



Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

411/11/22 2011









EXISTING MONUMENTS, SCULPTURES,

GEMS, COINS AND MEDALS.

Melle

BY A FELLOW OF SEVERAL LEARNED SOCIETIES.

[John Murray]

See Halkett



Laing.

VERA SALVATORIS NOSTRI EFFIGIES AD IMITATIONEM IMAGINIS SMARAGDO INCISE HYSSY TIBERII CÆSARIS QVO SMARAGDO POSTEA EX THESAVRO CONSTANTINOPOLITANO TYRCARVM IMPERATOR INNOCENTIVM VIILPONT MAX. ROM. DONAUT PRO REDIMENOD FRATRE CHRISTIANIS CAPTIVO.

LONDON.

1831.



THE

TRUTH

• O F

REVELATION,

DEMONSTRATED

By an Appeal

то

EXISTING MONUMENTS, SCULPTURES, GEMS, COINS, AND MEDALS.



FELLOW OF SEVERAL LEARNED SOCIETIES.

LONDON:

LONGMAN, REES, ORME, BROWN, & GREEN;
HATCHARD, PICCADILLY; SEELEY, FLEET STREET; & HOLDSWORTH & BALL, ST. PAUL'S CHURCH YARD.

MDCCCXXXI.

BS 651 M8

NO VIENT

27877

1

Whitley & Booth, Printers, Halifax•

THOMAS CHALMERS, D. D.

PROFESSOR OF DIVINITY,

IN THE UNIVERSITY OF EDINBURGH,

&c. &c. &c.

DEAR SIR,

I well remember that you favoured, with approbation, the skeleton of my original plan, which I have waved in favour of the present class of evidence; and, though more limited in its design, it possesses, in a greater degree, the features of novelty.

May I beg you to accept the present efforts in a Cause which is dear to both, as a pledge of my unfeigned admiration of your successful exertions in the sacred cause of Truth. That you may be long spared, by the goodness of Providence, the undaunted chieftain in the tented-field of the Christian warfare, is the sincere desire of,

Dear Sir,

Your faithful and obedient Servant,

THE AUTHOR.

November 1, 1831.

"Goe, little booke! thyself present,
As child whose parent is unkent;
And when thou art past jeopardie,
Come tell me what was said of me,
And I will send more after thee."

Spenser.

ADVERTISEMENT.

THE design, originally proposed, was intended to embrace a much more varied and extensive range than these pages present. A connected and condensed view was contemplated of the various classes of evidence which had been, from time to time, brought forward by the advocates of Divine Truth, accompanied with an analysis on inductive grounds of their power, and such original remarks as had satisfactorily impressed my own mind. I soon, however, found that I had entered upon too extensive and excursive a field, but which, though abandoned, I still feel persuaded might, if judiciously managed, be of considerable service to the cause of Truth. know not what may be the case with others, but for my own part I best relish a perspicuous delineation of truth, condensed, viewed under different aspects, and considered in diversified relations. I like the lineaments bold, prominent and palpable—the features standing forward in sublime relief, without being shaded by the diffuse reveries or phantasies, or much writing of injudicious advocates. In the hands of such writers the truth suffers an eclipse: the simplicity and beauty of the air are lost amid the intricacies and perplexities of the variation.

The class of evidence for the Truth of Revelation, unfolded in the sequel, appears to me more striking and novel than many others, and it is because I think it has either been too much neglected, or but too partially insisted on, that I have selected it. It has certainly

lacked that favouritism to which, in my humble opinion, it is most richly entitled—it seems to me also to be of a character well adapted to the present generation, restless and clamorous about "something new," as were the Athenians eighteen centuries ago. Modern discoveries seem to have intoxicated the mind, and reeling in its own assumed consequence, it may be heard to mutter-"Who is the LORD that I should serve him?" This is a condition of the mind but little adapted for the reception of the sober realities of truth, which speak to the understanding ;-our object is to prove that genuine science gives no countenance to such unnatural whims and fancies—such abortions of the brain. I readily grant that "the natural man is in enmity with Gop," a truth as demonstrative as any other proposition; -all that we mean to assert is, that literature and science, in their native excellency, disown such an illegitimate offspring. Besides, we trust the fruits of our present enquiry may, in some measure, meet the urgent call of the human intellect, which declares in these bold times, that it can be satisfied with nothing less than the stern and uncompromising scrutiny of inductive truth. Such a test is here propounded, while the original generalization is finally abandoned to others better qualified for the task.

To books generally which refer to the Prophecies, I have no friendly feeling. Unless much caution and acute discrimination be exercised, the question may "suffer loss." To rend the curtain which veils the councils of heaven in the vista of futurity, in my apprehension, savours no little of impiety. "Secret things belong to God; those that are revealed belong to us and to our children." These remarks are made by way of apology, for having long neglected the perusal of Keith's

excellent work on Prophecies fulfilled. It is a most judicious compendium, wherein the enlightened researches of modern travellers are adduced, and turned to excellent account. As these existing monuments most powerfully and satisfactorily speak for themselves, and demonstrate the Truth of Revelation in language which no sophistry can evade, we can cheerfully recommend the work in question as one which renders it unnecessary for us to appeal to this class of illustration. It is not akin to the labours of many of the seers and interpreters of modern times; it takes more substantial ground;-to my mind it is conclusive, and calculated to produce conviction in every honest mind. It is demonstration, and must hurl atheism itself from its impious throne, for surely none but JEHOVAH, who "sees the end from the beginning," and with whom the past, present, and future, are but a point of unity, could have foretold the facts and phenomena which have been registered, from time immemorial, in the Chronicles of Heavenly Truth, and with such remarkable particularity, and such microscopic minuteness, in the detail of the several incidents; and, all this too not in ambiguous language—ambiguas voces,—or couched in terms that may be doubtful. The evidence, as to the minutiæ of these remarkable details too, seems to have been the attestations of numerous travellers, chiefly in recent times. To this gradual accumulation, diversified minds and independent authorities have contributed; -- some of these have been infidels, who have, in the facts witnessed. unwittingly cast their mite into the treasury of evidence. Succeeding pilgrims have observed facts overlooked by their predecessors, to whom the requisite opportunity had been wanting. The pyramid of truth, thus built

