which is known in Europe as “Syria.” As for the Assyrians their name extended wherever their political influence reached.

A great deal has been written about the philology of the Book of Job, and different opinions expressed not quite sound in principle. Unfortunately a great number of men of learning have only learnt the Semitic dialects through study, without the natural tuition of a native-born Hebrew, Arab, or Chaldean. All languages have their own peculiarities, and a word may mean one thing in the dictionary and express quite a different sense when it is used colloquially. For instance the word “affection” in English is applicable to an unpleasant as well as pleasant state of the mind, and supposing in an old record two or three thousand years old we read that such a king had died from affection of the heart, I fear it would be difficult for any modern scholar to say exactly whether his majesty died from heart disease or from a disappointed love; and in the using of the word “let” it would not be easy for a foreigner to understand
whether it meant to give leave for a positive act or to retard and hinder.

As for the dependence upon the root of Semitic words that is also misleading, because anything may be construed from two or three letters. As an example, I will only quote a few Arabic words consisting of two letters, and you will see at once how difficult it is to determine upon the sense of a word by a person who has never heard the language spoken, or mixed with the natives of the country where Semitic is the vernacular language.

The word ֶקְל, consisting of two letters equivalent to K and L, means all, eat, and, be quiet; the word ֵם מ, M and N, means from, manna, who, and a certain weight; and בַל Bl, B and L, means but, to moisten, quarrelsome, and, to unite.

Moreover, the different Semitic languages have undergone so many changes for the last two thousand years that one might write thousands of words used in one place which would not be understood in another. If an Arab of Algiers or Morocco would be taken to Arabia Felix he would be difficult to understand; like the difference existing between the Latin and its cognate languages, the Italian, Spanish, and Portuguese. We must, therefore, take into consideration the provincialism of the land of Uz, at the time when the Book of Job was written, and place it in the same category with other Semitic languages of that time.*

I am fully convinced that the land of Uz lies to the northwest of Orfa, and its capital was where the present peculiar ruins of Wairan Shahir exist. It was a Chaldean city, and it must have been destroyed by an earthquake, as the shops, houses, and churches, which were built of huge basalt stone, are all thrown down as if by a supernatural convulsion.†

* Let us take, as an example, the present tongues of the Turks, Persians, Hindustanis, and even the Abyssinians, called Amharic, and we shall find that the association and intermixing of those races with Arabic-speaking people have corrupted their original languages to such an extent that it would be quite impossible for their progenitors, if they were living, to understand them. We know that Constantinople is neither in Arabia, Persia, or Tartary, and yet, the predominant race which sways the sceptre there issues its edicts and literature, not in an European, but in a mongrel patois composed of Arabic, Persian, and Tartar dialects.

† Mr. Ainsworth remarks on the site of Wairan Shahir as follows:—

"We identified this ruined town and stronghold with the Lacotena or Lacobena of the Tables, which is evidently the same as the Lavinianesina
Within six miles of Wairan Shahir, and 80 miles to the northwest of Orfa, there is a reputed shrine of "the prophet of God, Job," which is held with great sanctity by the natives of that district, especially the Mohammedans, who allege that the remains of that man of God are interred there. It has a "Takia," consisting of a few Mohammedan Darweeshes, who are supported by endowments and voluntary religious contributions. The "Takia" is a kind of monastery, where there is generally a shrine of a prophet or a saint, and though the Moslems have no monks, or any order sworn to celibacy, yet those who are appointed to guard places of sanctity lead the life of a recluse.

We are told in the Book of Job that bands of both Chaldeans and Sabeans had plundered his camels and cattle; it is not unreasonable, therefore, to suppose that both those nationalities inhabited then that district or the country around, especially as we know that Haran was at one time a Sabean settlement, and the Chaldeans occupied part of Cappadocia. The majority of the inhabitants of that district consist of two powerful Moslem tribes, called "Milee" and "Kara Gaitchee," whose men are fine-looking and of noble mien. They all live in tents, and lead a semi-nomad life. On seeing them I could not help fancying that Job and his friends had occupied the same country in days gone by.

