pletely restored the figure of the beetle, making it appear as a more perfect representation of what he had seen elsewhere. Norden also did the same. Possibly they were right in their conjectures as to the figure intended by the antient artist; but one proof of the great antiquity of this monument rests upon the style of the workmanship; and to misrepresent this, in copying the hieroglyphics, by any aim at superior delineation, is as barbarous as to exhibit an archaic inscription in modern characters.

The reader's curiosity to become acquainted with the hidden meaning of the symbols upon this obelisk is perhaps quite equal to that of the author; and if all that Kircher has written for its illustration be adequate to this effect, nothing is easier than to transcribe his observations. But Is 18 long ago declared, that no mortal

⁽¹⁾ See the Plate facing p. 365, in Show's Travels. Lond. 1757.

⁽⁹⁾ Norden's Travels, Plate facing p. 14. Lond. 1757.

⁽³⁾ If the reader believe Hasselquist, he was able to distinguish every species of bird upon this pillar, which he calls the handsomest obelisk in Egypt. "I could know," says he, "a strix (owl) which stood uppermost on the top of the obelisk." See Trav. to the East, p. 99. Lond. 1766.—All other authors, and among these Kircher, have made the strix of Hasselquist a VULTURE.

⁽⁴⁾ Edipus Egyptiacus, p. 330. Romæ, 1654.

had ever removed her veil'; and the impenetra- CHAP. ble secret seems not likely to be divulged. One solitary fact has been vouchsafed to ages of restless inquiry upon this subject; namely, that the hieroglyphic characters constituted a written language⁶, the signs of an antient alphabet, expressed according to the most antient mode of writing, in capital letters?: and it is probable that the more compound forms were a series of monograms, like the inscriptions upon the precious stones worn by the High Priest of the Hebrews, which were ordered to be made after the manner of "THE ENGRAVINGS OF A SIGNET'," and thus to contain within a very small compass, "AS STONES OF MEMORIAL," even upon "Two ONYX-STONES, THE NAMES OF

⁽⁵⁾ Tor imir minter eidelt mu sonrès àmenatures. Plutarch. de Iside et Osir. cap. 9.

⁽⁶⁾ See the words of the Greek Inscription upon the Ptolemaic tablet found near Rosetta.

⁽⁷⁾ The letters of the most antient written language of Egypt, according to Diodorus, were derived from the Ethiopians: and represented all sorts of beasts, the parts of the human body, and divers instruments. The capital letters of the Armenian alphabet (as published in the grammar printed by the Propaganda Fidei) are represented by animals: and it is observed by Pococke, who mentions this circumstance, (Description of the East, vol. I. p. 228. London, 1743,) that "the names of some antient letters are the names of beasts."

⁽⁸⁾ Exodus xxviii. 11.

⁽⁹⁾ Ibid. ver. 12.

THE CHILDREN OF ISRAEL'. Strabo's observation upon the Heliopolitan sculpture is here of importance: he says, it resembled the workmanship of Etrurians: and by the similarity already noticed', between the letters of the Etruscan alphabet and the characters observed upon Phænician signets, as well as the evident agreement of the signs upon Phanician coins' with the Egyptian hieroglyphics, it may be inferred that the mode of writing used by the priests of Egypt corresponded with that which Mores caused to be engraven upon the stones for the ephod, and for the breast-plate of judgment, which are expressly and repeatedly described' as " THE WORKS OF AN ENGRAVER IN "STONE, LIKE THE ENGRAVINGS OF A SIGNET."

But with reference to the inscription upon the obelisk at Heliopolis, and to the numerous examples of the same kind which have been noticed among the antiquities of Egypt, although

⁽¹⁾ Exedus xxviii. 9.

⁽²⁾ See Vol. IV. of these Travels, p. 34. Octavo edition.

⁽³⁾ Witness the appearance of the Crux ansata upon a Phanician medal found in Cyprus. See Vignette to Chap. II. Vol. IV. of these Travels. Octavo edition.

⁽⁴⁾ Brodus axviii. 11, 91.

we be unable to explain any thing of their original import, there is one mode of considering them, in which a careful examination of the signs thus represented may be attended with amusement, if not with instruction. This con- Archetypes sists, first, in ascertaining what the archetypes roglyphics. were of the several figures used to denote letters: these are sometimes clearly exhibited, but often confusedly sketched, as if with a view to abbreviation; and secondly, in using these documents, not only to illustrate the manners of the most antient nations, but also to prove the existence of many antient customs from their existing In this point of view, the discoveries made by Denon' among the hieroglyphics of Upper Egypt are valuable. The light thrown upon the history of antient Architecture, and of the Arts and Sciences, by the figured representation of things as they existed in the earliest periods, will gratify a laudable curiosity, and may also answer the more important purpose of conveying historical information. The hieroglyphics

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of the His-

⁽⁵⁾ See Denon's account of the hieroglyphics in the Sepulchres of the antient Kings of THEBES. Travels in Upper and Lower Egypt, vol. 11. p. 173. London, 1803 .- Also of the hieroglyphics of "Tentyra," where he discovered the first models of the style of decoration improperly termed Arabesque, such as were executed in painting at the Baths of Titue, and copied by Raphael. See vol. 1. p. 211.

CHAP. of Heliopolis perhaps afford less illustration of this kind than any other characters of the same nature; because the style of sculpture is here so rude, that many of the archetypes, whence the types of the inscription were derived, cannot now be ascertained; but, owing to their great antiquity, the few that can be discerned are worth notice. In the very summit of the obelish, beneath the figure of a vulture, may be observed the Crux ansata'. The original

Cruz wasata.

^{(1) &}quot;Sed non erat ullum templum, in quo non figura crucis ansata, ut eam eruditi vocaut, sæpius visenda occurreret, hodieque in ruderibus ac ruinis etiamnum occurrat. Ejus hæc est species ? Crucem vero istam ansatam, que in omnibus Ægyptiorum templis sæpius ficta et picta extabat, quam sigua Deorum Ægyptiorum manu tenere solent, que partem facit ornatus sacerdotalis, mbil aliud esse quam phallum," &c. (Vide Jablouski Panth. Agypt. 1. 282.) Jamblichus thinks the Crux unsata was the name of the Divine Being. Sozomen, and other Christian writers, (Vide Sozomen. Eccl. Hist. bb. vii. c. 15. Ruffin. Eccl. Hist lib. ii. c. 29.) conceive the whole figure, or at least the cross, to be expressive of the life to come." deriving this opinion from the explanation given of it by those of the Heathers who understood the hieroglyphics, and were converted to Christianity. Sometimes it is represented by a cross fastened to a circle, as above; in other instances, with the letter T only, fixed in this manner of to a circle. By the circle, says Kircher (Prod. Copt. p. 169), is to be understood the Creator and Preserver of the world; as the wisdom derived from him, which directs and governs it, is signified by the + T, the monogram, as he further conjectures, of Mercury, Thath, Tout, or OT Pthu. "It is certainly very extraordinary," (says Shaw, who has collected almost every information upon this subject,) "and worthy of our notice, that this cruz onsata should be so often in their symbolical writings; either alone, or held

of this curious type was the sort of key in use among the Antients, which generally appears fastened to a ring. Sometimes it is seen annexed to a rosary of beads, as in the remarkable instance where the same symbol appears upon a Phanician medale found at Citium in the Isle of Cyprus, of which an engraving was given in the preceding section'. This kind of key is not entirely banished from modern use; and such instruments have been discovered in the ruins of antient cities. They are often seen in the hands of Egyptian statues. Two were represented, as pendent from hooks, upon a hieroglyphical tablet found near the Pyramids by Paul Lucas'. The archetype of this symbol may possibly therefore have been a key. It is not the less likely to answer to Jallonski's explanation of it on this account'. We have historical

in the hands, or suspended over the necks, of their deities. Beetles, and such other sacred animals and symbols, as were bored through, and intended for, amulets, had this figure frequently impressed upon them." (See Shaw's Trav. p. 360. Lond. 1757.) The same author considers it to be the same with the ineffable image of Eternity, noticed by Suidas. Vide Euseb. Prof. Evan. p. 69.

⁽²⁾ It seems to have as much reference to Phanicia, as to Egypt. Upon a medal of Sidon, the cross appears carried by Minerva in a boat.

⁽³⁾ See Vignette to Chapter II. Vol. IV. Octavo edition.

⁽⁴⁾ See the Engraving of this in the Second Volume of his Travels, as published at Amsterdam in 1744, tom. II. p. 130.

⁽⁵⁾ See Note in opposite page, containing an extract from Jablanchi, upon

Moaning of the Crux Ansata.

ansata. Indeed, it may be considered as the only hieroglyphical type concerning whose import we have any certain intelligence. The singular appearance of a Cross so frequently recurring among the hieroglyphics of Egypt, had excited the curiosity of the Christians in a very early period of ecclesiastical history'; and as some of the priests', who were acquainted with the meaning of the hieroglyphics, became converted to Christianity, the secret transpired. "The converted Heathens," says Socrates Scholasticus',

upon the meaning of the Crux ansata. The women of Naples wear it as a pendant for the ear; annexing to this ornament the signification which Jablonsks has given of the Crux ansata: but the use of the metaphorical verb Chiavare, in their language, proves that the same interpretation is applicable to a key. An observation occurs in Athenaus where the letter T is deemed observe.