up by the aggregate strength of many minds, forms a structure of power impregnable to the assaults of flimsy wit, or maddened sophistry, and altogether such as none can gainsay or controvert. These wonderful facts are stamped with a literality and precision which, when compared with the lucid and descriptive language of Scripture, cannot fail to astonish and delight. It must be cheering to the lover of truth—the Christian to find, that, under whatever aspect the evidence and ground of his exalted hopes are tried, they "come forth like gold." In perusing this work, and diligently comparing, as I had already done, the combined testimonies of these eminent travellers, Sir R. Ker Porter, M. M. Buckingham, Keppel, Mignan, and others, and the researches of Mr. Rich, on the ruins of Babylon, in the Mines d' orient, not to mention a host of preceding travellers-it struck me as remarkable, that while the scenes of ruin which they visited were most faithfully described in the Records of Prophecy, without adding to or diminishing the force, accuracy, or minute colouring of its honest language, others again seem unconsciously to have breathed, by affinity with these scenes, the very atmosphere of Scripture, and echoed the tone of inspiration. Even infidels, like the apostate Saul, when brought within the mournful sphere of their desolations, have, by the resistless force of truth, borne reluctant testimony to the Heavenly Record, while we exclaim in astonishment, as we gaze, "are these also among the prophets?"

The ground of evidence I have now ventured to occupy, seems to be of a kind equally conclusive and satisfactory, and even more likely to reach the lofty pretensions of well bred science, and such individuals as

may not condescend to scrutinize the overwhelming evidence of demonstration presented in the palpable events of prophetic denunciation. The enquiry is curious, novel, and deeply imbued with interest. These legible memorials of time long elapsed, the transcript of wonderful events, are durable as adamant, and permanent as brass. They form a legend which all "who run may read," though one which, if we mistake not, instead of occupying the high vantage ground it ought to have possessed, has only been hitherto considered a subordinate link in the chain of evidence. Some writers on Coins and Medals. Pinkerton for instance, have treated with a sneer, the evidence derived from the Jewish Shekel and the Coins of the Lower Empire. It is true the impress on Coins of the Lower Empire is rude, as are the Shekel and the Jewish Currency under Agrippa, but this does not diminish their value as Medallions of history. Many Coins of high antiquity, the Sassanian, for instance, are barbarous in the extreme, but are certainly not on that account to be rejected from a complete cabinet which would equally welcome the antique Leaden Money with that of "Kimmeridge Coal," and in which the Leather Money of Numa, however rude, would be hailed as an acquisition. Dr. Walsh has, in his interesting little work, done much in the way of evidence collected from Coins and Medals, as illustrating the early history and progress of Christianity chiefly in connection with Coins of the Lower Empire. It is only to be regretted that he has bestowed so much attention on the idle fooleries of the gnostics, in our opinion altogether unworthy the space he has occupied in the discussion. I have grappled with the question of Revelation on a broader basis.

It should, however, be observed in this place, that I have neither time nor inclination for any elaborate disquisition had I ability for the task; and nothing of the kind will be found. Μεγα Βιβλίον μεγα κακόν—a great book is a great evil, is a conviction with which my mind has been long thoroughly imbued. My object has been to collect facts, still existing mementos, which any one may consult for himself: as far as possible the figures may be considered faithful fac similes of the originals; and though I am free to confess, that my researches in quest of illustration have cost me not a little anxious labour, I must also admit that the task has been a very delightful one—Labor ipse voluptas, and as the proofs rose before me in review, "I thanked God and took courage." The evidence has been most satisfactory to my own mind, and I most devoutly hope it may be found equally so to others. It appears, to me at least, altogether incontrovertible, and of such a nature as to impel conviction, and will, doubtless, vield satisfaction where the mind is honest and docile, and willing to receive information on the most important question which can animate its hopes, or engage its affections. It is just such a species of evidence as the most stern and rigorous demands for demonstration have reason to be satisfied with. It is of a stamp even superior to mathematical authority, high and lofty though its proud pretensions be. These things tell their own tale-they are seen and read of all men, and are written in a species of universal language-"Parthians and Medes, and Elamites, and the dwellers in Mesopotamia and in Judea, and Cappadocia, in Pontus and Asia, Phrygia, and Pamphylia, in Egypt, and in the parts of Libya, about Cyrene, and strangers of Rome, Jews and Proselytes, Cretes and Arabians, all hear in their own tongues the wonderful works of Goo." There is no room here for the charge of interpolation and artificial interpretation; the legend has nothing to do with phraseology, and belongs not to any kindred or tongue; our proofs are tangible inscriptions contemporaneous with the events they record, nor can sophistry elude their force, or pervert their meaning. We know not what higher species of evidence can be wished for, or demanded. Our eyes may see, our hands may handle them. We wrestle not with mere opinion, but grapple with matters of fact, attested by the senses.

It may be objected that some of these may be forgeries, such as were the Paduan Medals. To this it may be replied, that they are obtained under a great variety of different circumstances, and from a multitude of independent sources. As to the Paduan Medals, the original dies are, we believe, in one of the museums of Paris; nor is it doubted that these were copies from rare originals actually existing.