There has also been an endless controversy regarding Balaam, his country, his divination, and the meaning of his name and that of his father. Many of the arguments adduced seem to me unwarranted by the plain narrative represented to us in the Book of Numbers. One opinion is that Balaam was a Midianite (see Smith's Dictionary of the Bible), because "he was mentioned in conjunction with the five kings of Midian;" but the writer, it appears, has quite overlooked the fact of the mention made in the Book of Numbers (xxii, 5) that Balaam was sent for "to Pethor which is by the river of the land of his people," and that Pethor was in Aram-Nahraim (Mesopotamia), Deut. xxiii, 4.

The Midianites alluded to were occupiers of the country bordering the promised land and neighbouring the Moabites; but according to the testimony of Balaam (Numb. xxiii, 7),
he was fetched by Balak "from Aram out of the mountains of the east" in Mesopotamia, which was to the north of Padan-Aram and about 400 miles to the north-east of Moab.

I believe Balaam was an Aramean of the same country and nationality as those of Terah and Job, as we see it recorded in Genesis (xxix, 1) that "Jacob went on his journey and came into the land of the east;" but as, most probably, hundreds of years intervened between their respective times, their language and tribal distinctions underwent a material change, like the Assyrians and Chaldeans whose language was Aramaic (see Isa. xxxvi, 11, and Dan. ii, 4).*

The word מִדְרָךְ, Kkdam, east, mentioned throughout the Old Testament, has also caused perpetual etymological discussion, but in reality there is nothing mysterious about the meaning of the term if we take it in the sense it is understood in Europe, as the Orient, whether it is rendered in Hebrew as מָזוּרָה, mazrahh (sun-rising), or מִדְרָךְ, Kkdam (front).

When a person talks in England of going to travel in the East, no one would, I presume, think that he meant to visit the eastern counties, or France, or Germany; nor by saying that a man was an Oriental, would the term be considered applied to a native of Margate or Ramsgate. So if a man comes from Armenia, Mesopotamia, India, China, or Egypt, he would be called an Oriental, though those countries are not situated exactly to the east of Greenwich. In like manner the Hebrews applied the term East to all the nationalities and countries situated on the eastern side of the Euphrates, whether Armenia or Babylonia.

In Syria, Mesopotamia, and Assyria, they only apply the term شرقي Sharkkee (Oriental or Eastern) to the inhabitants of those lands, but not to any nationality eastward of them. They would call those Persians, Indians, or Chinese.

† As for the meaning of the name of Balaam and that of his father בֶּן בַּאוּר, about which some comments have been made by different scholars, it had nothing to do with the

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* It is interesting to relate that the present Chaldean Christians of Assyria, and the only remaining Gentile nation inhabiting Southern Babylonia, called Sabeans, speak, with some exceptions, the same Aramaic or Chaldee as is found in the Old and New Testament.

† Note.—Biblical Criticism being outside the Institute's objects any references thereto in pp. 120–1 are necessarily excluded from discussion.
former's mission, as we are not told that they were nick-named from a peculiar act they had committed. We might just as well imagine that there is a particular meaning to the names of Korah, Dathan, and Abiram (Numbers xvi) because they had rebelled against God, or that there is a mysterious signification to the name of Esau because he had sold his birthright for a mess of pottage (Gen. xxv, 33), whereas in that particular case we are plainly informed (Gen. xxv, 30) that Esau was nicknamed Edom (red) from the colour of the lentils of which the pottage was made.

With reference to the difference between the Βαορο Besor mentioned by St. Peter (2nd Epistle, ii, 15) and the Hebrew Baaor, it can easily be explained that the former was written in Greek, in which alphabet there is no guttural letter ḫ as exists in the Semitic languages.

The supernatural power of Balaam has also been misunderstood by many commentators such as Philo, Ambrose, and Augustine, who have regarded him merely as a wizard and a worshipper of idols, compelled by God, against his will, to give utterance to blessings upon Israel instead of curses. It is incomprehensible to me how this opinion was arrived at after reading the 8th verse of the 22nd chapter of Numbers, when Balaam tells the Princes of Moab that he would inform them of what the Lord (Jehovah) commanded him to do; and in the 18th verse that follows he mentions the Lord (Jehovah) as his God. Moreover, a wizard or false prophet would not utter the words mentioned in the 16th verse of the 24th chapter of Numbers, wherein Balaam enumerates the attributes of God Almighty, and ends by uttering the remarkable prophecies that follow.

