





Alan Visin Bassa

A

DISSERTATION

O N

THE NEWLY DISCOVERED

Babylonian Inscriptions.

BY JOSEPH HAGER, D.D.

Literas semper arbitror Assyrias fuisse.—Plin. Hist. Nat. lib. vii. cap: 57.



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SRLF

TO

THE HONOURABLE

THE

COURT OF DIRECTORS

OF THE

EAST INDIA COMPANY.

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HONOURABLE SIRS,

ALLow me the opportunity that your permission of dedicating this Dissertation affords, to mention a few of the obligations which literature owes you.

It was reserved for you to make Europe acquainted with those antient inscriptions, which gave occasion to the present work, and which have been brought from a quarter of the globe hitherto but little known; though it ought to have been an object of the first inquiry to every enlight-

enlightened people, being the cradle of mankind, as is proved both by sacred and profane history, and the country whence astronomy, the most antient of all the sciences, was derived. These valuable antiquities, of which it is impossible yet to form a just estimate, are the first specimen of those literary treasures, which the learned of Europe may promise themselves from the searches you have instituted in that country.

In transporting these remains from *Asia* to Europe, you have, Honourable Sirs, given a fresh proof of that zeal for promoting useful knowledge, which you have hitherto so abundantly displayed, in the midst of those weighty and important concerns with which your Honourable Court is continually occupied.

It is to you the capital of British India is indebted for its extensive BOTANICAL GARDEN, in which

which not only the various vegetable productions of India, but also of Europe, are to be found.—
To you is England indebted for the establishment of a college at *Calcutta* for facilitating to Europeans the acquisition of the Eastern languages, and particularly the *Persian*—a language which, by your care, will soon become as vernacular among Europeans, as it has hitherto been unknown and uncultivated.

You have, in the stately edifice which your Honourable Company occupies in London, established a Museum for the reception of original manuscripts, Indian antiquities, natural productions, and every thing curious which Asia can furnish. This institution, worthy of its projectors, cannot fail to enlarge our knowledge of the Oriental world, and to prove, at the same time, a source of the most rational amusement.

Not

Not contented with all this, you have taken upon yourselves the expense of publishing such works as to you appeared calculated to diffuse useful knowledge, respecting those distant territories intrusted by Providence to your care and superintendance.—That splendid work, the description of the *Plants* of *Coromandel*, still carrying on '; that, on the *Fishes* of the same coast, now in the press '; and that on the *Serpents* of *India*, published some time ago, are proofs of what I advance '3.

Your

Plants of the Coast of Coromandel, selected from Drawings and Descriptions presented to the Hon. Court of Directors of the East India Company by William Roxburgh, M.D. published by their Order, &c. vol. 1. London, 1795.

² By Dr. Russel.

³ An Account of Indian Serpents collected on the Coast of Coromandel, &c. by Patrick Russel, M.D. F.R.S. presented to the Hon. Court of Directors of the East India Company, and published by their Order. London, 1796.

Your liberality towards men of letters, is also proved by your generous subscriptions to such undertakings, as may have a tendency to advance our knowledge of *Asia*, and to illustrate its arts, sciences, and languages. This fostering care, I myself, scarcely arrived in this country, and a stranger, have experienced.

While you give so many proofs, Honourable Sirs, of that refined taste and greatness of mind by which you are animated, in regard to the literary world, it would be impossible for me to describe how much the English nation in general is indebted to you in regard to Commercial enterprise, the main spring of that industry, to which it owes its riches, power, and national prosperity, and how mightily you have contributed, and still contribute, to insure to Great-Britain that preponderance, which is the astonishment and envy of the world.

Continue,

Continue, then, Honourable Sirs, to give to your country, as well as to foreign nations, the same display of wisdom, zeal, liberality, fine taste, and every other virtue you have hitherto exhibited, and permit me in particular, revering the eminent qualities you possess, to subscribe myself, with the greatest respect,

Honourable Sirs,

Your much obliged,

And very humble servant,

London, October 19, 1801.

JOSEPH HAGER.

PREFACE.

OF all the travellers who, in modern times, have visited the ruins of Babylon, situated, according to the most accurate accounts, at about two hours' journey to the north of Helle, (a) a small town on the Euphrates, near Bagdad, no one seems to have taken notice of any inscriptions of a particular kind, found among these remains of antiquity.

For neither TAVERNIER, and the other antient travellers, as CARTWRIGHT, LA BOULLAYE, BALBI, RAUWOLF, quoted in the first volume of the *Universal History*, where the remains of the tower of *Babel* are described ', nor the more recent ones, as IVES, IRWIN, OTTER, OLIVIER, mention any inscriptions still visible among the ruins which they visited '. While they defcribe either the size of the bricks, of which these ruins are composed, or the bituminous cement, with which they are connected, or the height and circumference of the tower, called by

the

TAVERNIER six Voyages, tom. 1. liv. 2. chap 7. Univ. Hist. Lond. 1747. vol. 1. p. 332.

² Ives's Voyage from England to India, Lond. 1773, p. 298. IRWIN's Voyage up the Red Sea, vol. 2. letter 4. &c.

the Arabs the tower of Nimrod, they seem either to have neglected, or never to have discovered, any inscriptions, or impressed characters on the bricks. Pietro della Valle, the most circumstantial, and the most accurate among them, even carried some Babylonian bricks along with him to Italy, one of which he presented to Athanasius Kircher, then residing at Rome, to be preserved in his Musæum, which is still extant in that city'; but neither he himself, nor that learned Jesuit, who was so much engaged in researches respecting Egyptian, Chinese, and other kinds of Oriental literature, ever made mention of Babylonian inscriptions².

The first, then, by whom they were noticed, seems to have been Father Emanuel, a Carmelite friar, who, having resided some time at Bagdad, in his manuscript account, speaks of characters impressed on the antient bricks still remaining among the ruins of Babylon, which, D'Anville says, would supply the literati, who are desirous of penetrating into the remotest antiquity, with entirely new matter for meditation and study.

After

^{*} Al Gest

² PIETRO DELLA VALLE Voyages, trad. Franç. tom. 2. KIRCHER Turris Babel, p. 95.

³ Les charactères, que le P. EMANUEL dit dans sa relation être imprimés sur les briques, qui restent des bâtisses aussi anciennes, que peuvent être celles de Babylone, scroient pour les savans, qui veulent penétrer dans l'antiquité la plus recuiée, une matière

After him Niebuhr, in his Travels to Arabia, mentions inscriptions on the Babylonian bricks still extant, but without telling whether they contained characters unknown, or similar to any already discovered; only when speaking of the bricks on which they are inscribed, he says, that he saw inscriptions of the same kind on other bricks at Bagdad and in Persia.

The most circumstantial, and the most recent notice, therefore, respecting them, is that of M. Beauchamp, correspondent of the Royal Academy of Sciences, at Paris, who, by residing several years at Bagdad, had more leisure to examine and describe the ruins of Babylon; which he did, in his account inserted in the Journal des Savans, for 1790², and of which a translation appeared afterwards in the European Magazine for May 1792.

In this account, the author, speaking of the remains of Babylon, says, "On the side of the river are those immense ruins which have served, and still serve, for the building of Helle, an Arabian city, containing ten or twelve thousand inhabitants. Here are found those large and thick bricks, imprinted with unknown characters, specimens of which I have prefented to the Abbé Barthelemy". What kind of characters

racters,

matière toute nouvelle de méditation et d'étude. D'Anville Mem. sur la position de Babylone, tom. 28. des Mem. de l'Acad. des Inscript.

¹ Niebuhr's Reisebeschreib. vol. 2. p. 290. ² Décembre.

³ Beauchamp's Account of some Antiquities of Babylon: Europ. Magaz. cit.

racters, however, these were, neither Beauchamp, nor that celebrated antiquary, who wrote with so much ability on the *Phænician*, *Palmyrenian*, and other inscriptions, thought proper to determine; and it is only by his successor, M. MILLIN, that we have lately been made acquainted with the existence of some *Babylonian bricks* at *Paris*, containing inscriptions which were sent by Beauchamp from *Babylon*, and of which drawings or copies were transmitted to M. Herder, at *Weimar*, and to Professor Munter, at *Copenhagen*.

In the mean time, the Honourable East India Company, being always desirous to lend their assistance to those who may be employed in the elucidation of Oriental Antiquities, and being informed that, near the town of Hillah, on the river Euphrates, there exists the remains of a very large and magnificent city, supposed to be Babylon; and that the bricks of which those ruins are composed, are remarkable for containing, on an indented scroll, or label, apparently a distich, in characters totally different from any now made use of in the East, directed the Governor of Bombay to give orders to their Resident at Bassorah, to procure from thence

A translation into German of this account has been given by Mr. WITTE, Professor at Rostock, in his Vertheidigung des Versuchs über den Ursprung der Pyramiden in Ægypten, &c. Leipzig, 1792,

La Bibliotheque Nationale de France possède plusieurs briques semblables, envoyées de Babylone par le C. Beauchamp; j'en ai fait parvenir des platres à M. Herder, à Weimar, et elles ont été calquées pour Mr. Munter à Coppenhague Magas. Encyclop. an. 9. No. 3.

ten or a dozen of the bricks, and to transmit them, carefully packed up, as early as possible, to Bombay, that they might be thence forwarded to them in one of their ships sailing for England.

Thus we were gratified at the commencement of the present year and century, at London, with the first view of inscriptions, which, on comparing them with the Persepolitan characters, as given by Le Bruyn, Chardin, Niebuhr, and other travellers, appeared to be of the same origin, being only more complex, and connected by long lines, forming whole and half squares, stars, triangles, &c. so that they prove to be a different combination, though formed of nearly the same elements and nail-headed strokes.

It is well known that for more than a century past, about which time the *Persepolitan* inscriptions were first discovered by European travellers, the opinions have been much divided respecting these characters. Some have believed them to be talismans², and others the characters of the *Guebres*, or antient inhabitants of *Persia*³; others held them for mere *hieroglyphics*, and others for *alphabetic* characters, like ours ⁴. Kæmpfer

¹ Extract of Public letter to Bombay, dated October 18, 1797.

² Mandelslo Voyage; Amsterdam, 1727, tom. 1. p. 1. Philosoph. Trans. vol. 17. p. 775.

³ Gemelli Careri's Voyage Round the World, book 2. chap. 9. in the 4th vol. of the Collection of Voyages, Lond. 1745.

⁴ Chardin Voyages en Perse, tom. 9. Rouen, 1723, p. 108.

supposed them to express whole ideas, like the *Chinese* characters, but that they had been appropriated solely for the palace of *Istakhar*.

After that period, however, some of a similar kind were found also in Egypt; but as neither the Egyptian hieroglyphics, nor the characters observed on the mummies, had the least resemblance to them, they served only to prove the connexion, which we know from history, that Persepolis once had with Egypt².—RASPE, on finding some others on a cylinder of loadstone, persuaded himself, that they were the same with the Chinese characters; and, consequently, that the Chinese writing had been formerly known and cultivated on this side of the Ganges³.

By the Babylonian bricks here exhibited, the whole difficulty in regard to their origin is removed; as it is evident that Babylon, in point of cultivation, was much earlier than Persepolis, and that the Chaldeans were a celebrated people, when the name of the Persians was scarcely known.

To confirm this opinion, and by it to prove that the *Persepolitan* characters were derived from the *Babylonian*, I have thought it necessary to begin this work by a brief examination

¹ Kæmpfer Amænit. exotic. Fascic. 2. relat. 5.

² CAYLUS Recueil d'Antiquités, tom. 5. pl. 30.

³ RASPE Descript. Catal. of TASSIE'S Collect. tom. 1. p. 63.

of the antiquity, extent, and sciences of the Babylonians; and through scantiness of original monuments, to prove by astronomy, architecture, and languages, their well founded claim to antiquity. At the same time I have endeavoured to show that not only the Persians, but also the Indians, were disciples of the Chaldeans; and that the Egyptians themselves, who pretend to be the instructors of all nations, probably derived their pyramids and obelisks from Babylon. Proceeding then to the Babylonian inscriptions, I have shown their similarity to that celebrated alphabet which the Indians call divine or celestial, (deva-nagari) because they believe that it was communicated by the Deity himself in a voice from heaven'; and I have tried to prove that they were not derived from heaven, but from our earth, and from the borders of the Euphrates. I have confirmed my assertion by means of the Tibetan characters, those acknowledged descendants of the Indian ones, and thus endeavoured to invalidate the opinion of that great antiquity and boasted originality of the Bramins.

The whole subject might have been proved much better, and with more copious arguments, had I not been confined by the narrow limits of a dissertation, and, what is more, by the want of time necessary for describing matters of this nature.

Thus, in treating of the Antiquity of the Babylonians, al-

Jones's Dissertat. Asiat. Research. vol. 1.

though the original records of that country, with the cities of Babylon, Persepolis, Alexandria, and other towns, have perished, I might nevertheless have produced the testimony of authors who lived in a time when those records still could be consulted; and thus I might have confirmed, by the testimonies of Manethon, Josephus, Diodorus, Castor, Vopiscus, Emilius Sura, and many other Greek and Roman authors, the veracity of Ctesias, in so far as he ascribes a high antiquity to the Assyrian empire; but of these I shall only quote Plato, who, in his book Upon Laws, asserts that the Assyrian empire was several centuries older than the war of Troy.

By the same authors, the great extent of Assyria might have been proved; and the vast dominions of Semiramis, if the inscription of Polyænus 2 even should be rejected, might have been attested by several towns and monuments, which acknowledge her as their founder, or even bore her name; and thus in speaking of Aram, I might have adduced the authority of Moses Chorenensis, that the Armenians also pretended to descend from the Aramæans 3, or that of

Yee the Abbé Sevin Recherches sur l'Hist. de l'Assyrie, in the 3d vol. of the Mem. de l'Acad. des Inscript. and Freret Essai sur l'Hist. et la Chronol. des Assyr. in the 5th vol. of the said Mem.

² Polyæn. Stratagem. Semiramis.

³ Moses Choren. Hist. Armen. lib. 1. cap. 11.

STRABO, that their antient language was nearly the same with the Syriac.

I must here observe, that in treating of the origin, greatness, and power of the *Babylonian* empire, it became necessary, among other things, to inquire into the origin of the name of *Babel*, and having found that this word, neither in the *Hebrew* nor in the *Chaldaic* idiom, signifies *confusion*, I made no difficulty of declaring the truth.

It certainly was never my intention to reject the authority of Moses, whose religious books I respect, and whose moral doctrines I revere. But having remarked, that Bel was acknowledged by sacred as well as profane authors, to have been either the first god, or the first sovereign, and founder of Babel, or (according to the Greek termination) Babylon, and that Ninus, his son, built a city about the same time, which he ordered to be called after his own name; I was led to suspect, that as Nineveh signified in Hebrew the habitation of Nin', Babel, for a similar reason, might be called the court, or the castle of Bel'.

This opinion was corroborated by historical authorities. Thus Curtius, speaking of *Babylon*, says, it was built by Semiramis, or, as it is the common opinion, by Bel, whose court is still shown³; and Ammianus Marcellinus, recon-

³ Semiramis eam condidit; vel, ut plerique credidere, Belus, cujus regia ostenditur. Curtius de reb. gestis Alex. M. lib 5.

ciling both opinions, relates, that Semiramis built the walls of the city, and that the castle had been built long before by Bel'.