The speculations of the geologist have changed their form and dimensions like a Proteus, and almost as rapidly as the hues of the chameleon; happily, however, his wild eccentricities have not overturned the mountains of the globe; and our appeal is to them, to their legend and durable inscription. A theory, it is true, may not be able to account for all phenomena; but it is equally true, that a solitary fact, counter to its dicta, is sufficient to overturn it. We point, therefore, to monuments and inscriptions in the live rock, in situ, that are still fresh and legible, though ancient as the patriarchal and the prophetic age, bearing the autograph of some of the earliest events in the Biblical

History of man. The Babylonian and Persepolitan characters have not, it is true, been yet deciphered, but the task is by no means hopeless; and when the key shall be found to unlock these records of antiquity, there can be little doubt that some of the historical incidents of the Sacred Volume will be elucidated and confirmed. The hieroglyphic symbols of aboriginal Egypt, down to a very recent period, seemed to be as unpromising as could well be imagined; but the seal of its mystery is broken, and from this mystic source a new and unexpected confirmation of Sacred Writ has been obtained. As time rolls on, new accessions of proof are unfolded; these will accumulate age by age, continually, as Providence lifts the veil, until, in the fulness of time, they shall merge into one mighty and irresistible blaze of truth, which will consume all the cobwebs of sophistry, and for ever confound the infidel.

We hold that the sign manual of truth is appended to such deeds and documents as these, and require only the same test as we are wont to apply in our researches in pursuit of physical truth. In the following pages our object has been to condense and to collect into a focus, what appeared to us scattered rays of remarkable evidence, only regretting, though we can most conscientiously say we have not been wanting in diligence in collecting materials from every practicable and accessible source, that they are, after all, more limited than we could wish. If our present attempt should meet a favourable reception, neither time, application, nor expense, shall be withheld to swell the amount of evidence and demonstration, under a firm conviction that there remain, still "greater things than

these" in reversion—some tangible memorial, it may be, of every fact mentioned in the Biblical Record. The researches of discovery are not yet finished; many a wonder may yet be revealed to the keen scrutiny of man. It is not yet enough, nor has restless enterprize completed its task. On the other hand, should our present labours not meet with a hearty welcome, we shall most willingly and cheerfully resign our task into abler hands.

Let it not be forgotten, that the present attempt is the unaided effort of a solitary private individual, whose means are cramped, and whose influence is very limited; but, if one hedged about with so many difficulties, and whose sphere of usefulness is so contracted, can do so much, what may not be expected from another, who, to ability and zeal, and unfettered by any kind of restriction, could add both influence and means? And still more, what might be the result of the combined researches of many kindred minds?

Our wish has been to meet the infidel and the sceptic on the wide arena of modern science, of which he talks so loudly and boasts so much. We much mistake, indeed, if the literary and scientific sceptic has it all his own way. Mere verbiage will not give the disputant, in this arena, the palm of victory. Some more sterling chivalry must distinguish the victor. Sarcasm and sophistry are games for fools, but are altogether inadmissible in the Athenian school of genuine science. Wit and ribaldry will not break the lance of truth. These sorry warriors must come into the field equipped with different armour if they hope to win.

The sceptic and the infidel have no right to play the Procrustes in the republics of literature and science;

we, therefore, deny them a licence to apply to the palpable language of truth, the rack and inquisition of their sophistry. We have traversed the different realms of modern science, and, whatever may have been our attainments, we do trust, we are not over confident that we can give a "reason" for the principle that constitutes the main spring of our happiness.

"What is Truth?" said pusilanimous and versatile Pilate, while it stood personified before him in all its glorious attributes; but, like a light shining in a dark place, the darkness comprehended it not. Truth is an immutable and immortal thing, like its almighty Author it is "without variableness or the least shadow of turning." It is a reflected ray from the Father of Lights, and like its heavenly Source, it is "the same yesterday, to-day, and for ever." Time cannot impair its lustre, or tarnish its beauty. It springs brighter from the wave. "Great floods cannot drown it." The Christian may well rejoice in his hope, rooted in such a Paradise as is the Tree of Life. That hope is founded on a rock which no tempest can successfully assail. Into this heavenly Palmyra "the righteous flee and are safe." When they are chased by the enemy, this is their "strong hold as prisoners of hope."

Modern science and research, if our reason and our senses do not alike deceive us, give no colour or pretext to the artifices of scepticism or infidelity. Their assumptions rest on false grounds; -postulata, which, we hesitate not to say, are a bold inversion of the canons of inductive science, and framed in despite and defiance of the maxims of those great teachers of science and master-spirits of humanity, Newton and Bacon. hate idolatry of every kind, and above all, that of talent and intellect, while we honour, respect and admire, the precepts of truth, however lowly be the source whence they emanate. These, however, were "mighty men" on the Gilboa mountains of philosophic truth; they were as sober and circumspect, as they were profound in wit and genius: we would gladly sit at their feet, and listen to their instructions. It is the Christian, above all men on earth, who is "in his right mind."

The times in which we live are of no ordinary character; and what may follow there is now no prophet to tell us. The canon of Scripture is closed, and the heavenly Roll, in which our destinies are written, is entrusted to us, and to our children; we do well to take heed to its admonitions; it has all the emphasis of a voice from heaven, and its enunciation is, Thus saith the Lord.

The champions of truth are summoned to the field, and loftier ground must now be occupied than has ever yet been taken. The great Armageddon of infidelity seems rapidly to approach. The spirits of men are restless and convulsed. Thrones are tottering and empires are ruined-"men's hearts failing them for fear." Thus, however, saith the Spirit of Eternal Truth, "knowledge shall be the stability of thy times." Yes! religious knowledge is the pillar of our securityour "mountain that standeth strong." It is the high hill of our comforts and our happiness, far exalted above the storms that agitate the lower world. A serene sky illuminated by the Sun of Righteousness above our heads, we have nothing to fear, though the lightnings flash and the thunders roll beneath us. Eternity and a world to come are no trifles in the eye of right reason, and in the estimation of the imperial and noble aspirant for

"glory, honour, and immortality." Man was not made in vain, with such prospects as these; and the Christian need not fear to explore the "valley of the shadow of death," with the Safety-lamp of heaven in his hand.