Balaam, no doubt, knew and acknowledged the Lord Jehovah as his God, the same as Abraham and Job, with this difference, that he chose the wages of sin in preference to placing implicit confidence in his God, as faithful Abraham and Job did, and sold his divine inheritance for the mammon of unrighteousness in lieu of depending on God's bounty, as his ultimate fate proved, when he preferred the enjoyment of voluptuous living with the Midianites for a season, rather than lean upon the omnipotent guidance of the Most High.

I have always entertained the belief that the Arameans and Assyrians possessed a knowledge of the true God, but worshipped Him under peculiar names and attributes. This is proved by the Divine mission of the prophet Jonah to Nineveh, and the way Laban and Bethuel spoke of the
existence of the Lord (Jehovah) and blest the future seed of Rebekah their sister (Gen. xxiv, 50 and 60). Moreover, in all our discoveries in Assyria we found no trace of any representation of revolting sacrifices, which were practised by other Gentile nations; but, on the contrary, on the bronze gate of Shalmaneser II, which I discovered at Balawat in 1878, there can only be seen offerings of bullocks and rams, the same as the animals offered by Balaam and those that were ordered for sacrifice in the Mosaic law.

It is probable that the wise men or Magi, mentioned in the second chapter of St. Matthew, who offered gifts of gold, and frankincense, and myrrh to our infant Saviour, were notable Aramean diviners of the same race as Nahor, Job, and Balaam, and held independent positions in the land. Of course the country, nationality, and position of those magnates have also been the element of much comment ever since the beginning of the Christian dispensation; but the majority of the critics have agreed that those Magi were natives of Persia, on the mistaken supposition that the word *Magi* pertained solely to a certain priestcraft of that country. Why and wherefore such a notion was arrived at, it is beyond my comprehension to understand. We know of no other Gentile nation, excepting those whose language was Aramean, who have had any connexion with Divine measures such as the family of Terah, the repentance of the Ninevites, and the prophetic calling of Balaam. The very fact of the allusion made by St. Matthew that the Magi had gone to Jerusalem, *from the east*, and not from any known country in particular, seems to me to accord with other passages of Scripture which point to a certain locality without referring to any point of the compass. It must have meant then as having, "seen his star in the east," the same as "Sephar a mount of the east" (Gen. x, 30), Abraham sent the sons of the concubines "eastward into the east country" (Gen. xxv, 6), Jacob "came into the land of the children of the east" (Gen. xxix, 1), Balaam was brought "out of the mountains of the east" (Num. xxxii, 7), Job "was the greatest of all the children of the east" (Job i, 3), etc.

There is also another notable connexion between the prophecy of Balaam (Num. xxv, 17) and the *star* alluded to by the wise men (Matt. ii, 2) which they said they had seen *in the east*. The word *east* here, surely, could not have meant a point of the compass, as opposite to west? It must mean that part of Mesopotamia which was known to the Hebrews by repute as the *east country*, as we now call certain parts of
Turkey, the Levant and Asia Minor. It is very remarkable that the Turks term the latter province Anatoleя the same word ἀνατολή which is used in Greek in St. Matthew (ii, 2) for the east, the country of the Magi.

I am also of opinion that the prophecy alluded to in the 10th verse of the 72nd Psalm was fulfilled by the Magi; and although the exact land of Sheba is still shrouded in mystery it seems to me that it will not be extraordinary to suppose that, as one of the grandsons of Abraham by Keturah, named Sheba, was sent to the “east country” by his grandsire, a province in Northern Mesopotamia was called after him.

I may conclude my lecture with a few words on the subject of our Assyrian and Babylonian researches, as I know that this Institute has always taken a deep interest in them.