⁽¹⁾ The Scrapeum at Alexandria was destroyed about the year 389. It was at the destruction of this building that the Christians first became acquainted with the meaning of the Cross among the Egyptican hieroglyphics.

⁽²⁾ No liberty is here taken, either with the text of Ruffinus or of Socrates, in saying the priests, because no others possessed a knowledge of the sacred writing.

⁽³⁾ Τούτου δι Δμφισβατουμίνου, τολς του Έλλησου το Χροτιαισμός σροτιλίστες, τὰ Ιερογλυφικά τὰ γράμματα Ιπιστάμενα, λημητεύοντες του σταυραιδή χαρακτάρα, ίλεγου σημαίνευ ζωὰν Ιπερχομίνου. "Dum hæc inter illos agitatur controversia, quidam ex Gentelium errore ad Christi fidem conversi, qui hujusmode literarum notitiam habebant, notam hanc crucis forma depictam interpretantes, venturam vitam significare docuerunt."

"explained the symbol; and declared that it signified 'LIFE TO COME.'" Ruffinus mentions the same fact. Kircher's ingenuity had guided him to an explanation of the Crux ansata, as a monogram, which does not militate against the signification thus obtained. He says, it consisted of the letters OT, denoting Ptha, a name of Mercury'; and the name of this deity, as a conductor of the souls of the dead, might well be used with reference to a state of existence after death. But as every Egyptian monogram had its archetype in some animal, or instrument of common use, and the original of the Crux ansata seems to have been a key, we may perhaps, by attending to this curious circumstance, arrive at the origin of those allegorical allusions to a key, which, with reference to a future state of existence, are introduced into the Holy Scriptures. Such an illusion is made in the prophecies of Isaiah, concerning the kingdom of Christ. Our Saviour

docuerunt." Socrat. Scholast. Histor. Ecclesiast. lib. v. c. 17. p. 276. Paris, 1668.—The reader will do well to consult the whole chapter, which contains very curious information.

⁽⁴⁾ Ruffin. Hist. Eccl. lib. ii. c. 29. See also Heliod. Æthiop. lib. iii. p. 148.

⁽⁵⁾ Kircher. Prod. Copt. p. 169. See also a former Note upon the Crux ansate.

^{(6) &}quot;The key of the house of David will I lay upon his shoulder." Isaiah xxii. 22.

says unto Peter'. "I WILL GIVE UNTO THEE THE KEYS OF THE KINGDOM OF HEAVEN:" and the author of the book of Revelations, as if the sacred symbols of antient Egypt had suggested the image to his mind, describes the Angel of the Resurrection as having in his hand a key. Also, in the sublime prophecy concerning the second advent of the Messiah, a similar allusion may be noticed; "I am he that liveth and was dead; and, behold, I am alive for evermore, Amen; and have the keys of hell and of death."

Among the other signs used to express words upon this monument, there is one, respecting which our information is not attended with the same certainty as in the preceding instance, although its meaning be not entirely unknown. This is the curious monogram, called Hieralpha by Hieralpha. Kircher', composed of the Greek letters A and A,

⁽¹⁾ Matthew xvi. 19.

^{(2) &}quot;And I saw an angel come down from heaven, having the key of the bottomless pit, and a great chain in his hand." Revel. xx. 1.

⁽³⁾ Revel. i. 18.

^{(4) &}quot;Hic character idem significat, quod 'Ayalis $\Delta alpan$, id est, Bonus Genius, et componitur ex initialibus literis A et Δ . Si enim producitur Δ litera, fiat A, quod in se monogrammaticè continet Δ

which he explains, from Plutarch, to signify Agatho Dæmon, and to have had for its archetype an Ibis, in a particular attitude. It may be observed near the centre of the obelisk, immediately above another figure of the Crux ansata, similar to that which has been already described. Pauw ridicules Kircher's notion; admitting, at the same time, a resemblance between the first letter of the Greek alphabet and the Theban plough. Now the plough was, in fact, an archetype of the symbol which Kircher

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Egyptiacis inscriptionibus, &c. quam et Hieralpham imposterum vocabimus." (Kircher. Edy. Ægypt. Theatrum Hieroglyphicum, tom. III. p. 50. Rom. 1654.) Also (in Prod. Copt. p. 231.) the same author says, "Hoc μοτογραμμο A, ex A et A compositum, in nullo non obelisco frequentissimum, Ægyptiarum vocum DT&OOC ΔΕΥΟΠ, quibus bonum genium Delte Nili seu Ægypti signant, index; cum præter dictarum vocum capitales literas, ejus quoque Ægypti portionis figuram quam A passim vocant, clare dictum μοτόγραμμο exprimat."

^{(5) &#}x27;Ιβίς τὶ ποιῖ τῆ τῶν πόδων ἀποστάσιι πρὸς ἀλλήλους, καὶ πρὸς τὸ ρίγκος ἐσόπλιυρον τρίγωνος. "Ibis pedum dwaricatione eorum inter se, et cuni rostro comparatione, triangulum refert æquilaterum." Plutarch. Sympos. 5. Also Εμιῆς λίγιται Θιῶν ἐν Αἰγύπτω γράμματα πρῶτος εῦρειο, διὸ καὶ τὸ τῶν γραμμάτων Αἰγύπτιω πρῶτον 'Ιβιο γράφωσι, ὡς 'Ερμῆ ('Αγαδιώμων) προσάμωσαν. "Mercurius primus Deorum in Ægypto traditur invenisse literas, atque adeo Ihin Ægyptii primam literam faciunt Mercurio, videlicet Agathodæmoni, convenientem." Id. in lib. ix. Sympos. 2, 3. See also Kircher Œdip. Ægypt. Theat. Hieroglyph. p. 43. Rom. 1654.

⁽⁶⁾ Philosoph. Diss. &c. vol. 11. p. 121. Lond. 1795.

CHAP. calls Hieralpha: and although Pauw have proved this point, perhaps beyond dispute, yet something may still be added in its confirmation. The sort of hand-blough, represented as a sceptre in the hands of the priests and kings of Egypt', is still used by many of the Celiic tribes. author has also seen it in Lapland. It has this form, \(\formall \) which precisely corresponds (although in an inverted position) with the sort of sceptre mentioned by Diodorus, and denominated Hieralpha by Kircher. There are also a few symbols rendered interesting in the representations they offer of instruments still used by modern nations, without any deviation from their most antient form: such, for example, as the Testudo, or Cithara, of the Antients, a two-stringed lyre, constructed of the shell of a land-tortoise, common to all the shores of the Mediterranean. It corresponds with the Balalaika of the Russians, and is in use among the Calmucks'. This instrument is believed to be the DOPMITE of Homer's. It may be observed about half way

Testudo.

⁽¹⁾ Philosoph. Dus. &c. ibid. Vid. Diod. Sec. leb. iv. Tibullus, lab.i. " Primus aratra manu solerti fecit Osiris, Bt leneram ferre solicitavit humum."

⁽²⁾ See Part I. of these Travels, Chap. XII. p. 244. Second Edit.

⁽³⁾ The author is indebted for this observation to a letter he received from R. P. Knight, Esq. soon after the publication of the Pirst.

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up the face of the obelisk, upon the left hand, placed by the side of an axe or hatchet. The sort of staff, capped with the representation of an animal's head, which is seen in the hands of Egyptian deities among their hieroglyphic figures, and frequently delineated upon Greek vases, as a badge of distinction worn by Grecian Hierarchs, is yet in use among the Patriarchs and Bishops of the Greek Church; and this may be observed in two instances upon the Heliopolitan pillar. For the rest, the reader, if he have patience for the inquiry, may be referred to Kircher': who has written a particular

First Part of these Travels. Alluding to the account given in p. 320 of Vol. I. (8vo. edit.) of a two-stringed lyre represented in the Calmuck paintings. Mr. Knight said that he considered this instrument to be the same which Homer mentions, under the name of Doguir .

Τοΐσιν δ Ιν μέσσοισι πάις φόρμιγγι λιγείη
'Ιμερόιν πιθάριζε.- Iliad. Σ. 569.

(4) Vid. Syntagma viii. Theat. Hiergelyph. Œdipi Ægyptiaci, tom. III. p. 330. Rom. 1654. Kircher's account of this obelish is divided into four distinct chapters: 1. "De origine Obelisci Heliopolikani." 2. "De erectione et mensurd Obelisci." 3. "Argumentum hujus Obelisci." 4. Interpretatio Obelisci." Of these, the reader will in all probability rest satisfied with the two first: these, being historical, are valuable. An examination of Kircher's work will offer a striking example of the patient research and amazing erudition which characterized the learned labours of the Jesuits; but when he proceeds to the interpretation of the hieroglyphics in detail, his reveries may be compared to the feverish dreams of a scholar, who, from intense application to his, studies, is visited with a continual recurrence of postulates unattended by a single conclusion.

dissertation upon this obelisk, and, in his endeavour to explain its symbols in detail, has brought together all that his vast erudition enabled him to communicate; although it must be evident, since the discovery of a Greek translation of hieroglyphics upon the Rosetta Stone, that the interpretation proposed by him, of these characters, cannot accord with their real signification.