Nor am I the first who gave a different derivation to the word Babel. For I find that Professor Eichhorn, of Göttingen, in his enlarged edition of Simonis Hebrew Lexicon, has anticipated me, who supposes that Babel may have been contracted from Bab bel, the court of Bel²; and M. Beauchamp, who, during his residence at Bagdad, seems to have diligently applied to the Arabic, speaking of Babel, says, "a person skilled in Arabic will not easily believe, that the word Babel is derived, as commentators pretend, from the root belbel, which in Arabic as well as Hebrew, signifies to confound³."

To these difficulties, a learned friend of mine, who has undertaken to defend the authenticity of the *Pentateuch* against the attacks of the *German* Professor Rosenmuller, and to whom I proposed them for an elucidation, replied, that the whole passage respecting the *confusion* of languages was inserted by some later hand; for he observes, "if an

attentive

¹ Babylon, cujus mænia bitumine Semiramis struxit; arcem enim antiquissimus rex condidit Belus. Ammian. Marcellin. lib. 23.

² Sed fortassis contractum est ex ילי porta, seu aula Bell. Io. Simonis Lexic. Hæb. Chald. Halæ. 1793, voce בכל.

³ Ibid. I must here mention an error which is in the text, page 2, lin. 6, where instead of but balal, it ought to be or balal; and the sense is, that confusion ought to be called either Belilab, or Bilbul, after the Rabbinic dialect, or, after the dialect of the Scripture, Mebilab, or Tebilab, (like megilab, from galal; or tephilab, from palal); see David Kimchi's מכלול.

to include within parentheses, whatever is evidently posterior to the time of Moses, or occurs in the form of explanatory remark, it would be found, that the several interruptions of the original narrative would be removed, and its natural order restored." To this declaration, however, others would hardly subscribe, as they would believe that a door would thus be opened for declaring any passage in the *Pentateuch* to be an interpolation.—I would, therefore, in the mean time, prefer the answer given by BOCHART, Phaleg lib. 1. cap. 15. although not altogether satisfactory, that the *l* has been dropped also in other words, where it occurred twice, as in the word *Golgotha*, for *Golgotha*; or in *Kikaltha* and *Sosiltha*, instead of *Solsiltha* and *Kilkaltha*.

Before I conclude, I must again solicit indulgence, as I did in a former work, for the inaccuracies of style in a language, acquired at too late a period to make a due progress in it, and at the same time, for the imperfections in the execution of the work itself. But as several months elapsed, after the arrival of these *bricks* in London, without any elucidation of them being undertaken, I resolved to say something, (however imperfect) according to Horace:

EST QUODAM PRODIRE TENUS, SI NON DATUR ULTRA.

THE PLATES.

- PLATE I.—Copy of an Inscription from an unburnt Brick 13 inches square and about 3 inches in thickness.
- PLATE II.—No. 1 and 2, Inscriptions from two cylindrical Stones in TASSIE's collection.

 No. 3, from a similar Stone in the possession of Cardinal Borgia.
- PLATE III.—A Babylonian Inscription from another Brick—a cameo in Tassie's collection—specimen of an Inscription at *Buddal*—a Quadruped and Inscription on a Babylonian Brick in the possession of Dr. Hulme, F.R.S.
- PLATE IV .- Another Babylonian Inscription from a Brick.
- AT THE END of the Work is inserted an Inscription on a fragment of Jasper from Babylon, and taken from the stone itself.

NEWLY DISCOVERED

BABYLONIAN INSCRIPTIONS.

CHAP. I.

ANTIQUITY OF THE BABYLONIANS.

THE Antiquity of the Babylonians, says Freret, is one of those points of history respecting which both the Greek and the Roman authors have been the least divided '. Moses, speaking of the posterity of Noah after the deluge, tells us that "they found a plain in the land of Shinar, and dwelt there, and said one to another, Let us make bricks, and burn them thoroughly. And they had brick for stone, and slime for mortar. And they said, Let us build a city and tower whose top may reach unto heaven '." This was Babel, the capital of Chaldea, thus called "because the Lord did confound balal, 'Da, their language '." The antient writers quoted by Bochart in his Sacred Geography, all agree with this account, as they attest that Babel, or, according to the Greek pronunciation, Babylon 4, was built of bricks and bitumen, of which there were

¹ Essai sur l'Hist. de la Chronol. des Assyriens, tom. 5. des Mem. de l'Acad. des Inscript.

² Gen. chap. 11.

³ Ibid.

⁴ Like Colophon, Ctesiphon, and other names. I cannot agree with Mr. BRYANT, who derives it from Bel-on, the god of the sun. Analys. of Ant. Mythol. vol. 3. p. 45.

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such abundant fountains in the neighbourhood, that it afforded excellent cement for buildings. They, however, will not allow that Babel was thus called from the confusion of languages. If Babel, say they, was to signify confusion, it ought to be called either Belilab, בלילה, or Bilbul, בלכול, which is the name still given to confusion by the Rabbins 2; but balal, כלל, to confound, being one of those verbs which double the second radical, confusion ought literally to be called Mebilab, בבילה, or Tebilab, חבילה, and not Babel, which word, according to grammatical principles cannot be derived from Balal, בלכל, or Balbal, בלכל, to confound.

Of this difficulty ABEN EZRA, one of the most learned of the Rabbins, seems to have been aware ³. He therefore endeavours to derive the word *Babel* from *ba*, ND, to come; and *bel*, ND, which he translates confusion. But bel does not signify confusion, and is rather the name of *Bel*, the god of the Babylonians, as we shall show hereafter. And although the third radical might be syncopated, as in several other Hebrew words, yet, in that case, the etymology of the first word ba, CN, would be omitted.

Others say that *Babel* was thus called instead of *Balbel*, by suppressing the letter l; so that the Hebrews pronounced it *Babel*. But, besides this being a forced derivation, it is to be observed that the Chaldeans give to their capital a quite different origin. They tell us that *Bel*, c, built first of all a great tower or castle, $\beta \alpha \rho \iota \varsigma^4$, and that this was the origin of that immense city to which Babylon afterwards increased. Thus, says Pezronius, we

¹ Phaleg. lib. 1. cap. 11. ² See Buxtorf Lex. Chald. Talmud. Rabbin.

³ See his Comment. on the XI. chap. of Gen. in Buxtorf's Bib. Hæb.

^{*} $\beta_{\alpha\rho\iota\varsigma}$ is the same as the Persian bar, a castle; both derived from the Chaldaic. In the time of Jerome, the castles in Palæstina were so called, with the Greek termination in $\iota\varsigma$.

find that DIDO built first of all *Byrsa*, the citadel of the *new town*, which, according to the Punic language, was called *Chartago*. Romulus began the foundation of Rome by the *Capitolium*, and Cadmus that of Thebes by the *Theban fort*; and, in like manner, the *citadel of Athens* in Greece was of much greater antiquity than the town itself.

From *Bel*, then, Berosus and Abidenus, both Chaldean writers, assert that *Babel* derived its first origin, which, like *Nineveb*, was called after its founder, and signified either *the castle of Bel*², or *the court of Bel*³; or, it might have some other meaning, (in which the Chaldaic language is not deficient) but not *confusion*, a term applied to the Babylonians, as it appears, by the jealousy of their neighbours, who envied their prosperity and glory ⁴.

But as it is not my purpose to enter into this dispute, I shall only add, that this tower or castle, according to the same writers, was of an immense height; and, if not superior, as least nearly the

¹ Orig. Babylon. cap. 7.

² Bar-bel. The r of Chaldaic words is often suppressed. Thus from Darmesek, the antient name of Damascus, came Damesek; from Archad, Achad; from Parsid, Passid. Bochart. Phaleg. lib. 1. cap. 17.

³ Bab-bel. Bab signifies to this day not only door, but also court, in Arabic; like Der in Persian, and Kapu in Turkish.

^{*}It was commanded by the law of Moses, Deuteron. cap. XII. v. 3. to destroy the name of the foreign divinities; at which place, Solomon Iarchi-says, that this was by giving them a contemptible name; as for instance, instead of Beth-Galia, which is an honourable name, changing it into Beth-Karia, which is a contemptible one. Rabbi Bechai says the same: See Buxtorf Bib. Hæb. et Lexic. on those places. The Jews follow this commandment accurately to this day, as we may see, for instance, in the Christian names of און כליון and און כליון to which they give a contemptible turn.

same in size as the famous Pyramids of Egypt 1. It consisted of seven stories, according to the testimony of Herodotus, and in the eighth was the temple or chapel of Bel, which in Chaldaic, as well as in other dialects, signifies Lord, Master, or God, and of which word Asdrubal, Hannibal, Abibal, Balthasar, Balsamon, Belphegor, and many other names were compounded 2. This temple had a striking likeness to the celebrated pagodas of the Indians 3, which contain precisely the same number of stories. The great pagoda in Tanjore has even more stories, says Major RENNEL, than the tower of Bel. They are all square, and look to the four cardinal points 4. In this Babylonian tower the Chaldeans, the philosophers of Assyria, made their astronomical observations, which were the earliest ever made 5; for though the Egyptians, their rivals, pretend that the Chaldeans were a colony from their country, and had all their learning from them, they must be considered, says LALANDE, as the most antient astronomers, since Ptolomy and Hipparchus, who lived in Egypt, found no

where

HERODOT. lib. i. BAILLY Hist. de l'Astr. Ane. p. 143 et 304.

² See Selden Syntagma de Diis Syris.

³ The Pagoda of *Vilnour* has seven stories; il y a un huitième étage, says Gentil, qui soutient le faîte de la pyramide, mais l'escalier ne mène qu'au septième étage.

⁴ Le Gentil Voyage dans les Mers des Indes, vol. 1. p. 577. Rennel Geogr. of Herod. p. 368.

⁵ Principio Assyrii, says CICERO, ut ab ultimis auctoritatem repetam, propter planitiem magnitudinemque regionum quas incolebant....trajectiones motusque stellarum observaverunt, quibus notatis, quid cuique significaretur, memoriæ prodiderunt. Qua in natione Chaldæi, non ex artis sed ex gentis vocabulo nominati, diuturna observatione siderum, scientiam putantur effecisse, ut prædici posset quid euique eventurum, et quo quisque fato natus esset. De Divinat. lib. 1. ad init.

where else observations of greater antiquity ¹. Or, if a system of astronomy, says Bailly, was really invented by the Egyptians, why did Ptolemy, who resided in Egypt, make no mention of it? Why did he quote only the Chaldeans? Why does he employ only the Chaldaic epoch of Nabonassar, and not a Greek or Egyptian one? And why does he use only Chaldaic periods, Chaldaic elements, and Chaldaic observations ²?

The same thing may be said of the Indians, whose Bramins equally boast of the antiquity of their astronomy, and who look upon other nations with the utmost contempt. For though BAILLY himself, in his Treatise on the Indian Astronomy, asserts that it is more antient than the Chaldaic, a learned astronomer of his own country, who lately visited India for the purpose of acquiring a knowledge of the Indian astronomy from the Bramins themselves, maintains an opinion totally different 3. After my return from India, says he, I read, for the second time, with the utmost attention, the work of Syncellus, who treats of the Indian astronomy, which I had read twenty years before, and it appeared to me to contain the whole astronomy and all the methods of the present Bramins +. And, indeed, if the Indians did not receive all their astronomical knowledge from the Chaldeans, why, during the course of two thousand years and more, have they not advanced one step further than they were in the time of the Chaldeans? Why have they still the same division of the ecliptic, and the same figures of the

Astron. tom. 1. p. 177.

² BAILLY Traité de l'Astron. Ind. Discours prélim. p. lxxii. et p. 277. Hist. de l'Astron. Anc. p. 182.

^{. 3} LE GENTIL, tom. 1. cit. p. 213.

zodiac '; the same number and order of the planets; and the same instrument for measuring time as the Chaldeans '?—And why do these pretended masters of the Chaldeans still believe the moon at a greater distance than the sun, while their supposed pupils entertained a contrary opinion two thousand years ago '?

These observations are applicable also to the *Chinese*, who, in astronomical knowledge, were even inferior to the *Indians* when the European Missionaries first were admitted into China; who believed our globe to be square, and who, like the Indians, had not even a sun dial, with which the Chaldeans were acquainted since the time of Hezekiah ⁴. For though the eclipse of Chong-Kang mentioned by Father Mailla, which they observed 2159 years before our æra, may prove the antiquity of that nation ⁵, it does not thence follow, that they were of greater antiquity than the *Chaldeans*, who had astronomical observations made 1903 years before Babylon was taken by Alexander ⁶.

The figures of the twelve signs of the (Indian) zodiac, says SIR WILLIAM JONES, bear a wonderful resemblance to those of the Grecian. The days of the week of the Hindus are dedicated to the same luminaries as ours, and, what is more singular, revolve in the same order: Dissertat. on the Antiq. of the Indian Zodiac. Asiat. Research. vol. 2. Dr. Buchanan attests the same of the Birmans: See Asiat. Research. vol. 6. On the Relig. and Liter. of the Burmas.

² The clepsydra.

³ Les Indiens placent la lune plus loin que le soleil. Cette inconséquence est extraordinaire et unique dans l'Histoire de l'Astronomie. Ce n'est pas seulement le peuple, qui est dans cette erreur, ce sont les Brames mêmes. BAILLY Hist. de l'Astr. Anc. p. 116.

⁴ II. Kings 20. Is. 38. Chron. 2. 32. BAILLY, eit. p. 386.

⁵ Hist. Gen. de la Chine, tom. 1. lett. 6. ⁶ Simplic. de Cœlo, Comment. 46.

As to the *Persians*, whom Bailly reckons among the oldest civilized nations, and even older in regard to astronomical knowledge than the Chaldeans, because their country was situated between India and Assyria, it will be sufficient to observe that, till the time of Cyrus and the conquest of Babylon, they were barbarians '; that their first letters were *Assyriac* '; and that, besides the many Chaldaic words which their language contains, the very word "knowledge," or "science," *danush*, is *Chaldaic* '.

It may be further observed, that ZOROASTER, BUTTA, BRAMA, SHAKA, SAMANAKODOM, GODAMA, and other names of those celebrated persons who diffused their knowledge through Egypt, Persia, India, Thibet, China, and Japan, are all originally Chaldaic. I shall not indulge in those etymological dreams by which, in our times, VARGAS endeavoured to explain the whole geography of Naples from the Phenician language, and by which COURT DE GEBELIN thought he could discover the primitive language of mankind. I shall only ask, Why is that celebrated prophet, whose religion is at present known to be the most extended in the world, called in Ceylon But, or Butta, in Ava GODAMA and in Pegu and Siam, SAMANAKODOM? Why is he called Samanakodom, and his disciples only Samaneans? And why Shaka in Thibet, and the great Bali on the coast of Malabar? Father Paolino endeavours to explain the name of the Samaneans by the Sanscrit language, in which Samana signifies "meek," because these people, he says, kill no animal. But this is the case with all the

Gentoos,

See Herodot. Themistocl. lett. 21. to Temenides.