We have, it has been noticed, visited the regions of science, studied in her schools, conversed with her philosophers, walked through her avenues, and cultivated her fields; we have interrogated the oracles of nature, and solicited a distinct and positive reply to the question, whether the elements of hostility to revealed Truth were contained in them? One and all returned a negative, and an amen to Lord Bacon's maxim,-" the books of Nature and Revelation mutually illustrate each other." The root of the matter is to be sought for, therefore, in the heart, not in the head,—the pride of humanity—the would-be interpreter of nature's laws and phenomena. "Ye shall be as gods," said the wily tempter to the too credulous pair in Eden's Elysium, -ambition kindled at the thought, and the crown of innocence fell to the ground: the same seeds of disease still rankle in the moral frame. These truths, however, shall endure when the pillars of the universe totter, and the "mountains be removed and there be no place found for them."-

"Go, little book, heaven be thy guide."

CONTENTS.

CHAPTER I.

Page.

	
CHAPTER II.	
The Creator—History of Creation—Age of the World—Natural Chronometers—Hieroglyphics of Egypt	3
CHAPTER III.	
The Fall of Man—Remarks on Phrenology—The Mythology of Paganism	19
CHAPTER 1V.	
The Deluge—Historical and Traditionary Proofs—Geological Evidence of the Circumfusion of the Diluvial Waters, and comparatively recent Epocha of the Event	32
CHAPTER V.	
Phenomena of Caves enclosing Diluvial Mud and Organic Remains —The Bird of Noah—Dromedary—The Rainbow—Gigantic Remains—Concluding Geological Remarks	36
CHAPTER VI.	
The Dispersion—The Tower of Babel······ 17	10
CHAPTER VII.	
The Call of Abraham-Birth of Moses-Exode and Pilgrimage 18	37

1

CHAPTER VIII.

1	a	g	e	۰

Tables of Stone-Elevation of the Brazen Serpent-The Samaritans. 199

CHAPTER IX.

Shibbo	oleth	—Sai	mson-	-Bro	ok	Elah-	-Cap	tivity	of	the	Ten	Tribes	
by	Sha	lmar	eser-	-The	In	vasion	by	Shish	ak,	King	of	Egypt-	
Da	niel												214

CHAPTER X.

Remarks	on Mira	cles-Th	e Spir	it of Prophecy-M	odern	Judais	sm	
-The	Sacred	Code o	f the	Jews-Retrospect	-The	Eve	of	
Christi	ianity						2	224

CHAPTER XI.

The	Advent	of	the	Messiah—The	Divinity	of	Jesus	Christ-	
Т	he Cruc	ifixi	lon .		· · · · · · · · · · · ·				240

CHAPTER XII.

Illustrations	of	the	Acts	of	the	Apostles-The	Destruction	of	
Jerusalem	ı by	Tit	us V	espa	asian	-Conclusion			264



TRUTH OF REVELATION.

CHAP. I.

PRELIMINARY REMARKS.

WHEN we reflect on ourselves and our relation to the external world, we are lost in a labyrinth of uncertainty, and there is no Ariadne's clue to guide our footsteps. The scenes around amaze by their astonishing variety, captivate by their beauty, and enchant by their harmony. Power, wisdom, and goodness, pervade the wondrous plan. The sun of yesterday rises again and decorates the same landscape we saw before; yet, since the charm continues day by day, its magic is forgotten; and because our enjoyments are uninterrupted, we are insensible to the blessings that are profusely strewn around us. Our inquisitive mind naturally wishes for more information than we can glean from the mere routine of common observation. Hurried on by an impetuous and restless curiosity, we have recourse to those instruments with which the genius of our species has supplied us in ransacking the records of creation, and interrogating her phenomena. Our wonder increases with every step of advance; and

we, who before considered ourselves as the Teraphim of creation, in the extended knowledge which the telescope reveals, at length find ourselves almost "less than the least of all." Anxious for intelligence respecting the author of these things we interrogate the oracles of nature, and hear a voice from their mysteries attesting a supreme Creator, invested with the high attributes of infinite and supreme excellence; and whose power, wisdom, and goodness, are unlimited in extent, unaffected by the vicissitudes of time, and boundless as the range of eternity. That great and glorious Being we call "GOD-BLESSED FOR EVER." It is only "The FOOL, who hath said in his heart, there is no Gop." It is this "fool" who hath made the unique discovery of an effect without a cause. It is he who affects the possession of all knowledge—for that which he knows not, for aught that he can tell, may be the Gop that we adore. Intelligence and design are stamped in living and legible characters on every phenomenon around us, and such must emanate from an all-sufficient Source. Conscience lifts up her voice and would worship God, though "an evil heart of unbelief" will not have Him "to reign over it."

The Creator of the material world, must be altogether in himself independent of matter and its mutations, and transcendently more so than he who finishes "a work on the wheels" is superior to his workmanship. We cannot say here, as in the carved work of Mulciber, "materiam superabit opus," for both the material and the workmanship are alike wonderful; and he who made them is all-perfect—"without variableness or the least shadow of turning." Accepting the existence of a supreme and immutable Creator as a self-evident proposition, and that reason and argument would alike be lost on "fools," our attention will be chiefly confined to the mere theist; who, though he admits this position without hesitation, is, nevertheless, an infidel, or sceptical as to the all-important

question of a Revelation from God.