With the description of this obelish the author is compelled to terminate his very limited observations concerning Heliopolis: for such is the solitary remnant of a city and of an University where Herodotus was instructed in the wisdom of the Egyptians; and where, eighteen hundred years ago, the schools' of Plato and of Eudoxus were shewn to Roman travellers; as, in some future age, the places where a Locke and a Newton held their disputations may be pointed out among the mouldering edifices of Oxford and of Cambridge. That other monuments, equally entitled to consideration, may possibly exist

⁽¹⁾ ΔΙΑΤΡΙΒΑΙ dicuntur Philosophorum congressus ac desputationes, quæ Plut. διατειβαί στελ λόγοσε. Item locus, in quo διατείβευσε στελ τλ, ΔΙΑΤΡΙΒΗ dicitur. Sic leg. Strab. 'Επεῖ οδο ίδείπουντο οἶ τι τῶν ἰκείων οἶπου καὶ Πλάτωνος καὶ Εὐδόξου διατειβαί. " Ostendebantur ergo ibi sacerdotum ædes, ac domicilia in quibus Eudoxus et l'Iato egerant." Strabon. Geog. lib xvii. tom. II. p. 1143. Ed. Oxon.

around this pillar, concealed only by a thin CHAP. superficies of soil, can hardly be doubted; and these, succeeding travellers may bring to light. The antiquities observed by Pococke are probably among the number. Yet, if this alone continue to mark the situation of Heliopolis, the evidence it affords, when added to other proofs, will be sufficient to identify the locality of the city. Indeed, when it is considered that Helio- History of the Ubelish. polis was altogether a deserted city so long ago as the time of Strabo *, and that the Romans carried from Egypt so many of its antient monuments, it is surprising that this obelisk, stupendous as it is, remains in its original position-Among several trophies of this description, which were removed to Italy, Strabo mentions two obelisks that were carried to Rome from the ruins of Heliopolis'. According to Pliny, the first monuments of this kind that were raised in Egypt were placed within this city'; and the

⁽²⁾ Hartenuos i wilis-" Omnino urbs deserta est." Strab. Geog. lib. xvii. tom. II. p. 1142. Ed Oxon. 1807.

^{(3) &#}x27;Or due mai sic 'Pount inquiedneur, of un nenanouire relios. " Quo_ rum duo Romam delati sunt, non omnino corrupti." Ibid.

^{(4) &}quot; Primus omnium id instituit Mitres, qui in Solis urbe regnabat, somnio jussus: et hoc ipsum inscriptum cet in eo: etenim sculpturæ ille effigiesque, quas videmus, EGYPTIE SUNT LITERE. Postes et alii regum in supra dicta urbe." Plina Hist. Nat. lib. xxxvi. c. 8. tom. 111. p. 481. L. Bat. 1635.

CHAP. elevation assigned by him to each of the four obelisks erected here by Sochis, so nearly corresponds with the measure of the one which now remains, that, making allowance for its pedestal, its height would be the same'. Owing to this circumstance, Pococke' and Shaw' consider it as one of the four mentioned by Pliny. Diodorus relates', that two other obelisks were erected at Heliopolis by Sesostris; but each of these was one hundred and twenty cubits in height, and eight in breadth; an elevation. therefore, much too considerable to correspond with the present appearance of this pillar.

> After leaving this place, the author was so much exhausted by fatigue, that he returned to Cairo, across the sandy plain of the desert which lies east of the city, and extends all the way from the Nile to the Red Sea. Mr. Cripps,

⁽¹⁾ That is to say, 48 cubits; and admitting the Roman cubit to equal 18 inches, the whole height of the obelisk would be 72 feet. Pococke found the height of that part of the obelisk which is above the surface of the soil to equal 67 feet, measuring it by a quadrant. Shaw took its elevation " by the proportion of shadows," and made it only sixty-four feet; thereby allowing eight feet for the pedestal. Pecocke's mensuration allows only five.

⁽²⁾ Descript. of the East, vol. 1. p. 23. Lond. 1743.

⁽³⁾ Travels, p. 366. Lond. 1757.

⁽⁴⁾ Died. Sic. Biblioth. lib. i. p. 38. Hanev. 1604.

accompanied by Mr. Hammer, and by Mr. Hamilton, then secretary of our Ambassador at Constantinople, continued their journey as far as the Pilgrim's Lake, whence the canal is supposed to have extended to the Red Sea: and returned afterwards by the route which the author had They found, at the lake, the remains of a very large Caravanserai, and discerned the traces of a canal, bearing thence towards the south-east, in the direction of Suez. But the most curious objects noticed in this part of the day's journey were presented to our whole party where we least expected to find any thing remarkable; namely, in the mineral productions of the desert itself. A beautiful and well-known Minerals variety of jasper, commonly called Egyptian of the Arabian De-Pebble, is found in such abundance, among sertmasses of the most curious mineralized wood, upon the surface of the sands, over all the district eastward of Grand Cairo, even to the borders of the Red Sea, that specimens might be obtained in sufficient abundance to serve as ballast for a vessel bound from Suez to England. The author had collected almost enough to load a camel before he arrived at the walls of the city; but when the rest of the party returned, they brought with them a more considerable burden. Among these were large blocks of

Petrifac-

petrified palm-tree, of which Mr. Cripps had collected a very great variety. They found these masses lying in dctached fragments among the loose sand, wholly disengaged from any other stratum, and scattered over the face of the desert. In the same manner, but more frequently, appeared the large pebbles of Egyptian jasper, being almost always of a flattened ovate shape. This mineral is too well known to require a more particular description; but who can explain its origin? The received opinion, and that which daily experience confirms, respecting siliceous concretions in general, is this, that they have been deposited, after a stalactical process, in the fissures and cavities left by air in substances of anterior formation. Admitting, therefore, that every one of these Egyptian pebbles once occupied such cavities, in strata now reduced to a pulverized state, and since become the sand of the desert, what idea can be formed of the antiquity of this kind of jasper? Unlike other flinty substances, it seems to be almost incapable of decomposition by exposure to the atmosphere; having, as an exterior crust, a thin investment of a reddish brown colour, which differs in appearance only from the nature of the stone itself; its chemical constituents being precisely the same. Masses of pure silex,

Doubtful Origin of Egyption Susper.

and some chalcedonies containing almost as much alumine as the Egyptian jasper, when thus exposed to the continued action of air and moisture, gradually decompose, and assume the white colour common to the matter of silex when in a state of extreme division. But these pebbles, although constantly exposed to the nightly dews of a country where water falls during the night as abundantly as heavy rain, and to the powerful rays of a burning sun during the day, have sustained little or no alteration. They have also another very remarkable character. Although they be destitute of that whitish surface which is common to every silireous body long acted upon by the atmosphere, they are always characterized by a lighter colour towards the center of each pebble; and this is sometimes white. They vary in their size, from that of a hen's egg to the egg of an ostrich; but are rarely larger, and always appear more or less flattened, so as to exhibit a superior and an inferior elliptical surface upon each specimen. The masses of mineralized or petrified wood had no regularity of shape, except that parasitical form which the mineral, thus modified, had derived from the vegetable whose fibres it had

penetrated when in a fluid state. It is evident, therefore, that these pebbles do not owe their

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spheroidal shape to the effect of any previous attrition in water; because the masses of mineralized wood, possessing a degree of hardness inferior to the jasper, and being associated with it, would also have undergone a similar change. Pococke, and, more recently, that intelligent traveller Browne, noticed these appearances in the deserts; the first on the Arabian, and the last on the Lilyan side of the Nile'. Pococke seems to have observed the examples he alludes to, upon the same spot where we found them, or very near to it, for they occurred in the first part of his journey from Grand Cairo to Suez . Shaw' mentions, also, his having observed instances of the same kind, on the isthmus between Cairo and Suez: and the fabrilous accounts of the famous Ras Sem, or petrified village in the Cyrenaica, are supposed by him to have derived their origin from similar phænomena'. Shaw notices a method by which the petrified palm-tree may be distinguished from

⁽¹⁾ Travels in Africa, from the year 1792 to 1798, by W. G. Browne.

^{(2) &}quot;I observed in the road many stones that looked like petrified wood I saw one piece that seemed to have been a large body of a tree." Descript. of the East, vol. I. p.131. Lond. 1743.

⁽³⁾ See Shaw's account of the petrified village, or city, at Ras Sem, in the province of Dasha, in the kingdom of TRIPOLY. Travels, p. 155. Lond. 1757.

any other mineralized wood. He says', the fibres, as in the living plant, "do not run straight and parallel as in other trees; but are for the most part oblique, or diverging from one another, in an angle of about ten degrees."

In the gardens and cultivated grounds near Dates and the Nile, the inhabitants were now beginning (August 22) to collect the dates; but the corn was still out, in some places. The mercury in the thermometer, at noon this day, when observed in the desert east of Heliopolis, did not stand higher than 87° of Fahrenheit. The heat in England has been sometimes almost equal to this in the month of September.

The facility with which the Arabs run up and down the date-trees, at first sight surprises a stranger; but when the attempt is made, nothing can be easier. A series of cavities in the bark of those trees, as if purposely excavated to admit the hands and feet, render the ascent. and descent, as practicable as upon the steps of a ladder. We frequently climbed to the top of the tallest palm-trees by means of this natural staircase.