³ Thence, the celebrated Persian work Behar-danush, or The Garden of Knowledge, a book lately translated from the Persian into English by Mr. Scott, London, 1799.

Gentoos, and for that reason alone the Samaneans are not exclusively intitled to the appellation of "meek." As to Go-dama, it signifies, he says, a leader of cows, which is an attribute of that deity. But this epithet, which might be tolerated when alone, is ridiculous and absurd when united with Samana, or the Samaneans, who are contemplative philosophers, who observe celibacy, and lead a holy manner of life. Besides, he can assign no good reason why he is called Shaka, or Schekia, in Tangut, China, and Japan; or why he is styled the Great Bali in Hindustan.

All this, however, is rendered clear by the Chaldaic language. Samana νυσι, in Chaldaic signifies beavenly; just as σεμνος in Greek signifies boly, venerable, worthy of reverence 2; and thence, not only the Samaneans, on account of their holy manner of life, but also the philosophers in Galatia, were called σεμνόθεοι, who, as Diogenes Laertius attests, led the same manner of life as the Gymnosophists or Samaneans in India 3. Their chief is called Samananan or Godama, which in Chaldaic signifies the first, or the most antient of the Samaneans, γρημο. He is likewise called Shekia which in Chaldaic signifies a prophet, γρημο. We are told by Hesychius, that Seches, according to the Greek pronunciation, was among the Babylonians the same as Mercury 4. Butta is the name of Mercury in all the languages of India. He is the planet of Wednesday, for the Indians assign to the days of the week the same planets as we do 5, and the same as Samanakodom; for, ac-

cording

¹ Viaggio alle Ind. Orient. p. 73.

² Steph. Thence σεμινείον signifies a sacred place, a sanctuary.

³ In proëmio. ⁴ Σεχές, τε Έρμε απήρ. Βαθυλώνια.

⁵ Sec, besides others, Chambers's Account of the Ruins of Mavalipuram. Asiat. Research. vol. 1. Also, in Symes's Embassy to Ava, the days of the Birman week.

cording to the testimony of CLEMENS ALEXANDRINUS and JEROME, BUTTA was the institutor of the Gymnosophists. He is called Bal, or Bali, which is the same as Bel, and signifies Lord, Master, or my Lord, my Master; as Adoni in Hebrew and Phænician, from which the Greek word Adonis is derived. But, or Put, is a Chaldaic name, for one of the sons of Cham was Put, Did, the brother of Misraim. These observations might be carried still further, were I not afraid of being thought tedious by enlarging on so dry a subject.

In regard to Brama, I shall only observe, that according to the researches of the learned Dr. Hyde, the Persians, those neighbours of the Indians, called their most antient religion the religion of ABRAHAM, and that ZOROASTER, their legislator, himself is never called otherwise but IBRAHIM, or ABRAHAM ZERDUSHT 1. The same may be said of the Arabians, the neighbours of the more southern India, amongst whom Abraham was believed to have founded the famous temple of Mecca, to say nothing of the Egyptians, whom he instructed, as Josephus attests, in the Chaldaic astronomy 2. Whilst we find then such a number of Persian words in the antient language of India, which prove the great communication which must have existed between both countries, there is no wonder if the name of Abraham, the prophet of Persia, had been likewise adopted in India, and the testimony of those authors confirmed who pretend the Bramins to have been disciples of the Persians 3; and the Chaldaic name of the sacred fire, the worship of which is one of the principal

¹ Hyde de Relig. vet. Persar. cap. 2. et 3.

² Antiquit. lib. 1. cap. 9. apud HYDE cit.

³ As the Indian alphabets are all syllabic, and every consonant without a vowel annexed, is understood to have an a joined to it, there is no wonder if from Abraham

principal points of the religion of Zoroaster, shows the primæval origin of the antient religion of Persia. Atesh, اتشر, fire, from which the Parsees are to this day called Atesh-perest, اتش پرست, or worshippers of fire, is clearly Assyriac. Esh, www, which in Hebrew signifies fire, is in Chaldaic Esh-ta, אשתא, and by a transposition, which continually occurs in other languages, in Persian At-esh. It is from the same Chaldaic word Eshta, as BOCHART and HYDE observe, that the Esía also of the Greeks, and the Vesta of the Romans, are naturally deduced '. The Æolians, from whom the Latin language was chiefly derived, frequently added the digamma to Greek words, and used to say $\omega F \delta \nu$, in Latin ovum, instead of $\omega \delta \nu$, or $\delta F \iota \varsigma$, in Latin ovis, instead of ὅις, and Γέσπερα, in Latin vespera, for ἕσπερα; so that Vesta in the same manner was formed from Esía. Both signify a fire place, and the sacred fire; and this agrees with what is said by Ovid, who tells us that Vesta had no statue by which she was represented, and that she was merely fire 2. He therefore says, that under the name of Vesta we ought to understand nothing but burning fire:

Nec tu aliud Vestam quam vivam intellige flammam.

Had the case been different, Numa would not have erected a

was made Brahmà; and thus we see other Persian words in the Sanscrit having an a annexed, as deva from div, appa from ab, denda from dend, &c. See Father Paolino's Amarasinha, p. 12. Symes's Embassy to Ava, chap. 14.

¹ Vesta ἀπο της ἐπίας, id est a foco in quo ignis colitur dicta est, says Gesner, est enim Vesta quasi focus urbis appellata, ait Cicero De legib. Thesaur. Ling. Latin.

² Esse diu stultus Vestæ simulaera putavi, Mox didici curvo nulla subesse tholo. Ignis inextinctus templo celatur in illo, Effigiem nullam Vesta, nec ignis habet.

Fastor. 6. v. 295. seq.

temple

temple to Vesta. For Plutarch, in his life of this legislator, relates that, in conformity to the doctrine of Pythagoras, he would not suffer the Romans to have any statues or idols; and, therefore, that during the first hundred and sixty years their temples were without images ¹. All this shows the antiquity of the Babylonians; for this sacred fire was carried by Æneas from Troy ²; it was worshipped at Athens in the Prytaneum, where the laws of Solon in boustrophedonic writing were kept ³; it was also maintained at Delphos, the most celebrated oracle of all Gréece, and in many other places ⁴. Moses himself adopted it in his religion ⁵; and though Diodorus Siculus asserts that this custom was communicated to other nations by the Egyptians, its origin is to be referred to the Chaldeans, as is proved not only by the etymology already adduced, but also by Zoroaster himself, who is said to have been a Chaldean ⁶, and whose very name is Chaldaic ⁷.

- In NUMA.
- ² Sic ait, et manibus vittas, Vestamque potentem, Æternumque adytis effert penetralibus ignem. Æneid. 2. v. 296.
- 3 Meursius de Athenis Atticis, lib. 1.
- ⁴ See Histoire des Vestales, par l'Abbé NADAL, in the Mem. de l'Acad. des Insc. tom. 4.

 ⁵ Levit. 6.
- ⁶ STANLEY'S Hist. of the Chaldaic Philosophy, chap. 2. at least the first and the most antient, and even the Persian Zoroaster introduced *Chaldaic* sciences amongst the Persians.
- ידע, seed, family, posterity; and שמר, a ruler, or governor (see the book of Job); the Chaldeans believing that all men were under the dominion of stars; and thence, probably, the Persian sitare, the German stern, the English star, and the Greek $\alpha \in \gamma_0$.

CHAP. II.

EXTENT OF ASSYRIA.

As the Babylonians were of high antiquity, their empire also gradually acquired great extent. It is well known that Syria and Assyria are originally the same name; the first without the article, and the second with the Hebrew or Chaldaic articlen; and, therefore, these two names were antiently confounded. Thus Cicero, for instance, calls the country where the Chaldeans lived Syria; and Lucian, who was born in Syria, calls himself sometimes a Syrian, and sometimes an Assyrian². Aram, and, was the common name for Syria of Damascus, and Syria beyond the Euphrates. The Scripture also, speaking of the Chaldaic language, never gives it any other appellation than that of the Syriac, never gives it any other appellation than that of the Chaldaic, that, as Georgius Amira, a learned Maronite, observes, those who understand the one, a few slight differences excepted, can understand the other 4.

¹ In Syria Chaldæi cognitione siderum, solertiaque ingeniorum antecellunt. De Divin. lib. 1.

² See his Life at the beginning of his Works, edit. of Reitzius, Amsterd. 1743.

³ BOCHART. Phaleg. lib. 1. cap. 15. Daniel, however, calls the Chaldaic לשון כשרים, the language of the Chaldeans. But perhaps the priests of Babylon had their sacred language, like those of many other nations.

⁴ Grammat. Syriaca, Romæ, 1596. 4to.

But Aram seems in the most antient times to have extended much further. Persia by its antient historiographers and poets was always called Iran, if and is said to have comprehended under that name also Assyria 1. Besides, Persia precisely began where Chaldea finished, and consequently could be considered as a continuation of that country. It may therefore be fairly concluded, that its name Iran was the same as the Chaldaic and Syriac name Aram. For we find the letter m, on account of its affinity, very often changed into an n. Thus, for instance, from hashamajim, שמים, the Persians seem to have made assuman, beaven; and where the Hebrew in the plural, or dual, has an m, the Chaldaic language itself uses an n. The Persians also can assign no plausible reason, why their country was called Iran, nor can they tell, why in modern times they have been called Parsi2. But both these difficulties may be easily explained by the Chaldaic language. Pars, which signifies a horse, as well as borseman, proves that the Persians and Parthians, the latter of which is derived from the same root, were excellent horsemen; and this fact is sufficiently confirmed by the Greek as well as the Roman historians 3. Besides, we know that the dominions of Semi-RAMIS, the queen of Babylon, whose reign Freret, that severe critic,

De Fatis Linguar. Orient.—Ling. Persic. in MENINSKY's new edit. vol. 1.

² Eine Hauptbenennung des alten Persiens, says Wahl, ist *Iran*, ihr Ursprung ist aber ungewis. Eben so ungewis bleibt der wahre Ursprung des Namens Perser. Allgem. Gesch. der Morgenl. Spr. drit. kap.

³ Mr. Wahl is not satisfied with that derivation, because in the Persian language, he says, neither pars, nor fars, signifies a horse. To this I answer—First, that this is no matter; for neither the Laplanders, nor the Samoiedes, nor the Scythians, and twenty other nations, called themselves originally so, but were first thus called by their neighbours, and then by all other nations. Second, we find the Persians thus called, not only by the Chaldeans and Arabians on the west of Persia, but

critic, has proved not to have been fictitious, extended over all Persia, and to the borders of India ¹. The antient language of Persia called *Peblevi*, has been found to be a dialect of the *Chaldaic* ². Sir William Jones maintains, that the oldest languages of Persia, as far as can be traced, were the *Chaldaic* and *Sanscrit*, and he even asserts, that the two antient *alphabets* of Persia were both manifestly of *Chaldean* origin ³. But we have the strongest proof of the influence of the Chaldaic literature in Persia in the *Babylonian Inscriptions*, which will be produced in the present work; and besides, we have no occasion, either for the reign of Semiramis, or the conquests of Cyrus, Darius, or Alexander, to bring Babylonians to *Persia*, and to *India* itself. The *Chaldeans* were the most celebrated astrologers of the antient world ⁴, so that a Chaldean and an astrologer became synonymous terms. By these means they

also by the *Indians*, their neighbours on the east. In the *Sanscrit*, *Parasah* signifies a Persian, and a horse, or a horseman. The Germans also, who have derived so many words from the Persian, call a horse *pferd*, which manifestly comes from *Pars*, or *Parth*. Thirdly, were not the Persians also called $A_{\chi\alpha\mu\beta\nu}$, and does not Mr. Wahl himself allow this word to be derived from *agem*, in the plural *agemian?* Now this is originally Arabic, as the letter *ain* shows; consequently, a name given to the Persians by the Arabians, their neighbours, just as *Pars* or *Parsa* by the Chaldeans.

¹ See Mem. de l'Acad. des Inser. tom. 5. p. 391.

² I had the patience, says Jones, in his Dissert. on the Persians, to read the list of words from the Pa-zend in the appendix to the Ferhenghi-gihangiri. This examination gave me a perfect conviction that the Pehlevi was a dialect of the Chaldaic, and of this curious fact I will exhibit a short proof, &c.

³ Ibid. BAYER also maintains that the *Peblevi*, which he calls Parthic, is derived from the Assyriac alphabet, called *Estranghelo*. See Act. Erudit. Jul. 1731.

* Τέτο μέντοιγε διαβεβαιώσαιτ' ἄν τις προσηκόντως, says Diodorus, ὅτι Χαλδαῖοι μεγίσην ἔξιν ἐν ἀσρολογία των ἀπάντων ἀνθρώπων ἔχεσι, καὶ διότι πλείσην ἐπιμέλειαν ἐποιήσαντο ταῦτης τῆς θεωρίας. Biblioth. Histor. lib. 2.

introduced

introduced themselves at all foreign courts, and to all the sovereigns of Asia, just as the Bramins at present by astrology and fortunetelling find access to the courts of the sovereigns beyond the Ganges, after having long before acquired the like influence in Hindustan'. Thus the Chaldaic religion and tenets were propagated at the same time with the Chaldaic sciences. We are told by Xenophon, that Cyrus first introduced the religion of the Magi, or wise men, whom he became acquainted with at Babylon, among his countrymen, the Persians, who till that period had not even had temples, but, like other nations in a state of infancy, used to offer up sacrifices in the open air, on the top of their highest mountains 2. And in regard to India, we have the recent testimony of an ingenious Englishman, who has made curious researches respecting the antient mythology of that country, and found the names of most of the Babylonian deities in the antient Sanscrit books, many of whom, he says, are to this day worshipped in India 3. I shall only beg his leave to observe, that these names have not been introduced into the Chaldaic from the Sanscrit, but into the Sanscrit from the Chaldaic; for the Chaldaic idiom, like the Arabic, can produce the root or origin and cause of each of its words. Thus, for instance, the word Parasab, which that gentleman quotes as a Sanscrit word, and by which, as he says, the Persians are denoted on account of the excellence of their horses, may be used in the Sanscrit, but it is originally Chaldaic and Hebrew. It is derived from paras, פרס, which signifies to divide the hoof, from which comes parasab, פרסרה, division of the hoofs, or hoof, and Pharas, pro, Persia, or a Persian.

I could

¹ Sce Dr. Buchanan's Dissert. Asiat. Res. vol. 6.

² Xenophon. Cyropæd. Z. and H.

² WILFORD on Egypt from the antient Books of the Hindus. Asiat. Res. vol. 3.

I could here adduce several other words, which Mr. WILFORD, and others who have written on this subject, believe to be pure Sanscrit; which, however, are either Persian, or Chaldaic, and Hebrew. Nay, when future researches shall make us better acquainted with the Sanscrit language, I fear that a number of them, now supposed to belong to it, will be found borrowed from other idioms, and chiefly from the Persian—a circumstance which will considerably diminish its pretended antiquity. Thus, though its partisans maintain, that the *Persian* was derived from the *Sanscrit*, it may be asked, why are the Persian words always more simple and regular than the Sanscrit of the same sound and signification? Are not the simplicity and regularity of a language a proof of higher antiquity than the complex and corrupted language'? And, if the Sanscrit was introduced into Persia, why do we not find the Devanagari, their most antient characters, with which the Sanscrit was expressed, on the antient monuments of Persia, before it had its own characters, as, for instance, on the ruins commonly called of Persepolis, where we find those celebrated inscriptions in unknown characters, the most antient to be found in *Persia*, and which have no resemblance to any character of India? And why have the Hindoos themselves inscriptions on their antient pagodas in characters which they do not understand 2?