Nature, it has been stated, as with a living voice, attests the being of God, and reflects, as from a mirror,

his power, wisdom, and goodness. Vince, in his "Confutation of Atheism," has said, "If things happen oftener than they ought to do by our own calculations, there is a probability in favour of design, and a ruling Intelligence; and if several independent circumstances co-operate to produce a beneficial result, it is then encreased to the compound ratio of all the probabilities,"* or in other words, to a certainty. The sum of the whole matter, therefore, is appositely expressed in the language of professor Playfair:-" The only explanation that remains, is, that all this is the work of intelligence and design, directing the original constitution of the system, and impressing such motions on the parts as were calculated to give stability to the whole." T With this partial information, the voice and the vision end. The intimation tends only to excite still more our interest and curiosity—"we would acquaint ourselves with him and be at peace." To the question which affects us so deeply, "How can man be just with Goo?" the oracles of nature respond not; and like the prophets of Baal, on Mount Carmel, we may "call from morning even until noon," but there is "no voice, nor any that answers." The note of interrogation is followed by a blank. We may put on the ephod of philosophy and summon to our aid the auxiliaries of reason; but the almighty Author of nature answers neither by Urim nor Thummim, nor voice nor vision. The necessity of revelation, through some other channel, becomes obvious, in order to set at rest mental inquietude, and supply the hiatus of our anxious in-The man who is careless or uninterested in these things, must either be a fool or a madman: we, indeed, altogether dispute his pretensions to the character of a reasonable being, however loudly he may talk about that gifted being, mind, and its attainments in science and art.

That the good Being, who has created all things by his

^{*} Vince's Confutation of Atheism, 1807.

[†] Outlines of Natural Philosophy, vol. II. 1815.

omnipotent fiat, should satisfy the reasonable anxieties of the creature to whom he has given this natural restlessness concerning the things that "belong to his peace," is just what we might expect, and what, accordingly, the most credible testimony declares has been done: for there is a remarkable volume circulating in our world, distinguished by the high and bold pretensions of an immediate Revelation from God. It is entitled, by way of eminence, the BIBLE, or THE BOOK, and it certainly merits the emphatic name which has, by universal acclamation, been awarded to it. It is a diamond which refracts the rays of Truth. The privilege of quenching our thirst at this sacred fountain of wisdom, is one for which we cannot be too grateful. In reply to our categories, it is satisfactory and complete; it satisfies all our wants and wishes; and, leaving every thing else immeasurably behind, invests our aching temples with the diadem of happiness, and puts into our hands the palm of victory over doubts and fears-death and the grave. The BIBLE, however, summons not forth that deep awe and profound veneration, which its sacred pages are eminently calculated to excite and inspire. The haughty soul of man regards not the voice of God in the Oracles of Truth, and it is deaf and dead to the heavenly charmer. Abused though our advantages be, it is by no means a common-place volume, however lightly it may be esteemed by thoughtless, listless man. And what are the thoughts of man touching these things, but those of the proud and haughty Syrian? "Are not Abana and Pharphar, rivers of Damascus, better than all the waters of Israel?" Without a Revelation, man is like a mariner tempesttossed, without a chart:-reason is his compass, but its variations must be rectified. There is one who wills not that he should perish, and he is "able and willing to save." Unaided by this Directory, "without are doubts, and within are fears;" and if man be not altogether insensible to his best interests, or intoxicated with the bubbles that flicker around him, and burst in the sunbeam, he will flee to the city of refuge, "whose walls are salvation."

On these paramount inquiries—the character of Gon, his will to us, our relation to him, and our destiny in "another and a better world,"-the gifted Document, whose authenticity we advocate, supplies us with most complete and satisfactory information, while it restrains an impertinent and impious curiosity. "Indited under the influence of him, to whom all hearts are known, and all events foreknown, they suit mankind in all situations, grateful as the manna which descended from above and conformed itself to every palate. The fairest productions of human wit, after a few perusals, like gathered flowers, wither in our hands, and lose their fragrancy; but these unfading plants of Paradise, become, as we are accustomed to them, still more and more beautiful; their bloom appears to be daily heightened, fresh odours are emitted, and new sweets extracted from them. who hath once tasted their excellencies will desire to taste them yet again; and he who tastes them oftenest will relish them the best."*

The importance of the inquiry, which lies before us, being admitted by every rational mind, it may not be altogether out of place, in these desultory remarks, to glance at the general character of the infidel; and here we are at a loss which of these most excites our astonishment-the knowledge he must pretend to possess, (for assuredly that must be a range of intellect little short of infinite, which could on legitimate grounds enter the field against the evidences of Revelation,) or his excessive vanity, shining through a flimsy veil of frivolity and But sophistry is not the weapon that either sober reason or sound philosophy would employ; sarcasm and wit are not argument. With these ignoble and disingenuous characters we scorn to combat. We require that the maxims of inductive science be transferred to the question of Revealed Truth. We ask not a petitio principii for ourselves, and none, therefore, have a right to demand the concession from us. Now, according to Lord Bacon's precepts, a theory, to be true, must be

^{*} Bishop Horne.

incompatible with no specific fact; and though it may not be able to account for all the phenomena, a solitary fact, counter to what it presupposes, is, in itself, sufficient to overturn it. We fear our modern geologists will quail before their rigid exactions, and these architects of worlds hide their diminished heads. Too much deference, we think, has been paid to genius-men of vast acquirements in literature, or art and science. The metaphysician too often "darkens counsel" by mysticism:-there are "wheels within wheels," as in Ezekiel's vision, at the river Chebar; and the mathematician is too much absorbed in his abstractions to know any thing else. In our converse with the world, we have been surprized at the extraordinary limitation of the mere mathematician's knowledge. Confined to a little Goshen of his own, and hemmed in on every side with lines of demarcation, he is content to crow, Εύρηκα, when the problem is solved. Mr. Lawrence seeks the mind among the convolutions of the brain—the living among the dead. He tells us, by a species of catachresis, that "the mind is built up" of cerebral developments; but he, least of all men, can say, I have found it. Greater errors are no where committed than among men of deep research and profound knowledge, when they forsake the legitimate path of science, and enter the regions of conjecture, or leave their own familiar track, and the individual topic that has been the idol of their minds, to enter some other province-some terra incognita, where a new train of investigation, altogether foreign to their course of study, is required. A profound astronomer may be a very indifferent chemist; and Mr. Lawrence may be a skilful anatomist and an excellent surgeon, and yet utterly ignorant of any one of the numerous classes of evidence by which Revelation is substantiated. A James Watt may be conversant with mechanics in all their multifarious movements and momenta, and be baffled were the question to turn on the secretion of a pearl, or that of the Tyrian purple. A man's opinion in Biblical Science is not to be estimated by his powers of mind, as displayed in some individual branch of