Since my explorations were stopped at the end of 1882, owing to the expiration of my firman, no excavations have been allowed to be carried on in Assyria and Babylonia on the same condition as I was permitted to enjoy. Consequently the four important sites which I was anxious to examine in Babylonia, Assyria, and elsewhere, are now lying dormant for want of proper representation at headquarters.

I am grieved beyond measure that the remainder of the palaces and temples which have been discovered by us, are now lying buried underground, and, worse than all, that in Babylonia, especially, valuable records are being destroyed daily, through the clandestine excavations of the Arab diggers for the sake of selling what they find to native brokers for European purchasers, who smuggle them out of the country.

The Porte does not permit now any antiquities to be exported, but those who wish to make researches are only allowed to take squeezes and copies of any object found. This proposal was made to me as far back as 1876, but I refused to have anything to do with such a one-sided benefit. When Sir Henry Layard was appointed ambassador at Constantinople, however, he at once used his influence with the Sultan, and I was then allowed to send to the British Museum all antiquities discovered, but gave all the duplicates to the Ottoman authorities.

I feel confident that if our ambassador at Constantinople would use his influence with the Sultan, His Majesty will not say No to a proper representation to him, especially when he
knows that what we want is not new sites, but merely the recovering the remnant of the collections which we have already discovered through his bounty and that of his father, Sultan Abd-Almajeed.

The French, Germans, and Americans have been excavating for the last two years in Babylonia, but without any material benefit either to themselves or to the Ottoman Government, but in a number of ancient sites unauthorised excavations are carried on by the natives without let or hindrance on the part of the local authorities. It is impossible to estimate the priceless records that have been and are being destroyed by the Arab diggers, who are obliged to carry on their nefarious practices at night, or in a hurry, for fear of being detected. I think it is a great shame that steps are not being taken to protect those valuable monuments from destruction. Both for the sake of literature and history the researches in Assyria, Babylonia, and the Holy Land ought to be conducted on an international principle, and without jealousy or clashing interests. I feel convinced that there are inestimable treasures still buried underground in Asiatic Turkey, which will, if unearthed, throw a great lustre on the already discovered records of the past.

The President, Sir G. G. Stokes, Bart., M.P., P.R.S.—I will ask you to return your thanks to Mr. Rassam for his very elaborate paper. Of course he being a native of and having long lived in the East, and studied all the features of the country himself, and engaged in the excavations, he is an authority on the subject of which he speaks. (Applause.) I will now call upon those who wish to make remarks upon the paper to do so.

Mr. Theophilus G. Pinches.—I feel that we ought all to be very much obliged to Mr. Rassam, who is a native of that country of the Assyrians spoken of in the Bible, for having given us his opinion upon the difficult question of the position of the Garden of Eden, a question upon which I myself have not a very clear idea; but this paper of Mr. Rassam's will, let us hope, help to settle the question. It agrees with a preconceived idea I had, and it also agrees, to a certain extent, with the views of the illustrious father of Friedrich Delitzsch (Professor Franz Delitzsch), who is now
dead. The tablets containing cuneiform inscriptions unfortunately give no information whatever upon the subject, although the present Professor Delitzsch (the son of the famous old Professor of Hebrew at Leipsic) claims to have founded his views about it upon them. Professor Delitzsch’s opinion as to the position of the Garden of Eden, viz., that understood as Babylonia, rests on the fact that one of the Akkadian words for country is Edina, and the Assyrian form Edinu, the same as Eden.

There is an additional weight lent to this statement by a fragment of a tablet which was acquired by the Rev. Dr. Hayes Ward, in Mesopotamia, when exploring there some years ago. He allowed me the privilege of reading the fragment. It gave, in four lines, the words *Sipar* (or *Sippar*); *Sipar* (or *Sippar*) Edina, i.e., *Sipar of Eden* (to adopt Professor Delitzsch’s translation); *Sipar* (or *Sippar*) *Uldua*; and *Sipar* (or *Sippar*) *Šamaš* (Sipar of the Sungod).