I shall not proceed further towards the east, though several vestiges, perhaps, of Assyrian literature and arts might be found far

beyond

¹ The Sanscrit is a very compound language, says Mr. MAURICE, and delights in polysyllables. Ind. Antiq. vol. 7. on the Literat. of the Anc. Ind.

² As at *Mahavali-puram*. See Chambers's Account in the Asiat. Res. vol. 1. Sir William Chambers supposes, with reason, they might be in the *Pali* character. It is to be wished we may soon obtain in Europe genuine copies of them.

beyond the Ganges and the Imaus, but return to the west, and observe, that the Arabic language, that celebrated dialect, which at present extends over half Asia and almost all Africa, and in strength and copiousness is inferior to no other language, is a daughter of the Chaldaic. I shall not prove this by the history and the traditions of the Arabians themselves, who pretend to be the descendants of Ismail, the son of Abraham, the Chaldean; a slight comparison of the grammar and structure of both languages will prove that the Arabic approaches much nearer to the Chaldaic, than to the Hebrew.-In like manner the Geez, or the most antient language of the Abyssinians, in which their books are written, has the greatest affinity to the Arabic; at which, considering the small extent of sea, as Bruce observes, that divides this country from Arabia, we need not wonder 2, so that we may clearly see how the Assyriac language was gradually extended from Babylon to the centre of Africa and the very sources of the Nile.

But the clearest proof of the influence, which the Chaldaic literature had in Arabia, appears in their numbers, for which, like the Greeks, they often use alphabetic letters instead of cyphers; and also by the names of the days of the week, which were used among the antient Arabians, called *Homerites*. Both show their Assyriac origin, being exactly equal in number, and having the

regulis grammaticalibus comprehenditur; cædem fere conjugationum sunt formæ, eadem pluralium sanorum et fractorum ratio, ut qui illam...calleat, hane nostram nullo negotio addiscere possit. Ludolf. Hist. Æthiop. lib. 1. cap. 15. et in Commentar. ad eundem lib. Cum qua (Arabica lingua) in grammatica maxime convenit. Quippe in verbis eædem pene reperiuntur conjugationes, carumque significationes, nec multum abludit conjugandi ratio, &c. quare qui unam intelligit, facile capit et retinet quæ de altera dicuntur.

² Bruce's Travels in Abyssin. vol. 1. p. 425.

same order as the *Syriac* alphabet; which proves that they were not only acquainted with, but also used it. The same order of the alphabet is still common among the Arabians of *Marocco*, at the western extremity of *Africa*, who, being now so far separated from their brethren, the *Oriental Arabians*, and from their antient neighbours, the *Chaldeans*, must have been in possession of this alphabet at a very early period.

What further proves the influence of the Chaldaic literature in Arabia, is the *Cufic* writing, the most antient of all the kinds existing, and of which few written monuments remain. It was introduced before the Mahometan religion by a *Chaldean*, named Moramer, and was called *Cufic* from *Cufa*, a city of *Chaldea*. The modern alphabets *neski*, *talik*, *divani*, and others, of which the *Arabians*, *Persians*, *Turks*, *Tartars*, and *Malays* make use, sufficiently evince their Chaldaic origin, the *Cufic* being not only invented in *Chaldea*, but an imitation also of the *Estrangbelo*, an antient *Syriac* alphabet, of which we shall speak more hereafter.

A greater difficulty is to determine, whether the *Homeritic* alphabet, the oldest which the Arabians possessed, and which has hitherto been sought for in vain, resembled in its shape the *Syriac*? Had it been the same with the *Persepolitan* characters, as a German author believed 2, we might easily discover from what nation it derived its origin; but as this author brings no proofs of what he asserts, there is no reason, why we should adopt his opinion. We

A precious one I lately saw at the *Bodleian* library at *Oxford*, containing several chapters of the *Coran*; written on parchment, and of high antiquity. Few libraries in Europe contain such *Cufic* fragments. The Bodleian library also contains two copies of the *Kammua* of the *Talapoins*, written on gilt palm-leaves, and five *Mexican* hieroglyphic paintings.

² The author of the dissertation De Fatis Linguarum Orientalium, in MENINSKY's new edition—(Mr. IENISCH.)

can only infer from the facts above mentioned, that it was probably derived from Assyria; and this seems to be confirmed by a curious manuscript treatise on these characters, written in Arabic, and preserved in the Imperial library at Vienna, to which Mr. Adler called the attention of the learned after his return. In this treatise the most antient characters of the Homerites are called Suri, or Syriac, and are said to have been deduced from the Syriac writing, and to approach near to it in form '.

That the land of Canaan, or Palestine, and Phænicia also belonged in antient times to Assyria, is proved by the testimony of antient authors. Syria, says Pliny, quondam terrarum maxima et plurimis distincta nominibus. Namque Palæstina vocabatur qua contigit Arabes, et Judæa et Cæle, dein Phænice, et qua recedit intus Damascena, ac magis etiamnum meridiana Babylonia; and if we can believe Strabo, a professed geographer, the name of Syria extended antiently from Babylon to the Black Sea. The inscription, therefore, which Darius Hystaspes caused to be erected at the Bosphorus, was not only in Greek, but also in Assyriac, which would not have been the case, if the Chaldaic language had not been in use as far as these countries. The Phænician or Cananean language also clearly proves its Babylonic origin, being merely a dialect of the more antient Assyriac, and even the Samaritan alphabet,

^{&#}x27; See Mr. Murr's, of Nürnberg, Journal, vol. 15.

² Hist. Nat. lib. 5. cap. 13.

³ Δοκεῖ δὲ τὸ των Σύρων ὄνομα διατειναι ἀπὸ μεν της Βαθυλωνίας μέχρει τε Ἰσσικοῦυ κόλπε; ἀπὸ δὲ τέτε μέχρει τε Ἐυξείνε το παλαιόν. Lib. 16.

⁴ ο δε Δαρείος.... Θηησάμενος τον Βόσπορον σήλας έσησο δύο επ' αὐτῷ, λίθε λευκοῦ, ενταμών γράμματα, ες μεν την 'Ασσύρια, ες δε την 'Ελληνικά, έθνεα πάντα όσαπερ ηγε. Herodot. lib. 4.

⁵ See Bochart in his Canaan, where he has carefully collected whatever remains of the antient Phanician and Punic languages.

which is the same as the *Phænician*, and which was adopted by the Pelasgians, the Ionians, the Arcadians, and the Etruscans, has, as still appears by coins, a curious resemblance to the Babylonian inscriptions, of which specimens will be given in this work. For the letters, like them, seem to be nail-headed, and several of them evidently appear to be derived from these Babylonian prototypes, as we shall show hereafter. As the Scripture no where mentions that the Samaritan alphabet was invented by Moses, we may believe it to be derived from the Babylonian characters, since we find them first employed in Syria; and there is no reason for ascribing to others what may be found at home. Whatever be the case, we clearly see how the Chaldaic language and literature were gradually extended towards the west, since it is certain that Phænicia sent numerous colonies to Africa and Europe, some of which penetrated to Spain and Sicily, as is attested by many of their inscriptions and monuments discovered in modern times. Nay, if we can give credit to a learned professor, who has made profound researches in regard to the writing of the different nations of the globe, the Aramean or Chaldaic-Phænician alphabet is the foundation of most of the rest, and has never been abandoned, unless when necessary to do so to express new sounds, which several idioms possess . The Assyrian language and literature, therefore, in the earliest periods was widely diffused towards the east as well as the west, and is proved to be not only the oldest, but also the most extensive of any.

Arbitror, in plerisque alphabetis Aramæum seu Chaldæo-Phænicium facere fundum, nee ab eo discessum fuisse, nisi ut nova signa intersererentur ad novos sonos, quibus populus quisque utitur, designandos. Büttner Brevis Exposit. Alphabetor. tom. 7. novor. Commentar. Götting.

CHAP. III.

SCIENCES.

HAVING treated of the antiquity and extension of the Babylonians, I shall now speak of their sciences; not so much to show that they were a learned nation, for this is so fully acknowledged that in dictionaries the word Chaldean may be found as a synonyme for learned ', but rather to prove that their learning was not borrowed from their neighbours the Persians, or the Egyptians, as some might be inclined to believe. According to the testimony of Leibnitz, Debrosses, Trembley, and others, who have made researches into the nature of languages, they are the only, and the surest guide, in regard to facts of high antiquity, when from the want of sufficient authorities, or the discordance of authors, we are left in a kind of uncertainty or darkness. Of this we have an instance in the controversy, whether the Chaldeans derived their knowledge or science from the Persians, as BAILLY does not hesitate to assert 2, although they were a people of no consideration until the time of Cyrus, while Babylon had long been in a flourishing state, and the very name of Persia, and Persian, is not mentioned

^{&#}x27; Χαλδαΐοι. γένος μαγων πάντα γινωσπόντων. Hesych. Lexic. voce Χαλδαΐοι.

² Hist. de l'Astron. Anc. p. 13.

in the Scripture, till the time of Ezekiel. The Persian language itself may even serve as a proof of their inferiority; for I have already observed, that the very word knowledge, or science, among the Persians, is Chaldaic; and I shall here add, that also the Persian word for a learned man, or doctor, is Chaldaic. Dana, which in Persian signifies a wise or a learned man², is evidently derived from the Chaldaic tana, הנא, a learned man, a doctor; and hence, those Rabbinic doctors, of the first rank, who composed the Mishna, or text of both the Talmuds, the Babylonic and that of Jerusalem, have been called Tanaim, or the Doctors; nor can any body say that, perhaps, the Chaldeans derived it from the Persians, since its root is Chaldaic 3, and so many other Chaldaic words in the Persian language attest the contrary: and as the Latin word doctor has been received from that original idiom, not only into its dialects the Italian, French, and Spanish, but also into the languages of several other European nations, who, as appears, received their first knowledge from Italy, the case was the same in the East with tana. The Hungarians, once an Asiatic people, bordering on Persia, received this Chaldaic word through the Persians, and to this day call a doctor tanito 4. The Turks and Tartars, also neighbours of Persia, through which they received their first culture, employing their usual termination mak, for to know, say dani-mak, or tani-mak 5.

¹ Ezek. 27. ver. 10. They occur only under the name of *Elam*; which, considering the antient language of Persia, called *Zend*, had no *l*, but used, as ANQUETIL attests, in its place an *r*, might be the reason why the Persians themselves called their country *Iran* instead of *Elam*, if this name is not the same with *Aram*, as above said.

² RICHARDSON'S Pers. Diction. also danish-mend, which significs the same, with the usual termination of Persian nouns.

³ It descends from, or is the same with, טנה. ⁴ Pariz Papai Dictionar. Hungar.

⁵ Meninsky's Onomastic.

The Hindoos at Bengal and Bombay, in their language erroneously called Moors, call knowledge danish, and knowing, or sensible, danishmend; and it is not improbable that the Greek man-tano, μανθάνω, which signifies to learn as well as to teach, may be derived from the same source; for, besides the Greek language having borrowed a great number of words, as is well known, from the Chaldeans, or Assyrians, their neighbours, the first syllable itself is a Chaldaic prefix, by which substantive words are formed; and thus from tana we find derived mathnita, καταια, which, according to the Chaldaic termination, signifies learning or science in Chaldaic, just as mathesis, μάθησις, or mathitia, μαθητεία, according to the Greek termination, in Greek.

From Chaldea, therefore, the first learning was conveyed to Persia, and not from Persia to Chaldea, as the French author above quoted asserts. The Chaldaic word used for learning proves whence the learning of the Persians was derived, in the same manner, for instance, as the Chaldaic word rakam, Do, to embroider, confirms that the art of embroidery first came from the Chaldeans to the Arabians, and was by them transmitted to Italy and Europe. The Italian word ricamo, embroidery, indeed, is directly derived from the Arabic rakam; and history, as well as embroidered monuments of the Arabians still existing 2, attest, that this art was brought to Sicily and Germany by the Saracens; but as the word is originally Chaldaic, and as the Babylonians were so famous for embroidery 3, we may safely conclude, that the Arabians learned it from their antient

¹ See the Vocab. Moors and Engl. in Hadley's Gram. 4th edit. Lond. 1796.

² As at Palermo, Nüremberg, Lüneburg.

³ Colores diversos pictura intexere, says Pliny, Babylon maxime celebravit, et nomen imposuit. Hist. Nat. lib. 8. cap. 74.

tient neighbours; and, perhaps, also the *Hebrews* themselves, who had embroiderers for their tabernacle, called from the same root rokem, cap, may have received this art from their ancestors the Assyrians or Babylonians.

But we have still stronger proofs than etymologies to attest the high degree of culture, to which the *Babylonians* had attained in the remotest ages, and long before the *Persians* flourished, by only taking a view of the structure of their capital, the most antient of the world, and, according to Pausanias, the greatest of all which the sun ever beheld ²; a city so celebrated, that its walls and hanging gardens were reckoned among the seven wonders of the world—It was built in the form of a square, the sides of which looked towards the four cardinal points, and was intersected by the *Euphrates*, which ran through the middle of it, dividing it into two parts, the eastern and the western ³. The streets were all straight, and regularly arranged; some parallel to the *Euphrates*, which flowed from north to south, and others crossing the former at right angles, and leading on both sides to that large river ⁴.

The same regularity is observed in that flourishing empire of Asia, situated in the most remote part of our continent, and one of the oldest in the world. The greater part of the towns in *China*, says Du Halde, resemble each other in figure. They are all

and Martial:

Non ego prætulerim Bahylonica picta superbe Texta Semiramia quæ variantur acu.

³ Diodor, Sic. Biblioth. lib. 2. Strabo Geogr. lib. 16. Bochart, Phaleg. lib. 1. cap. 12.

⁴ Herodot. lib. 1. Diodor. Sic. lib. 2. Boehart. Phaleg. lib. 1. cap. 17, &c. squares,

squares, formed by four straight walls which unite at right angles. The Chinese follow this rule as far as they can, and the walls of their towns look towards the four cardinal points, or nearly so. The case is the same with their houses, the front of which must always look towards the south 1.

As to *Babylon*, not only the town itself was square, but also the famous temple of *Bel*, which stood on the east side of the river, and, considering the regularity with which the city was laid out, must also have looked towards the four cardinal points, like all the other quarters into which this immense city was divided ².

It is curious to observe, that the antient temples of the *Greeks* still extant are formed like the temple of *Bel*. The temple of *Segesta* in Sicily, as well as those of *Juno* and *Concordia* at Girgenti, and that of *Minerva* at Syracuse, which I myself have visited, are of a square figure, and look towards the four cardinal points. The temple of the *Sun* at Palmyra must have been square, and have faced the four cardinal points, as appears by the plan of it published by Wood 3.