human knowledge, or even in several, but as they are concentrated on it as a distinct and specific topic. range of mind may sweep far and wide, and yet, in reference to our present question, be as helpless as the opinion of a little child; and the rays of truth may fail to flash conviction because they fall on a darkened understanding, and are lost in their absorption :- "I found," says Dr. Beattie, "that the infidel philosophy was not what the world imagined it to be, but a frivolous, though dangerous system of verbal subtilty. which it required neither genius nor learning, nor taste, nor knowledge of mankind, to be able to put together; but only a captious temper, an irreligious spirit, a moderate command of words, and an extraordinary degree of vanity and presumption."* And such we have found it to be in our intercourse with mankind. It has been stated, that men may live infidels, but that conscience will take the alarm as "the king of terrors" makes his approach. Doubtless, this is a period in which men will reflect if they will ever think at all. We would not, however, attach an undue consequence to so sudden a change; we do not desire to rest on so questionable and flimsy a basis. There is such a thing as "judicial blindness;" and we believe numbers "die as the fool dieth,"-but this does not alter the case. Hume gave play to his facetious powers at the hour of Was that the act of a reasonable man, or of a reflecting mind? With all his philosophy he could not prove, that the termination of his existence here, involved the absolute negation of being; while such a farewell was an extraordinary recognition of friendship -a strange acknowledgment for a term of being, which, though brief, had certainly been productive, to him, of some enjoyment. A lunatic would behave better in an hour like this. It is without a parallel

"From Macedonia's madman to the Swede."

Or shall we defend his sanity and his character at the

^{*} The Immutability of Truth.

expense of his creed, and remind our readers of the school-boy, "whistling aloud to bear his courage up?"

Man is responsible for his belief or he is not accountable at all, because actions spring from belief as their source: and if the idea of accountability be excluded, the present scene ceases to be one of probation—there is no "judgment to come," nor any one "to require it at his hands." We would not, however, be understood as investing reason with a papal infallibility, or setting it above "all that is called God and worshipped." It must be admitted that reason is not gifted with infinite attributes, and to set up her image on a shrine and fall down before her is only another version of pagan rites. Reason "grows with our growth, and strengthens with our strength"-it has childhood and maturity. mental daring of a Newton seems, indeed, to have surpassed the ordinary limits of humanity, and we are by no means prepared to determine the ultimate range of its capability. The reason of centuries ago was more circumscribed in its range than the intellect of the present day, because it had fewer materials at hand; its horizon was more bounded, and consequently its knowledge; but it has no pretensions to infinite knowledge and universal thought, though some would make it supplant "the High and Lofty ONE that inhabiteth eternity." That it is a wonderful being, and its achievements vast and stupendous, we should be the very last to dispute or deny; but, that it has not attained, and never can attain the possession of all possible knowledge, we accept as an axiom which is altogether incontrovertible. The more we know, the humbler will our pretensions be, since we shall then see more distinctly that we have, indeed, but "seen in part." It is this conviction which brings the mind to its proper level, and causes it to take that attitude which best becomes it; thereby making it the readier recipient of truth. Humility is the pearl and the ruby of its attire. When we find symbols of pride and vanity in the walks of science, we may indulge a well-grounded suspicion that the attainments which they hide are shallow and superficial: -what made a

Newton humble, need not make us proud. The analogy, in reference to Revealed Truth, is complete, and pre-

cisely such as we should expect it to be.

We of course take for granted, that there is such a thing as TRUTH, that it may be discovered, and that its source must be Gop. As every ray which emanates from the "Father of Lights" must be pure, so it must also be immutable; over it, time and its casualties can have no control; it must be also susceptible of universal application. The sun shines not for Britain merely, but a world-so the gift of Revelation is intended for the great family of man. In the sagas of the Scalds-in the koran of Mahomet-in the puranas and vedas of India, we see here and there glimpses of truth, but shaded and eclipsed with error, while fable is impressed on every line. Neither the shasters of the modern Hindoo, nor of ancient Mexico, in past ages, contain elements of good. Evil spirits of perplexity and doubt hover over and around them ;-a "darkness that might be felt" enveloped them. Do we want palpable attestation, that "the world, by wisdom, knew not Gop?" We appeal to the capital of Greece—the atmosphere of a Phidias and a Praxiteles—ATHENS, the seat of all that was sublime in science and literature, or gifted in art, and where genius itself seemed "freeborn." PAUL, before he ascended the Acropolis, and on the plain overshaddowed by the proud Parthenon, that gem of the graces, had, however, discovered an altar with this inscription, "A Γ N Ω Σ T Ω Θ E Ω ;" as if a PANTHEON were not enough for the Athenians, and left their doubts unsatisfied. But lest the Heavenly Legend, which reveals the important fact, should as yet be questioned, we shift the evidence to the pictured imagery which is exhibited in the hieroglyphics of the valley of Beben el Malook, in the Thebais; and the temple of Karnac,-that mythology in masquerade, of which a faithful portrait and specimen are exhibited in Plate III. fig. 19, copied from the cerements of an Egyptian mummy, realizing, to its full amount, the accusation brought against the Pagan world, by the