ALVEN

CHAP.

In the evening after our arrival, some of our party went to an exhibition of the Almehs, or Dancing women, at the house of a lady of some distinction, and where it was believed this curious remnant of antient Egyptian ceremonies might be unattended with those violations of decorum by which they are generally characterized. This, however, was not the case. The dance was, as usual, destitute of grace, activity. or decency. It consists wholly of gestures, calculated to express, in the most gross and revetting manner, the intercourse of the sexes. In any part of Europe, if it were tolerated, it would be thought a degrading and wretched performance; yet the ladies of Cairo, accustomed to the introduction of these women upon festival days, regard the exercise of the Almehs with amusement, and even with applause. If we may judge from the representations upon Grecian vases, the female Bacchanals of Antient Greece exhibited in their dances a much more animated and more graceful appearance: yet the manner of dancing practised by the Almehs, however offensive in the eyes of civilized nations, is the most antient. Hence the observation of Cicero1, " NEMO SALTAT SOBRIUS, NISI

⁽¹⁾ Orat. pro Muraná.

FORTE INSANIT:" and if the history of this CHAP. exercise be traced to its origin, it will be found to have nearly the same character all over the world. In the anger of Moses at the dancing of the Israelites*; in the reproach cast upon David, by Michal the daughter of Saul, for his conduct when dancing before the ark'; in the gratification afforded to Herod by the dance of Salome'; we may perceive what were the characteristics of primæval dances: and if curiosity should lead any one to inquire what sort of dancing is found among modern nations, where the exercise has not been refined by civilization, his attention may be directed to the Tarantello of Italy, the Fandango of Spain, the Barina of Russia, the Calenda of Africa, and the Timorodee of Otaheite. Egypt, where no lapse of time seems to have effected change, where the constancy of natural phænomena appears to have been always accompanied with the same uniformity of manners and customs, Egypt preserves its pristine attachment to a licentious dance; and exhibits that dance as it was beheld,

above three thousand years ago, in the annual

⁽²⁾ Exod. xxxii. 19.

^{(3) 2} Samuel vi. 20.

⁽⁴⁾ Matth. xiv. Mark vi. Joseph. Antiq. Jud. lib. xviii. c. 2,

CHAP. procession to Bubastus, when the female votaries of Diana distinguished themselves in the cities through which they passed by indecency and dancing1. Considered therefore with reference to the moral character and habits of the people, as well as to their antient history, this practice of the Almehs may be entitled to some Indeed, the part they sustain in the scale of society in Egypt is so considerable, and the partiality shewn to them so inveterate, that it is impossible to give a faithful account of the country without some allusion to these women. They wear upon their fingers little bells, like

⁽¹⁾ Herodot. Euterpe, c. 60.

^{(2) &}quot;Il n'est point de fête sans elles; point de festin dont elles ne fassent l'ornément. Les Alme sont appellées dans tous les HAREM. Les Alme assistent aux cérémonie de marriage, et marchent devant la mariée en jouunt des instrumens. Elles figurent aussi dans les enterremens, et accompagnent le convoi en chantant des airs funèbres. Elles poussent des gémissemens," &c. Savary, Lett. sur l'Egypte, tom. I. pp. 150, 152, 154. Paris, 1785. Strangers who reside for some time in Cairo, however disgusted by the exhibition of the Almehs at first, gradually adopt the taste of the native inhabitants. Of this we find an instance in Niebuhr's Travels. "However much disposed to receive entertainment, they did not please us at first; their vocal and instrumental music we thought horrible; and their persons appeared disgustingly ugly, with their yellow hands, spotted faces, absurd ornaments, and hair larded with stinking pomatum. But by Jegrees we learned to endure them, and, for want of better, begun to fancy some of them pretty, to imagine their voices agreeable, their movements graceful, though indecent, and their music not absolutely intolerable." Travels in Arabia, vol. I. p. 140. Edinb. 1792.

small cymbals, which they use as the Italians and Spaniards do their castagnettes. They have ______IV. also tambours of different kinds. The form of one of these seems to have been derived from that of the common pumpkin, which is frequent among the vegetables of Egypt; for, although the tambour be made of wood, it has exactly the appearance of half a large pumpkin, scooped, with a skin bound over it. The Arabs use hollow pumpkins, when dried, as bottles to contain water: these becoming hard, are very durable, and may have preceded the use of a hollow hemisphere of wood, in the manufacture of a tambour. The dances of the Almehs are of the accompanied by vocal as well as by instru- and Cry of mental music; if that may be termed vocal, tion. which consists of a continual recurrence of the same shrill sounds, caused by trilling the tongue against the roof of the mouth, without the utterance of any distinct words. Yet this singular mode of expressing joy is all that constitutes the Alleluia of the Antients. When Lord Hutchinson first entered Cairo, after the capture of the city, he was met by a number of women who greeted him with Alleluïas: they accompanied him through the streets, clapping their hands, and making this extraordinary noise, in a loud and shrill tone. It seems to be

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a constant repetition of the same syllable, il, or al; uttered in this manner, Alalalalalalalal, with the utmost rapidity, and without interruption or pause of any kind. The person who is able to continue this kind of scream for the longest time, without drawing breath, is supposed to be the best performer. The same sort of singing is practised by the Almehs at funerals, with this difference: the Alleluia, or cry of joy, consists in a repetition of the syllable ul; and that which is used to denote grief, is formed by a similar repetition of the syllable úl, or el, constituting the long protracted elelebeleli, or ululation1. The tone of voice continues the same through both of these; the Alleluia, and the Ululation: but there seemed to be this distinction in the manner of delivering the sounds; that in the former, it was a tremulous note ascending; in the latter, the same note descending in continual cadences. However, it is exceedingly difficult, as perhaps the reader has already perceived, to convey, or to obtain, ideas of musical sounds by means of a mere verbal description.

⁽¹⁾ In the Prometheus Vinctus of Æschylus, Io utters this cry of lamentation, Ἐλιλιλιλιλιδ, which the Scholiast denominates Θράνφδις ιπίφθιγμα. See Pauw's Æschylus, tom. 1. p. 88, 877. Hag. Com. 1745. Stanley, Blomfield, &c.

Upon the twenty-third of August we set out CHAP. for the Pyramids, the inundation enabling us to approach within less than a mile of the larger Voyage to the pyramid, in our djerm. Messrs. Hammer and Pyramids. Hamilton accompanied us. We arrived at Djiza by day-break, and called upon some English officers who wished to join our party upon this occasion. From Djiza, our approach to the Pyramids was through a swampy country, by means of a narrow canal, which however was deep enough; and we arrived without any obstacle, at nine o'clock, at the bottom of a sandy slope, leading up to the principal pyramid. Some Bedouin Arabs, who had assembled to receive us upon our landing, were much amused by the eagerness excited in our whole party, to prove who should first set his foot upon the summit of this artificial mountain. As we drew Appearance near its base, the effect of its prodigious magni- by the tude, and the amazement caused in viewing the Pyranid enormous masses used in its construction. affected every one of us; but it was an impression of awe and fear, rather than of plea-In the observations of travellers who had recently preceded us, we had heard the Pyramids described as huge objects which gave no satisfaction to the spectator, on account of their barbarous shape, and formal appearance:

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yet to us it appeared hardly possible, that persons susceptible of any feeling of sublimity could behold them unmoved. With what amazement did we survey the vast surface that was presented to us, when we arrived at this stupendous monument, which seemed to reach the clouds! Here and there appeared some Arab guides upon the immense masses above us, like so many pigmies, waiting to shew the way up to the summit. Now and then we thought we heard voices, and listened; but it was the wind, in powerful gusts, sweeping the immense ranges of stone. Already some of our party had begun, the ascent, and were pausing at the tremendous depth which they saw below. One of our military companions, after having surmounted the most difficult part of the undertaking, became giddy in consequence of looking down from the elevation he had attained; and being compelled to abandon the project, he engaged an Arab to assist him in effecting his descent. The rest of us, more accustomed to the business of climbing heights, with many a halt for respiration, and many an exclamation of wonder, pursued our way towards the summit. The mode of ascent has been frequently described; and yet, from the questions which are often proposed to travellers, it does not

appear to be generally understood. The reader may imagine himself to be upon a staircase, every step of which, to a man of middle stature, is nearly breast high; and the breadth of each step is equal to its height: consequently, the footing is secure; and although a retrospect, in going up, be sometimes fearful to persons unaccustomed to look down from any considerable elevation, yet there is little danger of falling. In some places, indeed, where the stones are decayed, caution may be required; and an Arab guide is always necessary, to avoid a total interruption; but, upon the whole, the means of ascent are such, that almost every one may accomplish it. Our progress was impeded

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^{(1) &}quot;The stones, wherewith the Pyramids are built, are from five to thirty feet long. (Herodotus makes none of these stones less than thirty feet), and from three to four feet high." Shaw's Travels, p. 367. Lond. 1757.