The temple built by Solomon, as well as that built by Esdras and Nehemiah after the Babylonian captivity, were likewise of a square form, and looked towards the four cardinal points 4. Nay,

La plus part des villes de la Chine se ressemblent; ce sont autant de quarrés oblongs, formés par quatre longs pans de murailles tirées au cordeau et unies à angles droits...ils observent cette regle le plus qu'ils peuvent, et alors les murailles regardent les quatre points cardinaux, ou peu s'en faut. Il en est de même de leurs maisons, qui doivent toujours regarder le sud. Descript. de la Chine, tom. 2. p. 8.

² See in the Univ. Hist. vol. 3. the Hist. of the Babylonians.

³ Ruins of Palmyra, otherwise Tadmor, plate 3.

⁴ Ezek. chap. 40 and 41. Talmud. Tract. מדות. Walton Prolegom. ad Polyglot. p. 35 et seq.

even the Tabernacle of Moses and the Atrium were square, and directed towards the same parts 1.

Whether this quadrangular form of the temple of *Bel*, and of *Babylon* itself, was an imitation of more antient buildings, as, for instance, of Nineven, which we are told by Diodorus formed a parallelogram, I shall not pretend to determine ². The *Tower* of *Bel* was certainly not an imitation of these, being of a more antient construction; and the same, no doubt, with the tower of *Babel*; for the Scripture no where relates, says Bochart, that this tower was destroyed ³. No antient author speaks of two towers erected at *Babylon*, or in its neighbourhood; nor is it probable that two buildings of such an immense size should be built on the same spot, one after the other.

Kircher, indeed, an author of the last century, asserts, that Ninus and Semiramis built another tower a hundred years after the first was destroyed 4. But as he does not produce a single testimony in favour of his assertion, neither the destruction of the first tower, nor the building of a second, is proved by it.

This tower then, built of bricks and bitumen⁵, just as Moses relates of the tower of Babel⁶, was likewise of a square figure; and

³ Exod. 36 and 38.

² Nineveb, which Ninus ordered to be called after his name, as Diodor. Sic. relates, seems derived from Nin, p., a son, which was the name of Ninus, the son of Belus; and from neveb, come, a place of abode, or a habitation. The genitive before the nominative is of no consequence, as in Hebrew and Chaldaic the words are often transposed, and also duplicate letters omitted. Thence, instead of Nin-neveb, there may be Nineveb, just as Babel instead of Bab-bel.

³ Phaleg. lib. 1. cap. 9. ⁴ Turris Babel. lib. 2. cap. 3.

⁵ Έξ ἀσφάλτε κὰι πλίνθε. Diodor. Sic. lib. 2.

Gen. chap. 11. Bochart. lib. eit. cap. 11.

being in the centre of *Babylon*, and of the temple above described, there is every reason to believe, that its four sides were in like manner turned towards the four parts of the world; a form exceedingly convenient for an astronomical observatory, for which it was employed. Its seven or eight towers rising above each other, grew narrower in proportion to their height, so as to have a pyramidal appearance, and therefore it is called by Strabo a square pyramid.

Now, if we turn our view to the east of *Babylon*, we find not only on this side the Ganges, that every *Indian* pagoda or temple is furnished with a very high pyramidal tower, after the form of the *Egyptian* pyramids ³, and, what is more remarkable, that the pagodas of *Deogur*, which exhibit the earliest stage of *Hindoo* architecture, are simple *pyramids*, without any light whatever within ⁴, but that even

- Our modern observatories, when the circumstances permit it, are built in the same way. Thus, the new and elegant observatory at Oxford faces exactly the four cardinal points.
- ² Πυραμλς τετράγωνος, lib. 16. The number seven seems to have been sacred amongst the Chaldeans, in the same way as it was afterwards amongst other nations, in honour of the seven planets, over which they believed that seven angels, or Cahirian deities, presided. And therefore they may have built seven towers. In the eighth, says Herodotus, was the temple of Belus. This eighth tower represented, perhaps, the asman, which signifies eight in Chaldaic and Hebrew, and denoted the heaven, as the word asman, heaven, in Persian seems to prove, which is better derived from asman than from hashamaiim. See Jablonsky's Pantheon Egypt. Prolegom.
- ³ Chaque pagode a une tour de forme pyramidale, ou une pyramide fort élevée, dans la forme de celles d'Egypte. LE GENTIL Voyage dans les Mers des Indes, tom. 1. Paris, 1779, p. 160 et 219.

^{*} Hodges's Views in India.

beyond the Ganges, the largest and most celebrated temples in the kingdom of Ava and Pegu are generally in the form of a pyramid. The Shoe-madoo, or great temple at Pegu, says Colonel Symes, is a pyramidal building, composed of brick, and without excavation or aperture of any sort. Many of these temples, as we are told by Dr. Buchanan, are from three to five hundred feet high; and in China, according to the testimony of Du Halde, one or more towers, remarkable for their elevation, consisting of from seven to nine stories, may be seen in the most frequented places of every town. These stories go on decreasing as they rise; and thus the tower of Nan-king, the most famous of all, has nine stories, and grows always narrower as it rises.

If we turn towards the west of *Babylon*, we shall find the *Egyptian* pyramids to have a square base, and to be nearly the same height as the tower of *Bel*, among which those of *Sakbara*, which are more antient than those of *Ghize*, are also built of bricks ⁵; they look towards the four cardinal points ⁶, and were originally designed for

- * Symes's Embassy to Ava, chap. 5.
- ² Buchanan on the Relig. and Literat. of the Burmas. Asiat. Res. vol. 6.
- ³ The number nine is as sacred among the Chinese since the appearance of the Lo-shu on the back of the mystic tortoise, as the number seven was amongst the antients from the seven planets.
- ⁴ On voit dans les endroits les plus frequentés de chaque ville une, ou même plusieurs tours, dont la hauteur et l'architecture sont très belles. Ces tours sont de neuf étages, ou du moins de sept. Celle de la ville de *Nauking*, la plus celèbre, a neuf étages. Du Halde, tom. 2. p. 8. cit. et p. 93.
 - ⁵ GROBERT, Description des Pyramides. Paris, an. 9. 4to. p. 7.
- ⁶ The great pyramid, according to the latest observations of the French in Egypt, was found to have 19' 58" declination to the west. Grobert, p. 116.

mausolea

mausolea of the Egyptian sovereigns, as the Babylonic pyramid was for Belus.

the inventors of astrology; that astrology is the principal study of the *Indians* as well as the *Chinese*; that the same division of the zodiac, and of the day, as was used two thousand years ago at *Babylon*, is still used in *China*; if we call to mind also, that *Semiramis* extended her arms in the remotest times, not only towards *India*, but also, if we can credit Diodorus Siculus, to *Egypt* and *Ethiopia*; or that Sesotris, king of *Egypt*, conquered Asia far beyond Babylon and Chaldea; in a word, if we consider the vicinity and natural situation of *Chaldea* and *Egypt*, ought we not, in opposition to Newton, to believe, that the *Egyptian* pyramids, as well as the *Indian* and *Chinese* temples and towers, were derived from that antient pyramid, tower, and temple of *Babylon*, which lay between Egypt and India, and in which we find the peculiarities of both united ²?

But the opinion that the *Egyptians* were not the inventors of pyramids may, perhaps, be better supported by etymology. I know that a learned French Orientalist, in an ingenious disquisition, just published on that subject, at *Paris*, has endeavoured to prove their derivation from the *Arabic* word *baram*, sacred 3. But on casting a look towards the burial place of the first king of

Diodor. Sic. lib. 1. Strabo, lib. cit. According to CTESIAS, NINUS had also a high pyramid for his burial. The tomb of C. CESTIUS at Rome is built after the model of the Egyptian pyramids; and thence, perhaps, it may be that the cypresstrees, being of a pyramidical shape, became an emblem of mourning, and were planted at the burial places, as one may see to this day at Constantinople, and in many other places.

2 Chron. of Anc. Kingd. amended, p. 210. ct seq.

³ Sylv. DE Sacy Observat, sur le Nom des Pyram. Extr. du Magas. Encycl.

pyramid gave the first example of such pyramids to the neighbouring country of Egypt, and, with the building, the name also '. It is certain that the Assyrians, and the Hebrews, their descendants through Abraham, must have had some word in their language to express a pyramid; and if they had no appropriate appellation for that purpose, we must endeavour to trace out by what name a pyramid might be called either in the Chaldaic or the Hebrew. The Arabians, indeed, who are now in possession of Egypt, call those pyramids baram, (with a be), which according to its root, as given by Golius, must signify a very antient monument 2. But as the settlement of the Arabians in Egypt was much posterior to the pyramids, this denomination proves nothing; and, therefore, we must endeavour to find one more original.

Those conversant with both the above languages, will admit, that the most common, and almost only name in *Chaldaic* and *Hebrew*, will be עמוד, *Amud*; or with a *kibbutz* instead of a vau, *Amüd*, a column, a pillar; for that is the only name for a pyramid, unless we employ tamar, חמר, a palm-tree, by which houses were commonly supported in *Babylon* 3, or some other word much less

The most antient pillars in the Egyptian temples bear, as POCOCKE observes, a great resemblance to palm-trees; and their capitals are made in imitation of the top of that tree, when all the lower boughs are cut off. Descript. of the East, Lond. 1743. vol. 1. p. 217. The Corinthian order of the Greeks, whose masters were the Egyptians, strongly resembles a cut palm-tree.

¹ Turris Babel, cit. lib. 2. cap. 7. ² Lexic. Arab.

³ In Babylonia propter lignorum penuriam e palmarum trabibus et columnis ædificia faciunt. Quippe regio, magna ex parte nuda, nil fert præter frutices, et palmam, quæ in Babylonia....permulta est. Strabo Geogr. lib. 16.

in use than amud'. Amud is the very word employed in Scripture, where it speaks of the column of fire, which preceded the Israelites in the night time through the desert; a column which, according to the physical laws of gravity, must have been pyramidal, like the flame of a candle, or of any other burning body exposed to the air. Chemists, indeed, to represent fire, have from time immemorial employed the hieroglyphical expression of a pyramid in this manner Δ ; and Ammianus Marcellinus, quoted by the learned De Sacy himself, says: Pyramides sunt turres ab imo latissimæ in summitates acutissimas desinentes. Qua figura apud geometras ideo sic appellatur, quod ad ignis speciem, τέ πυρος, ut nos dicimus, extenuatur in comum'; and the Scholiast of Horace calls the pyramids regum Agyptiorum sepulcra ingenti mole constructa, et in cacumen educta in modum flammæ surgentis, unde et nomen acceperunt 3. Now if we consider that the term pyramid was communicated to us by the Greeks, who adopted several other words from the Chaldeans 4, ought we not to conclude, that they received from this source amud, or amud, a column; which being not a common one, but pointed like a column of fire, and the compounding of words being

¹ See Taylor's Hebr. Concord. Buxtorf's Lexic. Chald. and others. In the Arabic, likewise, the common name for a column is amud, or amid, for vau and jed are in all the three languages continually changing.

² Lib. 22. cap. 15. ³ Apud Jablonsky Pantheon Ægypt. Prolegom.

^{*}I shall only produce two, besides $\frac{1}{5}$ already mentioned; אָל אַנּסָּ, the sun, is manifestly derived from el, אל, the common name of the sun amongst the Jews themselves, when they relapsed into idolatry. $M_{\eta \eta \eta}$, which was the antient name of the moon, descends from meni, מני , the name of the moon among the Phænicians; and that the Greeks derived their first literature from that quarter, is proved by their own testimony, and by the names of their alphabet, which are Syriac or Chaldaic.

common to the Greek language, they prefixed to it the word $\pi \tilde{\nu} \rho$, fire, in order to denote or express something respecting its use, form, or object, and thus gave us $\pi \nu \rho \alpha \mu i \delta \sigma$, a pyramid :

This opinion is confirmed by what Diodorus says, that the sun, $\eta \lambda \iota \iota \iota \varsigma$, was formerly called by the Greeks $\pi \ddot{\nu} \rho$, $fire^2$; that Bel, among the Chaldeans, was also the sun^3 ; and that the antient pyramid of Babylon was either built by Bel, or dedicated to him; or, if the Greeks adopted that name from the Egyptians, ur, νr , being the name of fire in the Chaldaic, and P, the article which the antient Egyptians prefixed to each masculine word; if we suppose that the Babylonians called a pyramid ur-amid, why might it not be called pur-amid by the Egyptians, and after them $\pi \nu \rho \alpha \mu i c$, $\pi \nu \rho \alpha \mu i c c$, by the Greeks 4 ?

- In the same way, we find tamarur, תמרור, in Jeremiah, chap. 31. ver. 21. which is translated pyramid. The Jews can give no reason why ur is joined to tamar, a palm-tree, or a column; but ur signifying fire in Hebrew, there is no doubt tamarur. signifies a fire column, or a column pointed like fire, just as amud-esh signifies the column of fire in the Desert, only with other words.
- ² 'Ονομασθήσεσθαι γὰρ από των ἀνθρώπων ἥλιον μεν το πρότερον ἐν ἐρανῷ πῦρ ἱερον καλέμενον. Diodor Sic. Biblioth. Hist. lib. 3.
- ³ Voss de Idololatr. Vitringa Comm. in Isai. 46. apud Bruker Hist. Crit. Philos. de Philosoph. Chaldeor. lib. 2. cap. 2. History of the Babylonians, seet. 2. in the Univ. Hist. vol. 3. Pira was also the name of the sun amongst the Egyptians, a name not unknown to the Greeks, as it appears from Lycophron, who in his Cassandra calls the sun πέρρα. See Penn's Dissert. in Sir William Ouseley's Oriental Collect. vol. 1. numb. 2.
- ⁴ Whoever is not fatisfied with this etymology may also derive the Greek πυραμίς, from ram, ¬, or ramah, ¬¬, the most common name amongst the Hebrews and Chaldeans for high, elevated, or an elevated object, with the Egyptian article pi prefixed. Thence Ramah was called, a place situated near Jerusalem.

But we have from *obelisks* a further proof of what has been said. It is known that Semiramis, whose reign Frerer places nineteen hundred years before our æra 1, erected an obelisk of stone at Babylon². This magnificent pillar, one hundred and thirty feet high, which stood in the principal street, or cor/o of that capital, just as the fine obelisk at Rome, at the entrance of the Porta del Popolo, and afforded a grand spectacle to the passengers, was not brought from Egypt, which abounded with stone and marble, but from a quarter entirely opposite. It was cut out in the mountains of Armenia, on the north, Assyria being a flat country, and entirely destitute of such materials 3. Besides, obeliskos is not an Egyptian appellation; at least it has not yet been found among the remains of that language; it was received from the Greeks, and its termination proves it. For iskos is the Greek diminutive: hence βασιλίσκος, which signifies a little king, from βασιλέυς; παιδίσκος, a little boy, from παῖς; κυνίσκος, a little dog, from xuan, &c. Besides, the Greeks used to prefix an o to words which originally had none. Thus, instead of nam, in Persian, nama, in Samskrit, and nomen, in Latin, a name, they have made ονομα; instead of dend, in Persian, denda, in Samskrit, dens, in Latin, a tooth, they have made οδες οδοντος; and the case seems to have been the same with o-bel-iskos. For, if we consider that Bel denoted the sun, among the Babylonians 4; that the obelisks, according to

¹ Mem. de l'Acad. des Inscr. tom. 5. cit. p. 391.
² Diodor. Sic. lib. 2.