great "apostle of the Gentiles,"-they "became vain in their imaginations, and their foolish heart was darkened; professing themselves to be wise, they became fools, and changed the glory of the incorruptible God into an image made like to corruptible man, and to birds, and four-footed beasts, and creeping things."* Such, however, was the mythology of the capital of ancient Egypt,—the far-famed Heliopolis,—the city The Roman satirist could taunt these of the sun. blinded votaries with the bitter sarcasm, that their gods grew in their gardens. The religion commonly known under the name of Christianity, from its heavenly Founder, has lost none of its radiance since it arose, eighteen centuries ago, in the little land of Jewry. It is as lovely, and as bright as when Judea caught its rising beams. It has not lost one constituent of its glory; it is still the pearl of great price, and the 'merchantman' now who would realize its purchase, even at the expense of all else besides, would act a prudent part, and, in the acquisition, possess a rich inheritance. Christianity alone keeps pace with the progress of knowledge and the stream of time; and, even in this inferior sense, may be said to be "the light of the world." It is a plastic principle adapted to every shade of life-its lighter graces as well as its penseroso—to every character and condition, in every age and every country. She is a heavenly guide, and has never betrayed an honest confidence. Wherever sincerely welcomed, she has made that people wiser, better, and happier:-no other religion on earth will bear this test-conforming itself to every one, exalted or obscure—the sage and "the wayfaring man"-in prosperity or adversity-sickness or health—in every vicissitude, and in every clime. She is herself alone, unrivalled, and sways the sceptre of righteousness, while she wears the Alithea, or breastplate of TRUTH.

There is one peculiar circumstance which should not be overlooked in this estimate of her manifold

^{*} Romans i. 21, &c.

excellencies. She can illuminate the humblest mind with joy and gladness, invest it with "a peace which the world cannot give," and impart a conviction of its power, and an impression of its truth, as palpable as the man of science can receive from the attestation

of his senses in an affair of physics.

The man of intellect would justly dispute the pretensions of the mere sensualist to judge of his enjoyments, because the sensualist has no capacity to appreciate the luxuries of a mind endowed with intellectual powers, and whirling in the chariot of thought through the mazes of creation. In like manner we may dispute the right of a mere philosopher to judge of a principle which is altogether beyond his province: the wisdom of salvation may be felt and enjoyed independent of the wisdom of intellect. It is a distinct and independent principle, of the mechanism of which the possessor alone is a competent judge, while it is perfectly compatible with intellectual attainments. will chasten and refine them, and impart a glow and a grandeur to them which must be felt in order to be appreciated. Had the case been otherwise, God, who is no "respecter of persons," would have had respect alone to intellect, and let "the poor go empty away." But it was the peculiar excellence of the Christian religion, that while it gave "a new commandment" to men, "the poor had the gospel preached unto them."

In that venerable volume, called the BIBLE, we have a faithful history of humanity, written under the guidance of Heavenly Truth, and without any mixture of error. We see ourselves here in our true colours; and while conscience bears record, as a faithful witness, she would hide herself, conscious of guilt, among the trees of the garden when she hears the voice of the ETERNAL calling upon her, for obedience to his Law In this Record we find, too, the standard of immutable rectitude, so that we are left without excuse should we wilfully "compare ourselves with ourselves, or measure ourselves by ourselves," however excusable they may be to whom "the Word of this Salvation" has not yet been sent, and

who, "being without the law, are a law unto themselves"
—"their conscience witnessing with them."

In the Chronicles of Heaven we perceive the Old Dispensation, like a mighty river, emerging from the fountain of creation, and rolling its noble tide along, until, in the fulness of time, it falls into the New, while their united streams are, at last, absorbed in the ocean of eternity. The Old Dispensation is prospective, and points forward to the New as its accomplishment, while the latter proclaims the high announcement, "It is finished." Like the cherubim which hovered over the "ark of the covenant," they looked toward each other—both upon the Mercy Seat, where, from above, an unutterable form, the symbol of the Divine presence, constantly attested that the place was "holy ground."

CHAP. II.

THE CREATOR—HISTORY OF CREATION—AGE OF THE WORLD—NATURAL CHRONOMETERS—HIEROGLYPHICS OF EGYPT.

BEFORE we enter on the records of creation, and the testimonies by which the authenticity of the Sacred Volume is substantiated, it may be interesting to quote the character it unveils of the SUPREME ARCHITECT, THE LORD GOD ALMIGHTY,—HE IS THE HIGH AND LOFTY ONE THAT INHABITETH ETERNITY,—WHO DWELLETH IN THE HIGH AND HOLY PLACE,—WHOSE NAME IS HOLY. Heavenly voices, issuing from before the throne, are heard to exclaim, Holy, Holy, Holy, LORD GOD ALMIGHTY, WHICH WAS, AND IS, AND IS TO COME:-HOLY AND REVEREND IS HIS NAME,-ONE DAY IS, WITH HIM, AS A THOUSAND YEARS: AND A THOUSAND YEARS AS ONE DAY:-From Everlast-ING TO EVERLASTING, GOD:-WHOSE NAME ALONE IS JEHOVAH. His power is infinite:-HE MAKETH THE CLOUDS HIS CHARIOT, AND RIDETH UPON THE WINGS OF THE WIND:-HE COMMANDETH THE SUN, AND IT RISETH NOT, AND SEALETH UP THE STARS:-HE IS CLOTHED WITH LIGHT AS WITH A GARMENT :- WITH HIM IS TERRIBLE MAJESTY:-WHO HATH MEASURED THE WATERS IN THE HOLLOW OF HIS HAND, AND METED OUT THE HEAVENS WITH A SPAN, AND COM-PREHENDED THE DUST OF THE EARTH IN A MEASURE, AND WEIGHED THE MOUNTAINS IN SCALES, AND THE HILLS IN A BALANCE,-THE NATIONS ARE AS THE DROP OF A BUCKET, AND ARE COUNTED AS THE SMALL

DUST OF THE BALANCE:—BEHOLD HE TAKETH UP THE ISLES AS A VERY LITTLE THING.