I am inclined to the view that Babylonia had some legend of the Garden of Eden, as the Hebrews had, but they tried to locate that Garden of Eden in their own country, and this is the Garden of Eden which Professor Delitzsch has discussed, or rather it is that of which he treats in his book entitled *Wo lag das Paradies?*

With regard to the Ur of the Chaldees, I am inclined to agree with Mr. Rassam. The position of Mugheir I regard as too far south—I may be wrong. Mr. Boscawen just now whispered to me that Mugheir must be Ur of the Chaldees because it was the city of the worship of the Moon-god, and so was Haran. I fail to see the exact reason for that—that is to say, I fail to see why, on that account, Mugheir should be the Ur of the Chaldees, but I hope to have an opportunity of examining the matter, and perhaps in an additional note on this paper I may be able to say something about it; but what Mr. Rassam says about the family of Abraham having to travel from the extreme south portion of Babylonia so far north-west has great weight, and if my suggestion be a correct one, that Ur of the Chaldees is the same as Uri, the native name of Akkad, it would enable Ur of the Chaldees to be located from 120 to 150 or more miles higher up in the direction of Haran, and would shorten the distance to be traversed by the family of Abraham to that extent.

I may add that an additional argument in favour of Mr. Rassam’s theory that Mugheir is not Ur of the Chaldees is, that the native
Akkadian name of Mugheir is given as Urima (or Uriwa), and that the Hebrew form ought to show some traces of the ending -ima or -iwa—we ought to have at least Uri instead of the simple Ur. The Assyrian form of the name Mugheir is Uru (Urt), and, as an adjective ("Urite") Uru, fem. Uritum. It may be objected that the Hebrew form is borrowed from the Assyrian weakened one, and that, as the final vowel is not long, except in the adjective form, it may have disappeared. This, however, would depend upon whether the Semitic population of Mesopotamia regarded it as radical or not, and that they did so regard it is implied by the presence of the vowel i (Uritum) in the feminine form, which would otherwise have been Urtum. These facts are at least worth considering. (Applause.)

Mr. W. St. C. Boscawen.—I had the pleasure of reading the paper through a little while ago, but I am afraid I cannot agree with all of it. My own opinion is that I do not think we shall ever fix the position of the Garden of Eden; there are so many traditions about it, the oldest concrete tradition being in connection with Babylonia, where we have indications of two of the rivers. With regard to the other two rivers I behold strongly with Professor Delitzsch. At the time he was writing his book he and I both worked on the subject, and I cannot but agree with his conclusions. With regard to the city of Abraham I must again differ from Mr. Rassam; I think the evidence is strong that Mugheir was one of the earliest settlements in Babylonia. As to the location of the Garden of Eden there are traditions concerning it in India Persia, and elsewhere.

Mr. G. Bertin.—Mr. Rassam has brought forward so many points that it would be difficult for me to discuss them all, on some it is possible I might differ from him, but his paper is very interesting and of great value, being written by one who knows the country, for, as Mr. Rassam has said, most of us study these questions out of books and can be easily misled, whereas he can bring his practical knowledge and experience to bear upon the subjects on which he writes.

The Honorary Secretary (Captain F. Petrie, F.G.S.)—I am somewhat anxious that we should not lose sight of one fact to which Mr. Rassam has alluded, namely, that his paper was not written with the intention of introducing a new theory regarding the site of the Eden of the Bible, but rather of proving where it
was not. The Garden of Eden of the Bible having existed in the earliest days of the human race, we can have no other record of it except that revealed in Holy Writ. That the early Babylonians, after the flood, had their Garden of Eden, in imitation of the traditional one, we may well believe, but certain modern investigators, like the one whose statements in *Wo lag das Paradies?* Mr. Rassam controverts, must not call upon us to regard it as the original one; history furnishes examples of traditional and historical places having modern namesakes.

The Author.—At this late hour I will only return you my thanks for the kind way in which my paper has been received.

The Meeting was then adjourned.

REMARKS ON THE FOREGOING PAPER.

Major C. R. Conder, R.E., D.C.L., LL.D., writes:—

I believe with Mr. Rassam that the idea of putting Eden in Babylonia is quite impossible, and ought never to have been put forward. It has deluded many on account of Dr. Delitzsch's reputation as a scholar, but seems to me to bear no reference to the plain words of Genesis.