⁽²⁾ Upon this account, when we reached the top of the pyramid, we sent an Arab with a short note to the officer who had abandoned the undertaking, urging him to renew the attempt. After some time, the messenger returned, but without our companion. hearing this, went down to him, and found him in the entrance to the pyramid, sitting with some Arabs in the shade afforded by the large projecting masses of stone; and, having with some difficulty prevailed upon him to renew the attempt, succeeded in conducting him to the top. He expressed himself unwilling to return without having gratified his curiosity by a view from the summit; but confessed that the

We carried with us a few by other causes. instruments; such as, our boat-compass, a thermometer, a telescope, &c.; these could not be trusted in the hands of the Arabs, and they were liable to be broken every instant. length we reached the topmost tier, to the great delight and satisfaction of all the party. we found a platform, thirty-two feet square; consisting of nine large stones, each of which might weigh about a ton; although they be much inferior in size to some of the stones used in the construction of this byramid. Travellers of all ages, and of various nations, have here inscribed their names. Some are written in Greek; many in French; a few in Arabic; one or two in English; and others in Latin.

effect produced upon his mind, by the stupendous sight around him, was rather painful than pleasing, and had rendered him wholly unfit for the exertion it required. It is to this circumstance that allusion was before made (See Chap. II. p. 45); and it confirms the truth of Mr. Burke's observations, upon the impressions to which men are hable, who, without the smallest personal danger, are exposed to the contemplation of objects exceedingly vast in their dimensions. Mr. Burke describes the impression produced by the sublime as bordering upon a sensation of pain; illustrating this by reference to a person standing in perfect security beneath a precipice, and looking up towards its summit. (See Philosophical Enquiry into the Origin of our Ideas of the Sublame, &c. by Edmund Burke. Sect. 27. Part 3. p. 237, &c. Lond. 1782.

were as desirous as our predecessors' to leave a memorial of our arrival; it seemed to be a tribute of thankfulness, due for the success of our undertaking; and presently every one of our party was seen busied in adding the inscription of his name.

Upon this area, which looks like a point when seen from Cairo, or from the Nile, it is extraordinary that none of those numerous hermits fixed their abode, who retired to the tops of columns, and to almost inaccessible solitudes upon the pinnacles of the highest rocks. It offers a much more convenient and secure retreat than was selected by an ascetic who pitched his residence upon the architrave of a temple in the vicinity of Athens. The heat, according to Fahrenheit's thermometer, at the time of our coming, did not exceed \$4°; and the same temperature continued during the time we remained, a strong wind blowing from the north-west. The view from this eminence

^{(1) &}quot;Après que nous eumes gravé nos noms sur le sommet de la pyramide, nous descendimes," &c. Savary Lett. sur l'Egypte, tom. I. p. 188. Par. 1785.

⁽²⁾ In order to prove how commodious a station this place affords, it may be mentioned, that the author was enabled to write upon the spet a letter to a friend in England.

Objects seen from the Sum-

amply fulfilled our expectations; nor do the accounts which have been given of it, as it appears at this season of the year, exaggerate the novelty and grandeur of the sight. region towards Cairo and the Delta resembled a sea, covered with innumerable islands. Forests of palm-trees were seen standing in the water; the inundation spreading over the land where they stood, so as to give them an appearance of growing in the flood. To the north, as far as the eye could reach, nothing could be discerned, but a watery surface thus diversified by plantations and by villages. To the south we saw the Pyramids of Saccara; and upon the east of these, smaller monuments of the same kind, nearer to the Nile. An appearance of ruins might indeed be traced the whole way from the Pyramids of Diza to those of Saccara; as if they had been once connected so as to constitute one vast cometery. Beyond the Pyramids of Saccára we could perceive the distant mountains of the SATD; and upon an eminence near the Libyan side of the Nile there appeared a monastery of considerable size. Towards the west and south-west, the eye ranged over the great Libyan Desert, extending to the utmost verge of the horizon, without a single object to interrupt the dreary horror of the landscape,

except dark floating spots, caused by the CHAP. shadows of passing clouds upon the sand.

Upon the south-cast side is the gigantic statue of the Sphinx, the most colossal piece of sculpture which remains of all the works executed by the Antients. The French have uncovered all the pedestal of this statue, and all the cumbent or leonine parts of the figure: these were before entirely concealed by sand. Instead, however, of answering the expectations raised concerning the work upon which it was supposed to rest, the pedestal proves to be a wretched substructure of brick-work, and small pieces of stone, put together like the most insignificant piece of modern masonry, and wholly out of character, both with respect to the prodigious labour bestowed upon the statue itself, and the gigantic appearance of the surrounding objects. Beyond the Sphinx we distinctly discerned, amidst the sandy waste. the remains and vestiges of a magnificent building; perhaps the SERAPEUM. A sort of chequered work appeared in the middle of many of the stones belonging to this ruined It is unnoticed by every author who has written upon the Pyramids. Indeed, the observation of Geoffroy, as given in a Rapport

made to the Institute of Egypt, during the residence of the French at Caïro', is very just; that all preceding travellers have attended only to the principal objects, in their visits to the Pyramids. They have disregarded a number of other remains, less entire, and more diminutive, but calculated to throw considerable light upon the history of those antiquities which here occupy such a surprising extent. Strato, whose observations were certainly made upon the spot, as will hereafter be proved, has given, in his account of Memphis, a description of the situation of the SERAPEUM, pointedly applicable to this position of it; indeed it seems almost identified by his remark. He says it stood in a place so sandy, that hills of sand were heaped there by the winds; and mentions the remains of Sphinxes, as marking the place where it stood . A writer of somewhat later date, the author of the Sibylline Verses, which are believed

^{(1) &}quot;Rapport à l'Institut sur les recherches à faire dans l'emplacement de l'ancienne Memphis, et dans toute l'etendue des ses sépultures." Foy. (ourier de l'Egypte, No. 104. p. 3. Au Kane, de l'Imprimerie Nationale.

^{(2) &}quot;Εστι δι καὶ Σιράπιιον ἐν ἀμμώδιι τόπο σφόδος, ωσθ' ἐπ' ἀνίμων δίνας ἄμμων σωςιώτοθαι, ἀφ' ων αἰ σφίγγις κτ.λ. " Est ctiam Serapium, in loco valde arenoso, adeo ut arenæ colles a ventis exaggerentur: ibi vidimus Sphinges," &c. Strab. Geog. lib. xvii. p. 1145. Ed. O.con.

to be a composition of the second century, may rather allude to the Serapéum at Memphis, than to the temple at Alexandria, by the situation he assigns to Serapis³.

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Immediately beneath our view, upon the eastern and western side, we saw so many tombs, that we were unable to count them; some being half buried in the sand, others rising considerably above it. All these are of an oblong form, with sides sloping, like the roofs of European houses. A plan of their situation and appearance is given in Pococke's Travels'. The second pyramid, standing to the southwest, has the remains of a covering near its vertex, as of a plating of stone which had once invested all its four sides. Some persons, deceived by the external hue of this covering. have believed it to be of marble; but its white appearance is owing to a partial decomposition, affecting the surface only. Not a single fragment of marble' can be found anywhere near

⁽³⁾ Kai ou Tigari, Libus iriziluis. "Tuque Serapi sedens in saxis." S byllina Oracula, kb. v. ad fin

⁽⁴⁾ Description of the East, vol. I. Plate xvi. p. 41. Lond. 1743.

⁽⁵⁾ Marble was not used for buildings in very antient times. "It does not appear," says Shaw, "that marble was used by the Grecian artists, either in sculpture or building, before the 15th Olympiad,

this pyramid. It is surrounded by a paved court, having walls on the outside, and places as for doors, or portals, in the walls; also an advanced work, or portico. A third pyramid, of much smaller dimensions than the second, appears beyond the *Sphinx*, to the south-west; and there are three others, one of which is nearly buried in sand, between the large pyramid and this statue, to the south-east.

Having thus surveyed the principal objects, as they appeared from the summit of the greater pyramid, we proceeded to the examination of the substances, which composed its exterior surface.

Limestone used in constructing the greater Pyramid.

The stones of the platform upon the top, as well as most of the others used in constructing the decreasing ranges from the base upwards,

B.C. 720. Dadalus's statues of Hercules and Venus were of wood; of which, or of rough stone, were likewise their idols and temples, till that time. The antient Temple of Delphi was built about the 65th Olympiad, B.C. 520, or 513 years after the Temple of Solomon." See Shaw's Trav. p. 368. Note 5. Lond. 1757.

⁽¹⁾ In mentioning these particulars, the author may possibly repeat what other travellers have said before, without being conscious of so doing: indeed, it is hardly possible to avoid repetition, upon a subject which has been discussed by thousands, although the utmost vigilance be used.

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are of soft limestone; a little harder, and more compact, than what some of our English masons vulgarly call clunch; whereof King's College Chapel at Cambridge, and great part of Ely Cathedral, is built. It is of a grevish white colour; and has this remarkable property, that, when broken by a smart blow with a hammer, it exhales the fetid odour common to the dark limestone of the Dead Sea, and of many other places; owing to the disengagement of a gaseous sulphureted hydrogen. This character is very uncommon in white limestone, although it may be frequently observed in the darker varieties. It is now very generally admitted, that the stones, of which the Pyramids consist, are of the same nature as the calcareous rock whereon they stand, and that this was cut away in order to form them: Herodotus says they were brought from the Arabian side of the Nile2. Another more compact variety of limestone is found in detached masses at the base of these structures. exactly as it is described by Strato; seeming to consist entirely of mineralized exuvia, derived from some animal now unknown. We did not observe this variety among the constituents of the Pyramids themselves, but in loose fragments

⁽²⁾ Euterpe, c. 8.