³ Herod. lib. 1. Soit is still, according to the testimony of Niebuhr, Reisebeschr. nach Arab. vol. 2. pag. 288.

⁴ On le voit (Baal or Bel) comme nom du Soleil, says Court de Gebelin, sur les medailles Phéniciennes de Cadiz, et de plusieurs autres villes d'Espagne. Monde Primitif, vol. 4. Hence Baalbek in Syria was called by the Greeks Heliopolis, and according to Macrobius, Assyrii Heliopoli solem magna pompa coluere sub Jovis Heliopolitani nomine. Saturnal. lib. 1.

the clear testimony of *Pliny*, were dedicated to, and represented the sun^{-1} ; and that the oldest obelisk we know of was erected by *Semiramis*, the successor of Bel, and very likely in honour of him, at Babylon; there seems scarce any doubt that $o-\beta \epsilon \lambda - \iota \sigma \kappa o \epsilon$ signified diminutively Bel, or sun, and, consequently, that the *pyramids*, as well as the *obelisks*, of Egypt, were derived from the neighbouring and more antient country, $Babylon^2$.

To what has been said I beg leave to add one proof more, by observing, that besides Babylon in *Chaldea*, there was a Babylon also in *Egypt* ³, and, that this *Babylon*, as Strabo relates, was built by some Babylonians who, coming from *Chaldea*, had received permission from the sovereigns of Egypt to settle in that country; or, according to Diodorus Siculus, it was built by some captives from *Babylon* on the *Euphrates*, who, having made their escape to that neighbouring country, and a hill being given them to inhabit, they built a city on it, which, from their native place, they called *Babylon* ⁴.

It was in the neighbourhood of this city, which at present is called Old Cairo, and is a suburb of the capital lately taken by the

¹ Solis numini sacratos; radiorum ejus argumentum in effigie est. Plin. Nat. Hist. lib. 36. cap. 14. See Zoega's learned work, De Origine et Usu Obeliscorum, just published at Rome.

The first pyramid was erected, according to Herodotus and Diodorus, by Cheops, and the first obelisk by Sesostris, consequently a long time after Semi-Ramis; whose existence, instead of being fabulous, as the learned Mr. Maurice seems to suspect, is proved by the Indian puranas themselves, in which Mr. Wilford recently found not only the name and history of Semiramis (Semirama), but also of Belus, Ninus, &c. See his Dissertation on Semiramis, from the Hindu Sacred Books. Asiat. Res. vol. 4.

³ Ptolom. Geogr. lib. 4. Strabo Gcogr. lib. 17.

⁴ Diodor. Sic. lib. 1.

British arms, that the pyramids of *Memphis* were erected; for they could be seen from *New Babylon* ¹; and thus also *Heliopolis*, or *the city of the Sun*, where the first *obelisks* were erected, and where the *sun* was first worshipped ², stood quite near to that *Babylonian* colony. These three towns were situated in the eastern extremity of *Egypt*, that is to say, on the road to *Chaldea*. At any rate, it seems that both the *obelisks* and *pyramids* in *Egypt*, were an imitation of the two most antient monuments of this kind with which we are acquainted, those of *Old Babylon*; and, consequently, as the *Babylonians* were the masters of other nations in astronomy, it would appear, that they were the masters of the *Egyptians* in that department also; and, therefore, that their arts and sciences were extended on this side towards the west, as well as to *Persia*, *India*, and *China*, on the east.

^{*} STRABO, ibid.; and GROBERT, in his last account of the Pyramids of Ghize, says, en face de ce fauxbourg sont les Pyramides de Ghizé.

² Jablonsky prolegom. cit. It seems that the name of Apollo, or the sun, amongst the Greeks, was likewise derived from Bel, otherwise Baal, with an ain; for the Greeks, being unable to pronounce that guttural sound, have substituted for it an o. Thus in the Greek alphabet, which is derived from the Phanician, the o micron stands exactly in the same place where the ain of the Phanician stood, whose shape it also has retained. Besides, what in Chaldea was pronounced like an a, in Syria sounded like o,—as olaph instead of aleph, dolath instead of daleth, &c. If we then join a Greek termination, and prefix the Phænician article ba, we have the A-pollo of the Greeks and Romans, who had no aspirate letters, like the modern Greeks and Italians, their descendants, or did not pronounce them. The same Bel was also called Pul; which we ought not to wonder at, the ain being a guttural sound, sometimes approachiag to a, sometimes to o, and sometimes to u. Thence we find the different pronunciations of Bal, Bol, Pul, just as But, Pot, Fo, in more eastern countries.

CHAP. IV.

WRITING.

We re the instructors of other nations, they no doubt had some kind of letters or characters for noting down their observations. We are informed, indeed, by history, that Callistheres, one of the attendants of the Macedonian hero, sent to Aristotle astronomical observations found at Babylon, when it was taken by the Greeks, of which a register had been regularly kept since about one hundred years after the deluge. Or, if, with Le Clerc, we should doubt the testimony of Porphyrius, we cannot so easily reject that of Epigenes, a very respectable author, according to Pliny, who afferts that the Babylonians had marked down sidereal observations for seven hundred and twenty years, or at any rate for four hundred and nine, as related by Berosus and Critodemus. We also read, that in the earliest periods Semi-rams caused an inscription in Syriac letters (Συρίοις γράμμασι) to be

engraved

PORPHYR. apud Simplic. supracit.

² CLERICUS Indic. Philolog. in Hist. Phil. Orient. Stanleii, voce Sothic. apud Brucker Hist. Crit. Philos. lib. 2. cap. 2. § 1.

³ PLINIUS Hist. Nat. lib. 7. cap. 57. cit.

⁴ Qui minimum Berosus et Critodemus, 490 annorum. Ibid.

engraved on a rock of *Bagistan*, a mountain of Media, stating that she had reached the top of it; and, according to Herodotus, this queen ordered an inscription to be put on her tomb, which was preserved to the time of Darius².

Besides, we learn from Democritus that the Chaldeans, like the antient Egyptians and the modern Indians, had a hierogrammatic or hieroglyphic writing; for he composed a book, Περὶ τὰν ἐν Βαθυλῶνι ἱερῶν γραμμάτων, On the sacred Letters used at Babylon³.

Respecting the nature, form, and shape of these letters no antient author has left us any information. The only characters hitherto produced, are the square *Chaldaic*, still usual among the Jews, and found also at *Palmyra*; the *Cuthean* or *Samaritan* alphabet; the *Estranghelo* or antient *Syriac*, which is likewise called *Chaldaic*⁴; and the *Sahean*, otherwise called *Mendæan* or *Nahathæo-Chaldaic*, which forms a syllabic alphabet, as Norberg attests, and as was long ago mentioned by Abraham Echelensis⁵. Hence Bayer imagined, that the antient *Assyrians* might have used a syllabic alphabet, joining vowels to consonants, like the *Abyssinians*, *Indians*, and other nations. But a writing has at length been found different

^{*} Dionor. Sic. lib. 2. Bagistan seems to prove that the Persian language then was usual in Media, for it signifies in Persian a place allotted for gardens, which agrees exactly with what Diodorus says, of Semiramis having built there a garden (παράδεισον) of twelve stadia in eircumference.

* Herodot. lib. 1.

³ Diogen. Laert. in Vita. See also Bochart Canaan, lib. 2. eap. 17. where it is said, that some thought the *Hebrews* might also have had two kinds of letters; a sacred, the present *Chaldaic*, and a vulgar, the *Samaritan*.

⁴ Nonveau Traité de Diplomat. vol. 1. chap. 14.

⁵ Norberg de Relig, et Ling, Sabæor, Commentat, Götting, tom. 3. Abrah. Echelens, apud Bayer in Act. Eruditor, Jul. 1731.

from all these ', and in shape resembling none of the characters hitherto discovered, excepting those seen on the celebrated ruins of *Chebil-minar* in Persia, the inscriptions on which, says Anquettl, are the only antient literary monuments to be met with in that country; for the *daricks*, or antient Persian coins, exhibit no letters whatever ', and consequently they serve to prove the antiquity of the nail-headed characters. And although the *Babylonian* ones seem to have at the top a shape somewhat different from the *Persepolitan*, this is to be ascribed only to the different workmanship, or different style of writing, as is the case at different periods and in different countries. Thus we may see the same *Persian* characters, as represented a hundred years ago by Herbert, who had no knowledge of our *Babylonian* ones, exactly nail-headed like them ', and antient gems and cylinders found in *Persia* exhibit nail-headed characters exactly of the same kind '.

The reason why the Assyrians used characters shaped like nails may have been arbitrary. Thus we find that the Chinese, at various periods, employed characters of different shapes 5. Under the dynasty of the Cheu, when that great empire was divided into six kingdoms, various sorts of writing were invented, in order that the inhabitants of each might communicate their ideas among themselves, without being understood by the neighbouring kingdoms. Different kinds of characters were devised, some represent-

^{&#}x27; See plate 1.

² Anauetil Recherches sur les anciennes Langues de la Perse, tom. 31. des Mem. de l'Acad. des Inser. p. 436.

³ See Herbert's Travels. London, 1677, fol. p. 142.

⁴ See plate 2.

^{. &}lt;sup>5</sup> Amyot Origine des différentes Sortes de Caractères Chinois. Eloge de la Ville de Moukden. Paris, 1770, p. 127.

ing the leaves of the willow, others the claws of a dragon, others bent rods, or suspended needles, &c. ¹

In the same manner the *Chaldeans* may have adopted the figure of a nail, an object very proper for the purpose. It is well known that the *Romans* used every year to drive a nail into the wall of the temple of *Jupiter*. Clavus annalis appellabatur, says Festus, qui figebatur in parietibus sacrarum ædium per annos singulos ². As letters in those times were rare, says Livy, nails were employed to mark the number of the years ³. The same custom prevailed also among the *Hetrurians*, who used to drive a nail into the wall of the temple of *Nortia*, an Etruscan goddess, in order to mark the number of the years ⁴. It needs, therefore, excite no wonder, if

¹ See An Explanation of the Elementary Characters of the Chinese, by the author, Lond. 1801, p. 22. and following .- A person, who calls himself an occasional Chinese transcriber to his Majesty and the Honourable East India Company, displeased that I would not admit him a partner in my undertaking of a Chinese Dictionary, has published Proposals for a work, in opposition to mine, which he has surrounded with Chinese characters, to make a captivating show, as it seems, of his Chinese learning to the Vulgar, who cannot judge of such foreign figures, but which, however, to the Literati will prove his emptiness, and what they have to expect from him; for he transcribed them from tab. 21. and 23. of the 59th vol. of the Philosophical Transactions; and the Chinese motto, which has no meaning when applied to his Proposals, he transcribed from the 1st vol. of the Mem. of the Mission. of Peking, p. 323. without quoting either the one or the other: to all this he has added a passage of Fourmont, in which he speaks of others as ignorant. So that we may say of this transcribing doctor, in the words of STOBEUS, ² Festus de Verbor. Signifie. Homine impudente nullum animal confidentius.

³ Eum clavum, quia raræ per ca tempora litteræ fuere, notam numeri annorum fuisse ferunt. Livius, Histor. lib. 7. cap. 3.

⁴ Volsiniis quoque elavos indices numeri annorum, fixos in templo Nortiæ, Etruseæ Deæ, diligens talium monimentorum auetor Cincius adfirmat. Livius ibid.

nails were at first employed to supply the place of letters, that letters afterwards imitated the shape of nails. Most of the Roman characters, even, seem to be a mere compound of nails; and though some of them appear to have a rounder shape 2, we find that the Greek, or Etruscan alphabet, whence they were derived, and which exhibit a more antient and original form, were all pointed, and acquired roundness only in the course of time. Thus, to give a single instance, the letter O in the Greek and Roman alphabet, corresponds, by its order, to the letter ain of the Samaritan or Phænician alphabet, from whose shape it was derived 3. Now this is still extant in the *Samaritan* as a triangle, thus Δ , or a compound of three nails; nay, in the most antient Greek inscription we possess, there occurs no other O but in a triangular form, and therefore it is easily to be confounded with the delta, with which it has the same shape 4; and in the same manner the C, which at present is round like a half moon, was, following the Etruscan alphabet, compounded of two strokes thus < , if we adopt the very probable opinion, that the Latin C was derived from the Etruscan K; or, if we pretend to derive it from the third letter of the Greek alphabet, which is gamma (Γ), it was of course angular. But Velasquez has produced an antient Latin coin, in which the C is expressed

As AEIVHL, &c. As BCDGOP, &c.

³ The O in the Nabatæo-Chaldaic syllabic alphabet is likewise a triangle. See Norberg, cit.

⁴ See the boustrophedonic Inscription brought by Abbé FOURMONT from Amyche, and the Greek alphabets in the 1st vol. of the Nouveau Traité de Diplomat. pl. 10. In the Etruscan alphabet published by Gori, there is no O at all; besides, all the letters of that alphabet are pointed.

thus \langle , and according to the *Nouveau Traiti de Diplom*. it is sometimes so, sometimes like a Γ , and sometimes like an L^{τ} .

That the most antient characters of *Persia* resembled *nails*, has been already seen; and that they were derived from *Babylon*, is proved not only by the greater antiquity and culture of the *Chaldeans*, but also by the testimony of Themistocles, noticed by professors Tychsen and Munter in their recent dissertations on the Persepolitan inscriptions, and before them by Niebuhr, in his description of the ruins of *Chebil-minar*, where this traveller very judiciously remarks, that the nail-headed characters to be met with in *Persia* are, perhaps, those antient *Assyriac* letters of which Themistocles speaks ². Or, if the authenticity of these letters should be rejected, we have the testimony of Herodotus, about Darius Hystaspes making use of *Assyriac* characters, and that of St. Epiphanius, that most of the *Persians*, even in his time, besides their own letters, employed characters borrowed from the neighbouring country of *Syria* ³.

But what is still more curious, is, that even the oldest Samscrit characters, which, on account of their antiquity, the Indians believe to have been transmitted from heaven, and which they therefore call devanagari, are manifestly compounded of nail-headed perpendicular strokes; which serves to confirm what has been before said, that the Indians derived their astronomy and literature from

^{*} See the Nouveau Traité de Diplom. vol. 2.pl. 20. Nail-headed tops also appear in the most antient Latin and Greek capital letters.

² Themistoci. Epist. 21. ad Temenid. Tychsen de cuncat. Inscript. Persepol. Rostoeh. 1798, p. 17. Munter Undersögelser om de Persepolitanske Inscriptioner. Kiöbenhavn. 1800, p. 29. Niebuhr Voyage en Arab. vol. 2. p. 130.

³ Χρώνται γαρ οἱ πλεῖτοι Περσών μετὰ περσικά τοιχεῖα καὶ τω σύρω γράμματι. St. ΕΡΙΡΗΑΝ. Ηærcs. 76.