I have always supposed it clear that the head waters of Tigris and Euphrates, somewhere near Lake Van and Ararat, were intended to be understood.

Of course there was another Eden which is noticed in the Bible, and many Paradises, since the word only means "garden," but this latter word is Aryan, and not used in the Bible.

I set forth these views, which I think are those of all sober students, in my "Primer of Bible Geography" in 1884.

That the Zab should be the Pison seems very likely, but I do not see the necessity of supposing earthquakes, and removing the Gihon to the distant Piramis. The main affluent from a lake near Ararat into the Araxes might be the fourth river. We do not know how large was the enclosure intended by the word *gan Eden*.

The word Kusa for Cush is of value, but Cush was long ago
recognised in this region in the name of the Cosseans, and may
have had a considerable extension.

I do not myself believe that the land of Uz in the Bible is
intended to be east of the Euphrates. Uz is mentioned (Lam. iv,
21) as in Edom, and Teman, whence Job's friend came, is also
mentioned in Edom (Jer. xlix, 7), in connection with Esau (verse
10). I think, therefore, the region near Petra is Job's country,
and that this agrees perfectly with the natural history of the
book.

In the story of the Chaldean deluge the Chaldean ark builder is
said to have been taken away by the gods—

ina pi nārati,

"By the mouth of the rivers," but I do not see that this has any
connection with the Garden of Eden.

I regret General Gordon's theory as much as I admire his
character. When I was shown the MS. before it was published, I
advised that it should not be printed.

The region round Lake Van, as described by Palgrave, is
remarkable for its fine climate and sturdy native races.

[It has been objected by a distinguished correspondent that the
neighbourhood of "Lake Van would have been rather cold for our
first parents," but (even if the climate has not altered since) it
might be urged that there are instances in the present day of the
natives of very cold countries appearing to us remarkably insensible
to the absence of warmth.—ED.]

Sir J. W. Dawson, C.M.G., F.R.S., writes:—

Referring to the geological evidence relating to the condition
of the Babylonian Plain in the antediluvian or post-glacial
period—"There is the best reason to believe that this plain
was more elevated and was well wooded at that time, while its four
rivers, the Euphrates, Tigris, Kerkhan, and Karun, corresponded
with those of the writer of Genesis. These facts are now well known
in geological grounds, and must have been known to the writer of
Genesis from history or tradition. They have been fully explained
in my work Modern Science and Bible Lands (Chapter IV in
connection with the general discussion of the early human or
second continental period in other chapters)."
The Rev. Canon R. B. Girdlestone, M.A., says:—

"The description of the position of Eden (Gen. ii, 8–14), is evidently a very ancient piece of geography. Some years ago Mr. H. Rawlinson read a paper on 'The Site of the Terrestrial Paradise,' in which he discusses the passage. He suggested that Gan-eden (Garden of Eden) answered to the old Babylonian Ganduniya, and that the four rivers of Eden answer to the four which are associated with Babylonia in the oldest inscriptions. If this be the case we must go a step further, for the Eden of the Bible is very high, having watershed in four directions; and we are led to the conclusion that the Babylonians had travelled down from a mountainous region to the comparative level in which they lived in later ages. My present business is simply to call attention to the antiquity of the description as we have it (in the Bible)." (Foundations of the Bible, p. 128.)

Professor A. H. Sayce, D.D., writes:—

The position of the Garden of Eden has been settled in my mind since the discovery (of which Mr. Rassam does not appear to be aware) of the fact that the plain of Babylonia is called in the cuneiform inscription Edinu, from the older Akkadian edin, "a plain." The "Garden" of Edinu was in the neighbourhood of the ancient city of Eridu (now Abu Shahrein). In the midst of the garden rose the famous world-tree, an account of which is given in a Babylonian poem which I have translated in my Hibbert Lectures.

Havilah "the sandy-land," could never have been a designation of the rocky country eastward of the Tigris. Moreover its situation is defined in the Old Testament as being in Northern Arabia.