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upon the sand. The forms of the petrifaction are lenticular. We noticed an extraneous fossil of the same nature in the Crimea, which has also been described by Pallas. Strabo's description of this substance corresponds, in so striking a manner, with its present appearance, that his account of it may be noticed as affording internal evidence of his visit to the spot. "Among the wonders," says he, "which we

Extraneous
Fossil described by
Strabo.

"Among the wonders," says he', "which we saw at the Pyramids, there is one which ought on no account to pass without notice. There are heaps of stones, lying among the ruins before the Pyramids, in which are found little petrifactions, in form and size exactly resembling the natural appearance of lentils. The tradition is, that these lentils are the petrified remains of the food given to the workmen." Notwithstanding the throng of travellers, particularly of late years, who have resorted to the Pyramids,

⁽¹⁾ The author has since been informed that it has been observed among the stones of which the principal pyramid is built.

⁽²⁾ It has received the appellation of Lapis Nummularius, from the resemblance of these lenticular forms to small coins. See Vol. II Chap. V. p. 228. Octavo Edition.

⁽³⁾ εν δί τι τῶν ὁραθίντων ὑφ' ἡμῶν ἐν ταῖς Πυραμίσι παςαδόξων οὐκ ἄξιον παραλιπεῖν. Ἐκ γὰρ τῆς λατύπης σωροί πιτες πρό τῶν Πυραμίδων κεῖνται ἐν σούτως δ' εὐρίσκεται ψήγματα καὶ τύπφ καὶ μεγέθει φακοείδη ἐνίοις δὶ, καὶ ὡς ἐν πτίσμα οἶον ἡμιλεπίστων ὑποτρέχει. Φασὶ δ' ἀπολιθωθήναι λείψανα τῆς τῶν ἐργαζομένων τροφῆς. Strabon. Geog. lib. xvii. p. 1146. Ed. Oxon.

almost all of whom have borne away some memorial of their visit to the place, not a single specimen of this very curious variety of limestone has yet been observed in any collection of minerals, public or private4. Shaw mentions the mortar used in the construction of the Pyramids'; although a very erroneous notion be still prevalent, that the most antient buildings were erected without the use of cement. A reference to this kind of test has been frequently made, with a view to ascertain the age of antient architecture. All that can be asserted, however, upon this subject, with any degree of certainty, is, that if the most antient architecture of Greece sometimes exhibit examples of masonry without mortar, that of Egypt is very differently characterized. As we descended from the summit, we found mortar in all the seams of the different layers upon the outside of the pyramid; but no such appearance could be discerned in the more perfect masonry of the interior. Of this mortar we detached and brought away several specimens.

⁽⁴⁾ Greaves was almost disposed to doubt the truth of Strabo's description, because he did not observe these petrifactions. "Were not Strabo a writer of much gravity, I should suspect these petrified graines." Pyramidog. p. 119. Lond. 1646.

⁽⁵⁾ Travels in the Levent, p. 368. Lond. 1757.

CHAP. It is of a coarse kind; and contains minute fragments of terra cotta. Grobert says it does not differ from the mortar now in use. Shaw believed it to consist of sand, wood ashes, and lime.

Labours of the French Army.

The French had been very assiduous in their researches among these buildings. They even attempted to open the smallest of the three principal Pyramids; and having effected a very considerable chasm in one of its sides, have left this mark behind them, as an everlasting testimony of their curiosity and zeal. The landing of our army in Egypt put a stop to their labour. Had it not been for this circumstance, the interior of that mysterious monument would probably be now submitted to the inquiry which has long been an object among literary men.

We were employed for a considerable time in a very useless manner, by endeavouring to measure the height of the greater pyramid. This we endeavoured to effect, by extending a small cord from the summit to the base, along the angles formed by the inclination of its

⁽¹⁾ See Denon's Voyage, as published by Pettier, tom. II. p. 80. Append. Lond. 1802.

⁽²⁾ See Shaw's Travels, p. 368. also p. 206. Lond. 1757.

planes; and then measuring the base as accurately as possible, together with the angle of inclination subtended by the sides of the pyramid. The result, however, as it disagreed with any account hitherto published, did not satisfy us'. It is a curious circumstance, that all accounts of its perpendicular height differ from each other. Some French engineers measured successively all the different ranges of stone, from the base to the summit. According to their observations, the height of this pyramid equals four hundred and forty-eight French feet'.

We now proposed to enter this pyramid: and as an inquiry into the origin and antiquity of these buildings will be reserved for a subsequent consideration, (after a careful examination

^{(3) &}quot;Although these immense masses had been within our view for the preceding three days, and we gradually approached them in the boat, on our arrival we were more astonished than ever: the prodigious stones which are piled one upon another in regular courses, and joined together with cement, are continued to such an exceeding height, that some persons on the top of the great pyramid appeared to us immediately under it, as if they were birds." Squire's MS. Journal.

⁽⁴⁾ Déscript. des Pyram. de Ghizé, par J. Grobert. See Peltier's Edit. of Voyage en Egypte par Denon, Append. tom. II. p. 62. Lond. 1802.

CHAP. IV. of the Pyramids of Saccára, as well as of those of Djiza,) a few brief remarks, containing little else than a mere description of objects, as they appeared to us, are all that will be added to this Chapter.

As we ascended the sandy slope that extends

Theft committed by an Arab.

from the mouth of the pyramid, on each side, towards the angles at the base, we observed that the Arabs had considerably increased in number since our arrival, and were very cla-One of them, while we were meamorous. suring the pyramid, had stolen the boat-compass given to us by Captain Clarke; an irretrievable loss in such a situation. We offered ten times its value to the Sheik who accompanied us, but the thief had disappeared; besides, it was impossible to make an Aral sensible of the sort of instrument for whose recovery the reward was proposed. The Bedouin, who had stolen it, no doubt considered it to be a box of magic or of divination, whereby infidels were guided to the knowledge of hidden treasure; in search of which they always believed us to be engaged. They had the same opinion of the thermometer which they saw us carry to the summit. In many parts of Turkey, this last was believed to be an

instrument for ascertaining distances during a CHAP. journey.

Having collected our party upon a sort of Visit to the Interior of platform before the entrance of the passage the larger leading to the interior, and lighted a number of Pyramid. tapers, we all descended into its dark mouth. In viewing this entrance, the impression made upon every one of us was, that no persons could thus have laid open the part of the pyramid where this channel was concealed, unless they had been previously acquainted with its situation; and for obvious reasons: First, because its position is almost in the centre of one of its planes, instead of being at the base. Secondly, that no trace appears of those dilapidations which must have been the result of any search for a passage to the interior; such, for example, as now remain for a memorial of the labours of the French near the smaller pyramid, which they attempted to open. The opening has been effected in the only point, over all the vast surface of the great pyramid, where, from the appearance of the stones inclined to each other above the mouth of the passage, any admission to the interior was originally intended. marvellously concealed as this entrance must have been, shall we credit the legendary story

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of an Arabian writer, who, discoursing of the Wonders of Egypt', attributed the opening of this pyramid to Almamon, a Caliph of Babylon, about nine hundred and fifty years since? A single observation of Strato overturns its credit in an instant; as the same passage was evidently known to him, above eight centuries before the existence of the said Caliph. describes not only the exact position of the mouth of the pyramid, but even the nature of the duct leading to the Onen, or Soros, in such a manner, that it is impossible to obtain, in fewer words, a more accurate description². It seems also true, that this opening had been made before the time of Hirodotus, although his testimony be less decisive. He speaks only of

⁽¹⁾ G. Almec. Hist. Irab. ex edit. Erp. See Greaves's Pyramidographia, pag. 44. Lond. 1646. Maillet had a similar notion: "Ce fut donc sans doute sous les Princes Mahométans, et par le Calife Mahmout, qui regnoit à Bagdad, et qui mourut l'an de l'Egyre 205, ainsi que le rapportent les auteurs Arabes, que cette impieté fut commise." Déscription de l'Egypte, tom. I. p. 319. 1740.

^{(2) &}quot;Εχιιδ is υψι μίσως τως των πλισφων λίθον εξαιφίσιμος άφθίστος δε σύριοξ ίστι σπολιά μίχρι τῆς θήπης. "In media fere laterum altitudine, lapis exemtilis est: eoque sublato obliqua fistula usque ad loculum." Strab. Geog. lib. xvii. p. 1145. Ed. Oxon.

The Oxford Editor of Strabo, in commenting upon the words supply levi oxedia mixes the bians, justly observes (Vid. Not. 27. ibid.) the coincidence between Strabo's description of the entrance, and that given by Greaves and Le Bruyn.