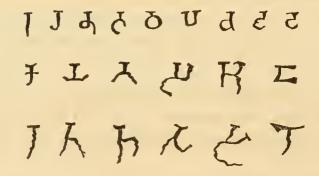
Assyria through Persia, whence they were conveyed by the Bramins to India. The antient Samscrit characters, indeed, exhibited by Mr. Goldingham, clearly prove what I have here afferted; for, in all the inscriptions on the ruins of Mahabalipuram, there is scarcely a character to be seen, which has not a nail-headed perpendicular line

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like the *Babylonian inscriptions*, which ought to be so placed, and not with the head at the bottom, as some might place them ¹. The case is the same in regard to the antient inscriptions of *Keneri*,

JAJNUBTY

exhibited by Anquetil², as also with those of *Ellora*, *Ekvira*, and *Salsette*, published in the *Asiatic Researches* ³, in which, the additional ornaments excepted, all the principal strokes resemble *nails*,



so that we may say, if the more modern Samscrit characters have larger tops resembling the square Hebrew, this change must have

¹ GOLDINGHAM'S Account of the Sculptures of Mahabalipuram; Asiatic Researches, vol. 5.

² Anquetil du Perron Zendavesta, tom. 1. pl. 4. ³ Vol. cit. taken

taken place in the course of time, or that some characters were originally composed of two nails, a perpendicular and a horizontal one. Of this we have a specimen in the antient Samscrit inscription near Buddal, where the third character to the left manifestly appears to be compounded of two nails, a perpendicular and a horizontal one, while most of the rest resemble single nails; so that we may henceforth rather believe the devanagari to be derived from the Babylonic nail-headed characters, than, as Sir Will-LIAM Jones believed, from the modern Hebrew or square Chaldaic.

What I here assert is confirmed by the antient *Tibetan*, styled *Uchen*, in which the sacred writings of Tibet are preserved; for these characters, according to the testimony of the *Lamas* themselves, are derived from the *Samscrit*, and the holy city of *Benares* is held by them as the source of their sciences and their religion ³. Now the *Uchen* manifestly resembles the antient characters of *Mahabalipuram* and *Keneri*. The ground of all the *Tibetan* letters, one or two only excepted, is an upright line with a nail-headed top, as

X U & SI AI NI

and no greater prolongation of the upper horizontal line appears in most of them, than the proportion of a *nail* requires.

These tops the modern *Indians*, it seems, have lengthened or increased so far, that they touch each other. The common characters of India or *Nagri* are now-a-days united by a continued horizontal line at the *top*, just as the common letters of the *Ara-*

Asiat. Research. vol. 1. an inscription on a pillar near Buddal, by Charles Wilkins.

2 See plate 3.

³ Turner's Account of an Embassy to Tibet, p. 281 and 282.

bians in Mauritania, are united by a horizontal line at the bottom ¹. The Indians, when they write, always begin by first tracing out the horizontal line to which they afterwards suspend or attach their letters as they proceed ².

The Samaritan letters, as they appear on some Samaritan coins, with a kind of nail-headed tops, in this way—

may likewise be deduced from the same *Babylonian* source, unless, as others pretend, these tops are to beconsidered as mere ornaments. Mazochi thinks that this form originated from the points made in the brass at each end of the letter before the line was drawn, for thus the *Greek* letters on the antient *Heraclean tables* appear expressed; from thence he thinks the shape of these letters, which the antiquarians call *gemmed*, (gemmatas) was applied also to medals. The *Greek* characters on the medals of Phillip, the *Macedonian*, and of the first kings of *Syria* and *Egypt*, are all thus shaped ³.

The Estrangbelo, or Syriac square character may, perhaps, also have been compounded of nails placed in different directions:

1 ムレン・コー

Among these the seventh character (thet) is remarkable; for it is to be found exactly of the same form in the Babylonian inscriptions

This kind of writing is called in the Arabic manuscript of the Imperial Library, quoted, *Iraki*, or the Chaldaic. See Kircher *Prodrom. Copt.* and Dr. Morton's Tables.

² See upon this the *Alphabet. Brahmanic.* Romæ 1771.

³ Mazochi Commentar, in Tab. Heraeleens. Neapol. 1754, p. 123, 124.

as on other monuments, which contain nail-headed characters; and, what is more singular, it perfectly agrees with the *daleth* of the *Samaritan* and *Phænician* alphabets, which, as any one may see, is a letter derived from the same original, and therefore easily to be confounded.

As to the Abyssinian, either the antient or Axumitic, or the Ambaric alphabet, its original characters, which bear a strong resemblance to several Greek and Roman ones, are likewise nail-headed. The same is also the case with the Kuzuri, or antient characters of Georgia², and with the Runic characters of the North³, which appear nail-headed. On the other hand, the Armenian, and other alphabets, are not nail-headed, though their form is such as might, notwith-standing, be derived from combinations of nails. Thus the Welch alphabet, as communicated by the learned Mr. Owen, and published in Fry's Pantographia, though it consists of angular strokes only, and strongly confirms what has been said about the antient Greek and Roman letters, yet has no nail-headed tops, any more than the Ogam of the Hibernians ⁴.

- * See Ludolf, Grammatic. Amharic. cap. 1.
- ² Sec MAGGI Syntagma Ling. Oriental. quæ in Georgiæ Region. audiuntur. Romæ, 1670. p. 3. The BIBLE was published in this character at Moscow, 1743, in folio.
- ³ These commonly are included between two horizontal lines at the top and the bottom.
- ⁴ See those alphabets in FRY's *Pantographia*; London, 1799, 8vo. a very valuable work, if the many apocryphal alphabets it contains were omitted, and the genuine ones, which are wanting, were inserted.

CHAP. V.

BABYLONIAN BRICKS.

HAVING treated of the *Babylonian* writing in general, it remains to inquire, to what kind of writing the inscriptions on the *bricks*, lately brought from *Babylon*, belong; which is the proper way of reading them; and what may be their contents.

As the country around *Babylon* was deficient in stones, this want was supplied by abundance of earth fit for composing excellent *bricks*. The tower of *Babel*, therefore, according to sacred and profane authors, was built entirely of *bricks*; the temple of *Belus*, the largest of all the antient temples, was built of the same materials; and the *banging gardens*, the famous *walls*, and all the other edifices of Babylon, the *bridge* and *obelisk* excepted, were also of *bricks*. These *bricks* served not only for building, but were employed as the most antient tablets for writing upon. It is well known that the first materials for writing were not paper or parchment, and that many centuries had elapsed before such commodious articles as pen and ink were invented ². The first and most obvious tablet would be the earth itself, and we read, in the sacred scriptures, that

Lucan. Pharsal. lib. 3. 222, seq.

¹ See Herodotus, Diodorus, Strabo, quoted.

Nondum flumineas Memphis contexere biblos Noverat: in saxis tantum volucresque feræque, Sculptaque servabant magicas animalia linguas.

JESUS CHRIST Wrote on the sand ¹. But as this writing would soon be obliterated, to render it more permanent, rocks, or the walls of houses, would be employed, and the pen which would most readily suggest itself would no doubt be a *nail*, or other pointed instrument capable of making an impression upon such bodies. Thus, according to the testimony of PLINY, *bricks* were used at *Babylon* for preserving astronomical observations ².

On this subject Mr. Bryant says, he cannot help forming a judgment of the learning of a people where such materials were employed; "for it is impossible to receive any great benefit from letters when they are obliged to go to a *shard*, or an *oyster shell*, for information ³."

But Mr. Niebuir replies, that he had seen in *Persia*, where there is abundance of marble and sufficient knowledge of letters, inscriptions on *bricks*; that he had found inscriptions still legible after six or seven hundred years; and that the *Babylonian* astronomers, in all probability, inscribed on *bricks* such observations only, as they wished to be preserved from alteration by copyists, or from the injuries of time ⁴.

The *Chaldeans* also might have continued the antient custom of engraving on *bricks*, even when they had better materials for writing upon. Thus we find that the *Chinese*, though well acquainted with writing, and though the use of paper, ink, and pencils has been long known among them, still employ their *abacus* for reckoning, as the *Greeks* and *Romans* did in antient times ⁵; and the *Bramins*

² John 8. 6. ² Plin. Nat. Hist. lib. 7. cap. 57. cit.

³ BRYANT'S Analysis of Ancient Mythol. vol. 3. p. 126.

^{*} Niebuhr Reisebeschr. vol. 2. p. 290.

⁵ MARTIN. Histor. Sinic. lib. 1.

in India, though sufficiently learned, and possessed of a copious alphabet and ciphers, perform their astronomical calculations and mathematical problems without either pen or pencil. For this purpose they use a kind of shells, called by Le Gentil cauris, by means of which, says he, they calculate eclipses of the sun and moon with astonishing speed and accuracy.

The Babylonians then engraved their observations on bricks, as Joshua wrote the law of Moses on stones². For their flat and marshy country not affording stones or wood enough for building, except the palm-tree, and bricks being the only material they possessed, bricks were used for their public monuments and inscriptions. Whether these bricks were inscribed singly, or whether they were united, so as to form columns, or monuments of another shape for writing upon, Pliny does not mention³.

Amongst the *Egyptians*, indeed, (their neighbours) the most antient learning was inscribed on *columns*. The columns of *Hermes*, near *Thebes*, are famous in antiquity; and it is certain that many things were borrowed from them by the Egyptian historians and the Greek philosophers. Sanchoniathon and Manethon made use of them for their histories ⁴. Pythagoras and Plato both read them, and borrowed from them their philosophy ⁵. In *Crete* also there were very antient *pillars* on which was inscribed an account of all the ceremonies practised by the *Corybantes* in their

LE GENTIL Voyage cit. tom. 1. p. 215.

² Jos. chap. 3.

² Lib. cit.

^{*} History of Egypt, book 1. chap. 3. in Univers. Hist. vol. 1. sect. 2.

⁵ Ibid.

sacrifices ¹. In the time of Demosthenes there still existed a law of Theseus written on a pillar of stone ²; and if the Babylonians had no pillars of stone, they must at least have had pillars of brick; for Democritus is said to have transcribed his moral discourses from a Babylonish pillar³. And that pillars of brick were usual in those times, we have the testimony of Josephus respecting two pillars being erected by the descendants of Seth before the flood, one of which was of stone, and the other of brick; which, though not to be entirely depended upon, confirms at least the antient practice of erecting pillars of brick for inscriptions, and for preserving matters relating to the sciences and literature ⁴.

- ¹ Goguet, Origin of Laws, Arts, and Sciences, vol. 1. book 2. chap. 6.
- ² Ibid.
- 3 CLEM. ALEXANDRIN. Strom. lib. 1.
- ⁴ Joseph. Antiquit. Judaicar. lib. 1. cap. 3. These pillars were, according to Josephus, in the land of Siriad, (Σιρίαδα or Συρίαδα according to different copies) which the authors of the Universal History, vol. 4. book 1. chap. 1. sect. 1. believe to have been rather in Egypt than in Syria, because the pillars of Thot, or Hermes, were in Egypt. But it seems more probable that Josephus understood Syria, the country to which he originally belonged, and from which he deduced the origin of nations. The Sabeans in Syria fill derive their doctrine from Seth, whose descendants are said to have been the first who cultivated astronomy. That, Thoyt, Taaut, or Theut, according to different pronunciations, may be derived from Seth; the S being not only in *Chaldaic* and *Syriac*, but also in *Greek*, so frequently changed into T, that Lucian composed a dialogue upon it. The Cabiri, the most antient. gods of the Egyptians, who wrote on pillars what TAAUTUS commanded them, and their father Sidik, are Hebrew or Chaldaic names, as every one knows; and TAAUTUS was, according to Sanchoniathon, a Phanician, or of Syria, and went only afterwards to Egypt. Hermes itself may be a corruption of Ormuz, Ormuzd, or Oromazes.

Besides employing pillars for literary matters, it was an almost universal practice among antient nations to write upon them ¹. The pillars erected by Osiris, Bacchus, and Hercules, in the course of their expeditions, to perpetuate the remembrance of them, were very famous in antiquity. Sesostris, says Diodorus, erected in all the countries which he conquered columns (τήλας) inscribed with the sacred characters of the Egyptians ². Darius Hystaspis ordered to be engraved, in Greek and Assyriac characters, on two columns, the names of all the nations which he commanded ³; and Germanicus saw at Thebes columns on which the different kinds of tribute, raised by Rameses from his subjects, were engraved ⁴.

It is not then to be wondered at, if the writing of the antients was perpendicular rather than horizontal; columns and pillars being much fitter for the former manner of writing than for the latter; and this original way of writing on columns or pillars may be the reason why we find the Babylonian writing preserved on the bricks, of which we now treat, and of which engravings are here given, to be perpendicular, rather than borizontal. This, indeed, seems to have been the most antient manner of writing, as we see from the example of the Egyptians and Chinese. These nations, and, according to Diodorus, the Ethiopians also, wrote perpendicularly from the top to the bottom; and this is the proper direction of the Babylonian inscriptions, as I can prove by gems, which, in the annexed engravings, show that this is the pro-

GOGUET, cit.

² Diodorus Siculus, lib. 1.

³ Herodotus, lib. 4. cit.

⁴ TACIT. Annal, lib. 2. cap. 60.

per position of these monograms, and that the *beads* of the *nails* ought always to be uppermost.

We find then a wonderful conformity among these three antient learned nations, the *Babylonians*, the *Chinese*, and the *Egyptians*. They all wrote perpendicularly; and, that the words of one column might not be confounded with those of another, they separated the columns by parallel lines, as may be seen not only on the *Babylonian* bricks and on antient *Egyptian* hieroglyphical monuments, but also in any *Chinese* book or writing to this day.

The antient *Greeks*, as well as the *Romans*, seem to have been acquainted with this perpendicular mode of writing of the *Chaldeans*; for one of the Latin poets, speaking of them, says

E cœlo ad stomachum relegit Chaldæa lituras.

And the Greeks had a peculiar name for it, as we are told by Festus that they called perpendicular writing tapocon², which Vossius pretends to be derived from the Chaldaic verb hapac (הפך) to turn, or invert³; and if we believe the testimony of Eustathius, the antient Greeks themselves wrote perpendicularly⁴.

It is likewise remarkable that the Syrians still write perpendicularly, like the Babylonians their ancestors. They turn the paper

Tassie's Collection, No. 651 and 15099, in RASPE's Catalogue; and the third, of which I received a copy from Mr. Munter, at Copenhagen, through the kindness of Sir William Ousely, is in the Cabinet of Cardinal Borgia.

² Tapocon Græci soliti sunt appellare genus scribendi deorsum versus, ut nunc detrorsum scribimus. Festus de Verbor. Signific.

³ Vossius de Arte Grammat. lib. 1. cap. 34.

^{*} Ad Iliad. Ψ.

indeed, when they have done, so as to read horizontally; but in writing they begin at the top, and write straight down to the bottom '. The Mongols and the Tartars in China, having derived their alphabet from the Syriac, write also perpendicularly; not from the right to the left, like the Chinese, but from the left to the right, like the Syrians. In this they differ not only from the Chinese, Japanese, and all those nations who make use of Chinese characters, but also from the Babylonians. That the latter read in the way I have stated, appears plainly from a cameo, in Mr. Tassie's collection, with characters exactly the same as those found on the bricks, and which we clearly see, by turning it quite round, were read by beginning at the right and ending at the left 2; and this may be the reason also why the heads of those borizontal nails, which cross the perpendicular ones, are constantly placed to the right, where they began to write, and never to the left ³. The *Persians*, in changing the perpendicular position of the Babylonian nail characters into a horizontal one, seem to have adopted the most natural way in doing so; for the heads of their horizontal nails are all to the left. Now, if we turn our perpendicular characters in such a manner, as to make them lie in a horizontal direction, the effect will be exactly what takes place in the Persian writings.