Kush may be the Kasai of the inscriptions, the Kossæi of classical geography, who lived to the east of Babylonia.

According to a cuneiform tablet the Euphrates in one part of its course was called the Gikhan, which, as I have shown in my Hibbert Lectures, must be read Gikhan.

Has there been any volcanic action in Armenia during the quaternary period?

There may have been more than one Ur, though I doubt it. But the birthplace of Abram is defined as belonging to the Kasdim, and therefore in Chaldea. The name is not found in one inscrip-
tion only, as Mr. Rassam seems to think, but is of repeated occurrence.

Mr. Rassam is supported in his view that Balaam was of Aramaic origin by the Assyrian inscriptions from which we learn that Pitru or Pethor lay on the western bank of the Euphrates, close to its junction with the Sajur.

THE AUTHOR'S REPLY.

May, 1892.

From what I have read of the remarks made by different gentlemen upon my paper, it seems to me that there is very little to comment upon: but I must reply briefly to three or four points mooted by Major Conder, Sir J. W. Dawson, and Professor Sayce.

First, I beg to remark with reference to Major Conder's allusion to "Uz," mentioned in Lam. iv, 21, and "Teman," referred to in Jer. xlix, 7, that I have already explained in my lecture that it was not uncommon in ancient days, nor indeed at the present time, to give the same name to cities and districts in different parts of a country, as it is the case now in Biblical lands. There is a large Arab tribe in the south of Assyria called Tai, and another one which bears the same name, and has no connection with it, inhabits northern Mesopotamia.

Moreover, if we are to follow Major Conder's theory that "Uz" and "Teman," mentioned in the Book of Job, were located in Edom, how are we to get over the difficulty of the mention of the Sabeans and Chaldeans in connection with Job's affliction? (Job i, 15 and 17.)

There is no historical record of those two nationalities as having occupied any part of Arabia, whereas, we are told by more than one ancient historian that the Chaldeans and Sabeans occupied at one time the country bordering on the upper part of the Euphrates, in what was known as Aram-Nahraim and Cappadocia.

As to the theory about the situation of the river Gihon where the Piramis now flows, I have been led to it by the fact that Cappadocia was formerly called "Cush," and the "Gihon" had encompassed it. (Gen. ii, 13.)

I am gratified, however, to find that Major Conder agrees with me as to the main points in my paper.
Secondly, I am sorry to dissent from the opinion expressed by Sir J. W. Dawson that there is any indication of the plain of Southern Mesopotamia having been more elevated than it is now; on the contrary, it is supposed that the sea had extended in ancient times as far as the junction of the Euphrates with the Tigris. As regards the four rivers, viz., “Euphrates, Tigris, Kerkban, and Karun,” one has only to look on their respective sources in any map and will find that they come down from diametrically different localities, the present positions of the sources of the first two rivers being about 700 miles apart from those of the latter.

With regard to Professor Sayce’s contention about the position of the traditional Garden of Eden, I regret that I am unable to agree with him that the plains of Southern Babylonia have been the abode of our first parents. I do not dispute that the plain of Babylonia was called in the cuneiform inscription “Edinu,” but I maintain that that name has no connection with the Eden of the second chapter of Genesis. It is quite incomprehensible to me how, in the face of such a glaring evidence as the existence of the two Biblical and classical rivers, the Euphrates and the Tigris, whose sources lie about 800 miles to the north and about 5,000 feet above the plain of Southern Mesopotamia, there can be any doubt as to the original site of the Biblical Garden of Eden.

With reference to the word “Havilah,” as I pointed out before, it is not uncommon to find all over the world places having the same name, and as regards the derivation of the word very often in Semitic languages, as Professor Sayce knows, the same number of letters represent different meanings.

Then with regard to the birthplace of Abraham, we can only rely upon the historical record of his family which points to “Aram Nahraim” as the land of his nativity, and there is no doubt that the Hebrews never considered these words to mean Southern Mesopotamia. Even if we take Mesopotamia of the Greeks to mean Southern Babylonia, the ruin of “Mogayir” cannot be the Ur of the Chaldees, as that site is not situated between the two rivers, nor could it have ever been.