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subterraneous chambers'; but it were impossible to know any thing of their existence, unless the pyramid had first been entered. Hence it is evident, that a passage to the interior had been obtained from the earliest age in which any account was given of this pyramid; and perhaps it never was so completely closed, but that with a little difficulty an access might be effected. Proceeding down this channel (which may be compared to a chimney about a yard wide, inclined, as Greaves affirms', by an angle of twenty-six degrees to the platform at the entrance,) we presently arrived at a very large mass of granite: this appears to have been placed on purpose to choke up the passage; but a way has been made round it, by which we were enabled to ascend into a second channel, sloping, in a contrary direction, towards the mouth of the first. This is what Greaves calls the first gallery'; and his description is so exceedingly minute, both as to the admeasurements and other circumstances belonging to these passages, that it were a useless

⁽³⁾ Herodot. Euterpe, c. 125.

⁽⁴⁾ Pyramidographia, p. 85. Lond. 1646.

⁽⁵⁾ Ibid. p. 86.

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the Antients; for this exactly answers to the description given by Pliny of this well; and, in all probability, the depth of it does not much differ from that which he mentions, of eightysix cubits, or one hundred and twenty-nine feet, making the cubit equal to eighteen inches. Pliny says that the water of the Nile was believed to communicate with this well. The inundation of the river was now nearly at its height. May it be supposed, that, by some hitherto unobserved and secret channels, it is thus conveyed to the bottom of this well? It seems more probable, that the water is nothing more than the usual result of an excavation in a stratum of limestone, carried on to the depth at which water naturally lies in other wells of the same country; as, for example, in the pit called Joseph's Well, in the Citadel of Grand Caïro. The hill whereon this pyramid stands, is elevated about a hundred feet above the level of the plain country through which the Nile flows; and, allowing for the height of the mouth of the well above the base of the pyramid, we shall

^{(1) &}quot;In Pyramide maxima est intus puteus octoginta sex cubitorum, flumen illo admissum arbitrantur." Plin. Hist. Nat. lib. xxxvi. c. 12. L. Bat. 1635.

have nearly the distance required for a shaft CHAP. sunk below the bed of the river.

Some of the officers belonging to our party, Examinawhile we were occupied in examining the well, some infehad discovered two or three low ducts, or chan- rior Channels, bearing off from this passage to the east and west, (like those intersecting veins called by miners cross-courses,) and which they believed to have been overlooked by former travellers. Certainly there is no accurate notice of them in the descriptions given by Sandys, Greaves, Vansleb, Pococke, Shaw, Niebuhr, Maillet, Lucas, Norden, Savary, or any other author that we have consulted. Perhaps the French engineers employed under Menou in the examination of the Pyramids, by removing the stones which had closed the mouths of these channels, have laid them open. We undertook a most laborious and difficult task, in penetrating to the extremities of these ducts. The entrance being too low to admit a person upon his hands and knees, it was necessary to force a passage by lying flat upon our faces, gradually insinuating our bodies, by efforts with our arms and feet against the sides. The difficulty, too, was increased by the necessity of bearing lighted VOL. V.

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tapers in our hands, which were liable to be extinguished at every instant, in the efforts made to advance. As we continued to struggle in this mamier, one after another, fearful of being at last jammed between the stones, or suffocated by heat and want of air, a number of bats, alarmed by our intrusion, endeavoured to make their escape. This we would gladly have permitted, but it was not easily effected. Flying against our hands and faces, they presently extinguished some of our tapers, and were with difficulty suffered to pass by us. After all our trouble, we observed little worth notice at the end of any of these cavities. In one, which the author examined, he found, at the extremity of the channel, a small square apartment, barely large enough to allow of his sitting upright; the floor of which was covered with loose stones, promiscuously heaped, as by persons who had succeeded in clearing the passage leading thither. All these triffing channels and chambers are perhaps nothing more than so many vacant spaces, necessary in carrying on the work during the construction of this vast pile, which the workmen neglected to fill as the building proceeded; like the cavities behind the metopes in the Parthenon at Athens, which, although usually

filled in *Grecian* temples, were, as we find in CHAP. certain instances, left void.

After once more regaining the passage whence Chamber these ducts diverge, we examined a chamber Sepulchre. at the end of it, mentioned by all who have described the interior of this building. Its roof is angular; that is to say, it is formed by the inclination of large masses of stone leaning toward each other, like the appearance presented by those masses which are above the entrance to the pyramid. Then quitting the passage altogether, we climbed the slippery and difficult ascent which leads to what is called the principal chamber. The workmanship, from its perfection, and its immense proportions, is truly astonishing. All around the spectator, as he proceeds, is full of majesty, of mystery, and of wonder. The materials of this gallery are said by Greaves to consist of white and polished marble. This we did not observe. Pococke also mentions pilastres in an anticloset before the principal chamber'; circumstances which are inconsistent with received opinions respecting

⁽¹⁾ Pyramidographia, p. 90. Lond. 1646.

⁽²⁾ Description of the East, vol. 1. p. 45. Lond. 1743.

CHAP. antient architecture. The pilaster is believed to be of modern date; and marble, according to some writers, was not used by architects before the fifteenth Olympiad'. Presently we entered that "glorious roome," as it is justly called by Greaves*, where, "as within some consecrated oratory, Art may seem to have contended with Nature." It stands "in the very heart and centre of the pyramid, equidistant from all its sides, and almost in the midst between the basis and the top. The floor, the sides, the roof of it, are all made of vast and exquisite tables of Thebaick marble." By Greaves's Thebaick marble is to be understood that most beautiful variety of granite called, by Italian lapidaries, Granito rosso3, which is composed essentially of feldspar, of quartz, and of mica. It is often called Oriental granite, and sometimes Egyptian granite, but it differs in no respect from European

⁽¹⁾ Before Christ, 720. See a former Note in this Chapter. It should be said, however, that Shaw, who makes this remark, (Trav. p. 368, Note 5. Lond. 1757,) applies it to the Grecian, and not to Egyptian artists. There are Doric pilasters, of the age of Augustus, in the remains of Mecenas's Villa, near Rome; and the immense capitals discovered among the ruins of a temple at Girgenti evidently belonged to pilasters of much earlier date.

⁽²⁾ Pyramidographia, p. 95.

⁽³⁾ See Forber's Travels, p. 226. Lond. 1776.

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granite, except that the red feldspar enters more largely as a constituent into the mass than is usual in the granite of Europe'. So exquisitely are the masses of this granite fitted to each other upon the sides of this chamber, that, being without cement, it is really impossible to force the blade of a knife between the joints. This has been often related before; but we actually tried the experiment, and found it to be true'. There are only six ranges of stone from the floor to the roof, which is twenty feet high; and the length of the chamber is about twelve yards. It is also about six yards wide. The roof or ceiling consists only of nine pieces, of stupendous size and length, traversing the room from side to side, and lying, like enormous beams, across the top.

⁽⁴⁾ The author has seen grante of the same kind, and of equal beauty, in fragments, upon the shores of the Hebrides, particularly at Icolmkill.

⁽⁵⁾ Diodorus particularly alludes to te same thing. "But this work," says he, "is not only worthy of praise on account of its magnitude, but wonderful for the skill displayed, and remarkable for the nature of the stone; since that in so much vastness there was not a fissure nor a blemish visible." Τὸ δὶ ἔργον τοῦτο μὰ μένον εἶναι κατὰ τὸ μίγεθος ἀποδοχῆς ἄξιον, ἀλλὰ καὶ τῆ τίχνη θαυμαστὸν, καὶ τῆ τοῦ λίθου φύσει λιάφορο, ὡς ἀν ὶν τηλιποότφ μιγίθει μάτε ἐκαφυάδος μάτε καλίδος μπότεμῶς θεωρουμένης. Diod. Sic. lib. i. c. 47. p. 57. ed. Wesselingis. Amst. 1746.

The Soros.

Near the western side, stands the Soros, of the same kind of granite as that which is used for the walls of the chamber, and as exquisitely It is distinguished by no difference polished. of form or dimensions from the common appearance of the Soros, as it is often seen in Turkish towns, when employed by the inhabitants to supply the place of a cistern. It resembles, as Gremes has remarked', "two cubes, finely set together, and hollowed within; being cut smooth and plain," without sculpture or engraving of any kind. Its length on the outside is seven feet three inches and a half; its depth, three feet three inches and three quarters; and it is the same in breadth. Its position is north and south.

This beautiful relic was entire when our troops were landed in Egypt. Even the French had refused to violate a monument considered by travellers of every age and nation as consecrated by its antiquity; having withstood the ravages of time above three thousand years, and all the chances of sacrilege to which it was exposed during that period from wanton indiscriminating barbarity. It is therefore painful

⁽¹⁾ See Pyramidog. p. 96.

to relate, that it is now no longer entire. The CHAP. soldiers and sailors of our army and navy having had frequent access to the interior of the bemolipyramid, carried with them sledge-hammers, to break off pieces, as curiosities to be conveyed to England; and began, alas! the havoc of its demolition?. Had it not been for the classical taste, and the laudable interference, of Colonel now General Stewart, then commanding-officer in that district, who threatened to make an example of any individual, whether officer or private, who should disgrace his country by thus waging hostility against History and the Arts, not a particle of the Soros would have remained. Yet, as a proof of the difficulty which attended this worse than Scythian ravage, the persons who thus left behind them a sad memorial of the British name, had only succeeded in accomplishing a fracture near one of the angles. It was thus disfigured when we arrived; and every traveller of taste will join in reprobating any future attempt to increase the injury it has so lamentably sustained.