Syri non a dextra ad sinistram versus queunt manum, ut Judæi faciunt, cum scribunt; sed eam ex adverso positam reducunt sensim ad se per chartam transverso situ collocatam... cæteroqui legendi ratio prorsus eadem est, quam Hebræi tenent. Andr. Masius, Grammat. Syr.

² See plate 3. and in RASPE's Catal. No. 653.

³ See the inscription on the *jasper*, at the end of this work. In the gem No. 15099, there is a very small exception; but this seems rather against the general rule.

As the antient Babylonian characters agree with the Chinese in regard to direction, they appear to have agreed also in regard to their value; for, as the Chinese express whole words by a single character, or at least by a group of simple characters, this seems to have been the practice of the Babylonians. Indeed, the inscriptions on the bricks of which we treat cannot be composed of alphabetic or syllabic characters; for if they were, the same forms must soon recur, which is not here the case. On the contrary we find single groups, composed of abundance of nails, just like the various strokes in the Chinese characters, all different from each other, and different also from what we observe in the Persepolitan inscriptions; which being more simplified, the same characters frequently recur. This seems to be very obvious, if we consider that the invention of alphabetic and even of syllabic writing, according to the opinion of all grammarians, is much posterior to the bieroglyphic, as it is called, or to the monogrammatic writing. For I cannot agree with Goguet, who makes no distinction between bieroglyphic and, as I call them, monogrammatic or logographic characters; but divides writing only into bieroglyphic, syllabic, and alphabetic 1. In my opinion, before the writing of words was so simplified as to be divided into syllables, words were expressed, not by hieroglyphics only, which may express whole sentences, though often obscure, but by some arbitrary sign, figure, or character, destined to express complete words, and which I therefore call monograms.

I can confirm what is here said by observing, that there are a number of particles, adverbs, and other words, in every language, which can never be expressed by a *bieroglyphic*; or, if some *biero-*

GOGUET, chap. 6. cit.

glyphic were to be employed, it would again be merely an arbitrary sign, as it might be applied to twenty other words of a synonymous, or nearly the same signification. Consequently, besides hieroglyphics, we must, with Warburton, admit in every language of this kind a number of figures of merely an arbitrary institution 1. Of this we have an instance in the Chinese language, in which though a great many characters are hieroglyphic or representative, either by their shape and figure, or by symbols and emblems, or by analogy and metaphors, vet there is a vast quantity of prepositions, particles, synonyms, &c. not fit to be represented or distinguished by any determined image, and which the Chinese consequently must represent by signs of an arbitrary institution, or in other words by figures, which have so little analogy to what they denote, that it would be a hundred times more troublesome to learn the reason and history of each of these characters, than to mark its shape directly, and to learn it by heart, as all the Chinese boys do, who, before they are able to comprehend the sense or meaning of any such character, learn to mark its shape by daily practice and application. Nay, of this we have a clear proof from the antient Chinese themselves; for the famous Koua, or eight trigrams, which, according to the testimony of the whole Chinese nation, were their first hieroglyphics or symbols used in writing after the use of knots was abolished, were merely arbitrary; or what connexion is there between the first trigram, or three united strokes, of which it is composed, to represent beaven, and between the second trigram, or three broken ones, to represent the earth? Is not this symbol equally applicable to a hundred other ideas, and more particularly words? Is it not then an

arbitrary.

WARBURTON, Divine Legat. of Moses, book 4. sect. 4.

arbitrary institution? The necessity of expressing more words than these eight ideas afterwards increasing, the Chinese history relates that Tsang-kie, the minister of Hoangti, received orders to invent more arbitrary signs of the same kind, in order to express more objects as far as might be necessary. He was at the same time permitted to employ strokes in every direction, without being confined to straight ones, or to a certain number, as in the Koua; which he accordingly did'. This seems to have been the case also with the Babylonians. At first some lines were traced out, either to denote their geometrical and mathematical operations, or to express the most necessary or useful objects of life, as circumstances required. Other characters to express new ideas succeeded; and these becoming always more copious, it at length became necessary, in order to avoid confusion, and for the sake of greater perspicuity, to express fingle words by single characters. But as characters would have been infinitely multiplied by this manner of proceeding, which in the Chinese language is found, at present, to be so great an inconvenience, the Babylonians, or their neighbours the Persians or the Indians, observing that the same syllables in many words continually recurred, thought proper to appropriate certain figures to these syllables, by the simple union of which they might be able to express any word of the like kind, without inventing a new monogram. This we find practised in Japan and Corea, those neighbouring countries of China, where some of the simplest Chinese characters were selected and set apart, for expressing as many different syllables as their language required, and their words were compounded of. In this manner were formed the syllabic alphabets which Kæmpfer first published

[!] Mem. des Miss. de Peking, tom. 2. p. 49.

in his History of Japan, and thus was formed that of Corea, a specimen of which I myself have published '.

In more recent times, others, observing that the same vowels always returned, detached from them the consonants, and thought them either superfluous to be expressed, as they are subject to so many alterations, as some of the Orientals seem to do; or they invented singular figures for expressing the five vowels, as well as each consonant, separately. Thus the first rude invention of expressing ideas by written signs was simplified into single letters and alphabetic writing.

The characters on the *Babylonian bricks* being then, according to my opinion, such *monograms*, formed and combined by an arbitrary institution, and designed to express not letters or syllables, but either whole sentences, or whole words, it is evident that no other resource remains for us at present, except, by means of a great quantity of such characters, to employ the art of combination, and thus to decypher their meaning, (which we shall be better able to do, when more copious materials shall be procured from the East by the liberality of the Honourable *East India Company*) or, till these are obtained, to judge by well-founded reasoning what they may probably contain.

By following the latter method, the only one which remains, I shall endeavour to prove that the newly discovered *Babylonian inscriptions* are ordinary inscriptions on bricks, as was usual among other nations. Thus we find a number of antient *Roman bricks*, produced by Fabretti, which contain an orbicular impression like that of a large seal, together with inscriptions. These inscriptions

In Sir William Ousely's Orient. Collections, vol. 3.

generally contain the name given in Latin to pottery: opus figlinum, or opus doliare. Besides this, the name of the proprietor of the manufactory, or place or ground where it was established, was added, as for instance in the following inscription:

OPVS. DOL. DE FIGVL. PVBLINIANIS. EX. PREDIS. AEMILIAES. SEVERAES.

Where the Latin genitive in aes instead of ae, to distinguish it from the dative, is remarkable 1.

The name of those who made the bricks, or their fize, (as BIPEDALIA) or the town to which they belonged, were sometimes imprinted on them also. I myself have seen in the antient *Naumachia* at *Taormina*, (Tauromenium) bricks impressed with the word

TAVROMENITAN

and with a line on each side, stamped along with the letters.

There are Roman bricks which contain also the names of the Consuls; such bricks have been of considerable use for correcting the Consular Fasti; and by their means Cardinal Noris settled various disputed points in chronology.

With the help of these remarks, says M. De LA BASTIE, most of the inscriptions on Roman bricks may be decyphered 2.

I know that other nations, such as the Etruscans, engraved

- ¹ Fabretti Inscript. Antiquar. quæ in ædib. paternis asservantur, explic. Romæ, 1699. ap. 7.
- ² Remarques sur quelques Inscript. Antiq. tom. 15. des Mem. de l'Acad. des Inscript.

on their bricks *sepulchral* inscriptions ¹, and the *Babylonians*, according to the testimony quoted of PLINY, astronomical observations ²; and it is certainly a curious circumstance to find now-a-days so many *bricks*, among the ruins of Babylon, with different characters and inscriptions ³.

But this is certainly not the case with the *Babylonian bricks*, of which I here treat; for we find the greatest similarity between them and the common bricks of the *Romans*. They have not indeed an orbicular impression like the *Roman* ones; but a square one, entirely similar in other respects; impressed at random, as is usual with things done in haste, and not at all parallel to the edges of the bricks ⁴. We not only find the same inscription on almost all the bricks brought from *Helle*; but we may see also, that the greater part of the surface of the brick is left vacant, which would scarcely be the case if they contained astronomical observations, or other remarkable events. For if the Babylonians were accustomed to inscribe every day of the year a different brick, as Bailly imagined, or if these bricks constituted a part of a pillar, pyramid, or other

- See Gori Musæum Etrusc. Florent. 1743. vol. 3.
- ² Epigenes apud Babylonios, 720. annorum observationes siderum coctis lateribus inscriptas docet.
- ³ M. DE SACY wrote me lately from Paris, that the inscriptions on the Babylonian bricks of that capital, are quite different from those, whose drawings I sent to him from London. The Abbé Tersan possesses likewise some Babylonian bricks. I expected to have received copies of them in time for the present Dissertation, M. Chaptal, the Minister of the Interior, having given orders for that purpose; but they have not yet reached me. Should they furnish any thing new or interesting, I intend to present them as a supplement to this work.
 - * See the vignette in the title page.

monument

monument of bricks, the inscriptions would either be different, or the bricks would be interely filled with characters.

One of them, indeed, is quite different from the rest; but it contains likewise only a narrow impression, imprinted at random, as is usual in works of pottery. Now Beauchamp has observed, that the bricks of each quarter among the extensive ruins of Babylon had a peculiar impression, though all those of the same quarter resembled each other.

Another of these bricks has a near resemblance to the first, a very trifling difference excepted; which still tends to confirm my opinion ².

But the strongest proof that these inscriptions were not designed to preserve the remembrance of any remarkable events, is, that they are not always exposed to the view, but often placed in the inside of the wall, without regard to their inscription, which clearly shows that it was intended for no important use. This fact is mentioned by Beauchamp, above quoted, who examined them it seems with great attention. Most of the bricks, says he, have writing on them; but it does not appear that it was meant to be read; for it is as common on bricks buried in the walls, as on those in the outside. I observed that each quarter had a peculiar impression 3.

Nevertheless two modern authors have from this circumstance drawn a quite different conclusion. The one has pretended, that as these incriptions were found also on bricks in the inside of the walls, they were no inscriptions at all, but only *vulcanic* productions.

¹ See plate 3.

² See plate 4.

³ European Magazine, for May 1792.

He compares them to the *piedras pintadas*, (painted stones) of which Eduguer, in his *Voyage to Peru* speaks, and declares the figures occuring on both, not to be characters, but mere effects of physical causes, and productions of *fire*. The other admits them to be real inscriptions, indeed, but to be of a religious nature, or *magical formula*, to which the people ascribed a *talismanic* power of protecting the houses, built of such bricks, from the influence of the *dæmons*².

But as this gentleman produces no other proof, but the similarity which he pretends to have detected, between the characters on the cylinders (which he declares for amulets), and between those of the bricks, this similarity not occurring on our bricks, if compared with our cylinders, I can as little agree in believing them magical, as to admit them to be vulcanic; and believe them therefore, similar to the Roman bricks.

If our bricks however do not contain any remarkable events or valuable information, they serve to establish a number of important facts, which renders their discovery highly interesting, as,

Ist, That the nail-headed characters, found in *Persia*, are real characters and not ornaments or *flowers*, as Dr. Hyde and Professor Witte have supposed, nor *magic* and *talismanic*, as others have mentioned ³.

2d, That

- WITTE Vertheidigung des Versuchs über den Ursprung der Pyramid. p. 139. and follow.
 - ² Munter Undersögelser cit. 2. dissertat. towards the end.
- ³ Me autem judice, says Hyde, non sunt literæ, nec pro literis intendebantur; sed fuerunt solius ornatus causa in prima palatii exstructione merus lusus primi architecti, &c. ergo hi characteres, seu figurationes non possunt esse voces, nec literæ legendæ,

2d, That they were used not in *Persia* only, as Tychsen and others believed, but also at *Babylon* and in *Chaldea* ¹.

3d, That they were not derived from Egypt, as LA Croze suspected; or of Bactrian origin as Hefren imagined², but derived from Babylon, which in point of culture was anterior to Persia; and, consequently these characters ought in future to be called rather Babylonian, than Persepolitan.

4th, That these characters, very likely, are the sacred letters of Babylon, on which Democritus wrote.

5th, That the same, also, were the *Chaldaic* characters with which, according to Athenæus, the epitaphium of Sardanapalus, at *Nineveh*, was engraved ³; the *Assyriac* characters mentioned by Herodotus, Diodorus, Polyænus, and other antient authors, rather than the *square Chaldaic* now in use among the *fews*; or the *Samaritan*, the *Estranghelo*, and other alphabetic letters. Their being found on common bricks is of little moment, for the sacred characters of the *Egyptians* are found on monuments of every kind.

legendæ, nec tali usui serviunt, sed tantum ornatus et lusus gratia adhibentur. Hist. Relig. vet. Persar. Witte Versuch über die Bildung der Schriftsprache. p. 527 et 28. Rostock, 1799. Mandelslo cit. Philosoph. Trans. vol. 17. cit.

In omni antiquitate orientali, says TY CHSEN, cuncata scriptura quæ Persepoli aspicientium oculos allicit... sola incedit, nec nisi in vase alabastrite (apud Caylus, &c.) offertur. De cuncat. inscript. Persep. Rostock, 1798. Tales ductus sunt peculiares Persepoli, says HYDE, nec alibi terrarum cernuntur. Lib. cit. p. 526.

² Hoc vetustissimum literarum genus, says LA CROZE, hieroglyphicum esse, ab Ægyptiis derivatum... suspicor. Thesaur. Epist. tom. 3. apud De Sacy Mem. sur diverses Antiquités de la Perse. Paris, 1793, p. 2. Heeren Ideen über die Politik, den Verker, &c. Götting. 1796. 2 th. p. 265.

³ ATHEN. Deipnosophist. lib. 12.

6th, That several alphabets of other nations, particularly the *Indian* and *Tibetan* in the east, and the *Greek* and *Roman* in the west, seem to have been originally derived from *Babylon*, as is proved by their pointed shape and nail-headed tops.

7th, That there existed a perpendicular, monogrammatic writing two thousand years ago at Babylon, as is still the case in China; and that this was probably the most antient way of expressing words, without symbols or images, by arbitrary groups and figures.

8th, That the *Persepolitan* inscriptions ought not to be read *perpendicularly*, as Chardin believed, and that their perpendicular situation round the windows or doors of the palace of Istakhar, is to be considered like the legend of a medal.

9th, That the *nail-beaded* characters of which they are composed, are of another combination, different from the *Babylonic*; to be read *borizontally* only, and from the *left* to the *right*.

Besides the above consequences, these bricks in a great measure confirm the testimony of PLINY, and other antient historians, respecting the practice prevalent among the Babylonians of stamping astronomical observations and inscriptions on *bricks*; and, by possessing a greater number of such characters we are better enabled by means of combination to attempt decyphering other monuments with real inscriptions, such as an engraved *jasper* brought from the East at the same time as the *bricks*, and of which an impression, from the stone itself, is here annexed ².

¹ Chardin Voyage en Pers. cit.

² The characters for this very reason appear here on the reverse, and ought to be turned.