⁽²⁾ During the same week in which this Chapter was printing, little pieces of granite were shewn to the author, as " bits of King Pharach' Tomb," which were taken f. om this sepulchre,

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Having quitted this Pyramid, we amused ourselves by a cursory survey of the rest; concerning which we have nothing to communicate that would not be a mere repetition of what has been already related by many other writers. We then descended into some of the smaller sepulchres. The walls within these were adorned with hieroglyphics. In some instances, we noticed the traces of antient painting, an art that seems to have been almost co-eval with the human race. The most remarkable instance of this kind was discovered by the author in a situation where, of all others, it was least to be expected,—upon the surface of the Sphinx. As we drew near to view this prodigious colossus, a reddish hue was discerpible over the whole mass. quite inconsistent with the common colour of the limestone used in building the Pyramids, and of which the Sphinx itself is formed. This Its surface induced us to examine more attentively the superficies of the statue: and having succeeded in climbing beneath the right ear of the figure, where the surface had never been broken, nor in any degree decomposed by the action of the

> atmosphere, we found, to our very great surprise, that the whole had once been painted of a dingy red or blood colour, like some of the

The SPRINT.

found to be painted.

stuccoed walls of the houses in Pompeii and CHAP.

Herculaneum'. Upon this painted surface there

(1) See RODE and RIEM "On the Painting of the Antients," p. 53. Berlin, 1787. "It is really astonishing that a people, which, if we except the obstacles arising from climate and the despotism of its priests and its rulers, possessed such abundant means of elevating the Arts to the highest degree of perfection, did so little understand how to use these means. In these glowing colours, of which the original quality remains unaltered and entire, after thousands of years, in these so well-preserved colours of the royal tombs of BIBAN EL MOLUCH, of the ceiling at TENIVRA and SVENE, and in the colours of the fallen Sphinx near the antient Heriopolis, are discovered resources of which few nations have been able to boast, and which Count Caylus supposes to consist in certain sharp and corroding materials, which united the colours so firmly with the body, that centuries would produce no alteration in their substance. This supposition is perhaps erroneous Corroding materials do not always preserve the colours, but destroy certain kinds, or at least change them, is such a manner, that they are far from remaining what they were. I will venture a supposition, which, however, I mean to try previously, by an experiment which, for that purpose, I propose to make. I think, namely, I may conjecture, not without reason, that the Egyptians did not put on the colour in the manner in which it is done now; because the use of the pencil was entirely unknown to them. Nothing was left them, in this respect, but to unite a plastic viscid mass so thoroughly with the simple colours, that the whole mass which they put on contained those colours. It is precisely the same, whether this consisted of a kind of wax, of cement-earth hard as stone, or of something similar. This they could easily put on, by means of their instruments; and indeed the easier, as they knew of no mixing and of no shading of colours, but painted all in uniform colours, red, yellow, or otherwise. plastic mass, or cement-earth, hardened either by encaustic treatment, which was not unknown to them, or by itself. This must very naturally preserve the colours in equal strength, as they were bound together and rendered permanent by the mass itself, and quite incorporated into it, which is particularly true of stone- and earth-colours.

Toward

IV. Discovery of an antient Inscription.

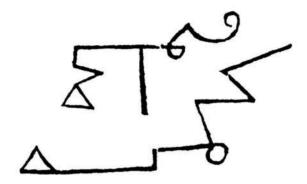
CHAP. was also an Inscription; but so concealed, by its situation beneath the enormous ear of the Sphinx, and so out of the reach of observers viewing the statue from below, that no notice has yet been taken of it by any preceding traveller. As to the age of this inscription, the reader must determine for himself. At the same time, it may be proper to add, that it bears the characteristic of a high antiquity in the manner of applying the writing. There is a passage in the Book of Deuteronomy which proves that the custom of writing upon plaister existed in the fifteenth century before the Christian æra. The Israelites are thus instructed to write the Law; and it is very probable that Moses had learned the art from the Egyptians. "THOY SHALT SET THEE UP GREAT STONES, AND PLAISTER THEM WITH PLAISTER: AND THOU SHALT WRITE THEM ALL THE WORDS OF THE LAW ." two first lines are Coptic; the rest is Arabic. The characters were of considerable size, and

Toward the end of this work, I shall make my readers acquainted with such a kind of cement-earth, and describe its whole composition. which, in hardness, is not inferior to any sandstone, emits sparks when struck, and to which, with soft and plastic treatment, one may give not only the complete appearance of a work composed of raw sandstone, but also all the colours, and all the firmness, hardness, and durability of stone."

⁽¹⁾ Deut. xxvii, 2, 3.

they were inscribed in black paint upon the CHAP. red surface of the statue. The author bestowed all possible care and attention in making the following copy of them, as a fac-simile.

CHAP. Above these, and closer under the ear, were written, very conspicuously, these curious monograms,



probably also Arabic, but in their appearance somewhat resembling the kind of writing preserved among the Inscriptiones Sinaicæ, as published by Kircher and by Pococke'. According to Pococke, this was not engraven, but painted, or stained, upon the rock where he saw it.

Custom of painting Antient Statues.

Whatsoever may be the age of these characters, the specimen of painting exhibited by the superficies of the stone is of still higher antiquity; not merely because the inscription appears upon the painted surface, but from the

⁽¹⁾ See Plate LV. Inscript. 86. Descr. of the East, vol. I. p. 149. Lond. 1743. "The Greeks," says Pococke, "call this inscription Θιῶ χάραντα γράμματα, "The words of God engraved." The same inscription may also be found in Kircher's Prodromus Copticus.

to other examples which may be mentioned.

The statues of the Parthenon at Athens were originally painted and gilded; and however contrary the practice may seem to our notions of taste, a custom of painting statues, and of gilding the hair of images representing celestial beings, has continued, without intermission, from the age of Pericles and the golden-haired Apollos of Greece, down to the æra of those Italian artists who filled our old English churches with alabaster monuments, where, besides the painted effigies of our ancestors, may be seen the figures of angels with gilded wings and gilded hair. But these are subjects which, to a writer

"PAUL. Opatience '
The statue is but newly fixt, the colour 's
Not dry._____"

^{(2) &}quot;Avant que ce marbre précieux eût été nettoyé, il conservoit des traces, non-seulement de la couleur encaustique dont, suivant l'usage des Grees, on endusoit la sculpture, mais encore d'une séritable peinture dont quelques parties étoient couvertes; usage qui tient aux procédés de l'enfance de l'art, dont il ne s'etoit pas encore débarrassé. Le fond étoit bleu; les cheveux et quelques parties du corps etoient donés." Voy. Monumens Antiques inédits. Description d'un Bas-Relief du Parthenon, par A. L. Millin. Traces of gilding are still to be perceived on the hair of the Venus de Medicis.

⁽³⁾ A splendid monument of this kind, erected over the bodies of Lord Surrey the Poet and his family, may be seen in Framlingham Church, Suffolk. Shakspeare has finely availed himself of this practice, in the image of Hermione (Winter's Tale):

CHAP. fond of pursuing the mazes of antient history, offer such alluring deviations from the main route, as might lead both him and his reader into almost endless digression: the vestiges of antient art, and the remains of antient customs. visible in our daily walks and in every haunt of society, so frequently suggest themselves to philosophical reflection, that, if due attention were paid to them, whole volumes would be inadequate to the dissertations that might be written. A few observations only, selected from the pages of an author who has expressed a similar observation; and who, most learnedly illustrating the arts of painting and writing among the antient Egyptians', has concentrated within a small compass whatever might have been added upon these topics; may terminate this chapter.

Extract from Prew. "The number of things to be spoken of here will not permit us to treat of each in particular; for it is necessary sometimes to neglect details, and confine ourselves to essentials only, that a chapter may contain what might otherwise require a whole book. The loss of the greater

⁽¹⁾ Philosophical Dissertation on the Egyptians and Chinese, by De Pauw, vol. I. pp. 187, 188, 189, 190, 202, 203. Lond. 1795.

part of the history of the Arts in Egypt is a CHAP. circumstance truly lamentable. All the wrecks now remaining form only a mutilated body.

" Pliny has fallen into an unpardonable contradiction, when he maintains that the art of writing had been known from all eternity, and denies, at the same time, that the Egyptians practised painting during six thousand years. Plato finds no difficulty in believing it to have been known to them for ten thousand years'. When Plato, in his Dialogues, makes an anonymous interlocutor assert that ten thousand years had elapsed since some pictures then seen in Egypt were painted, we should observe, that colours, applied in all their natural purity on the partitions of the Theban grottoes, might really be capable of supporting so long a period. The fewer mixtures are admitted in colours termed native, and appertaining neither to the vegetable nor animal kingdom, the less they are subject

⁽²⁾ De Pauw is evidently here aiming at the introduction of his own sceptical notions with respect to chronology. We are to understand Pliny's use of the word eternity only as referring to a period antecedent to existing records, or those of the αὐτόχθονις: an observation necessary to rescue many of the antient philosophers from the absurd notions imputed to them.

⁽³⁾ De Legibus, Deal. 2.