These are truly sublime symbols, although they but faintly shadow forth the Majesty of the I AM, whose "throne is high and lifted up," filling immensity, nor can we fully comprehend the emphasis implied in "that glorious and fearful Name," JEHOVAH. The tetragramaton, or four-lettered Name of God- 777 -is always contemplated, by the devout Jew, with ineffable awe-it is never pronounced; a solemn pause succeeds and the eyes are veiled the instant it is revealed on the Sacred Roll. Gop is not less to be adored and recognized amid the meteoric blaze of Sinai, than in the whispers of creation. It was so with Elijah, while fleeing for his life, through the wilderness in the province of Judah,—"a great and strong wind rent the mountains and brake in pieces the rocks before Jehovah, but Jehovah was not in the wind; and after the wind, an earthquake, but JEHOVAH was not in the earthquake; and after the earthquake a fire, but Jehovah was not in the fire; and after the fire, a STILL SMALL VOICE, and it was so, when Elijah heard it, that he wrapped his face in his mantle and went out and stood in the entering in of the cave."*

The history of creation is introduced with inimitable grandeur by the inspired Hebrew cosmogonist:—it is unparalleled and peerless—a gem from the antique—and Longinus might well quote it as his text in illustration of the true sublime. The rich treasure in which this record is found, is enjoyed by millions, else its language should be cited in proof on our humble page, though our translation, however excellent, falls infinitely short of the original.

It appears from the annals of creation, recorded in Genesis, that light was summoned into being, in relation to our globe, at a very early period, as a witness on the first demiurgic day, to attest the glories of the animated panorama when it heaved with life and motion,

under the fiat of OMNIPOTENCE; and it may have been localized in the orb of the sun, refulgent over the "evening and the morning" even of this period of the hexaemeron, as described by the diurnal revolution of the earth on its axis. It is true, the sun and moon became only visible for the first time from the surface of the earth on the fourth day: -at this period the alternation of day and night were first defined by the terminal line of light and shade. Hitherto the "firmament" had not been circumfused around the globe, nor had the separation of the waters taken place; and the earth must have been enveloped in a dense shroud of vapour which the solar ray could not pierce. An eminent meteorologist having proved the necessity of the turbid state of the aqueous atmosphere, previous to the creation of the firmament, makes the following acute and judicious remarks :--

"The complicated and beautiful contrivances, by which the waters are collected "above the firmament," and are at the same time "divided from the waters which are below the firmament," are inferior to none of those adaptations of Infinite Wisdom, which are perpetually striking the inquiring mind, in the animal and vegetable kingdoms. Had it not been for this nice adjustment of conflicting elements, the clouds and concrete vapours of the sky would have reached from the surface of the earth to the remotest heavens; and the vivifying rays of the sun would never have been able to penetrate through the dense mists of perpetual precipitation.

"Nor can I here refrain from pointing out a confirmation, which incidentally arises, of the Mosaic account of the creation of that atmosphere whose wonders we have been endeavouring to unravel. The question has been asked, How is it that light is said to have been created on the first day, and day and night to have succeeded each other, when the sun has been described as not having been produced till the fourth day? The sceptic presumptuously replies, this is a palpable contradiction, and the history which propounds it must be

false. But, Moses records that God created on the first day, the earth covered with water, and did not till its second revolution upon its axis, call the firmament into existence. Now one result of the previous inquiry has been, that a sphere unequally heated and covered with water, must be enveloped in an atmosphere of steam, which would necessarily be turbid in its whole depth with precipitating moisture. The exposure of such a sphere to the orb of day would produce illumination upon it; that dispersed and equal light, which now penetrates in a cloudy day, and which indeed is "good:" but the glorious source of light could not have been visible from its surface. On the second day, the permanently-elastic firmament was produced, and we have seen that the natural consequences of this mixture of gaseous matter, with vapour, must have been, that the waters would begin to collect above the firmament, and divide themselves from the waters which were below the firmament. The clouds would thus be confined to definite plains of precipitation, and exposed to the influence of the winds, and still invisible sun. The gathering together of the waters on the third day, and the appearance of dry land, would present a greater heating surface, and a less surface of evaporation, and the atmosphere during this revolution would let fall its excess of condensed moisture; and upon the fourth day it would appear probable, even to our short-sighted philosophy, that the sun would be enabled to dissipate the still-remaining mists, and burst forth with splendour upon the vegetating surface. So far, therefore, is it from being impossible that light should have appeared upon the earth before the appearance of the sun, that the present imperfect state of our knowledge, will enable us to affirm, that, if the recorded order of creation be correct, the events must have exhibited themselves in the succession which is described. The argument therefore recoils with double force in favour of the inspiration of an account of natural phenomena which, in all probability, no human mind, in the state of knowledge at the time it was delivered, could have

suggested; but which is found to be consistent with facts that a more advanced state of science and experience have brought to light. If, however, it were reasonable to expect that the ways of God should in all cases be justified to the knowledge, or rather the ignorance, of man, the boldest philosopher might well pause before he applied the imperfect test of a progressive philosophy to the determination of the momentous

questions involved in these considerations."*

Prior to the creation of vegetation the emphatic word season would have been an inapposite term, because the periodic vicissitudes implied in it could have had no affinity. In like manner, as yet there had been no animated form to which "days and years" could strictly apply as the metre of age; accordingly, it was not until "the earth brought forth grass," and became instinct with the glow of botanical glory, that these measures of time were introduced into the system. Light might have been otherwise located or diffused, on the first day, to bear witness to the sublime progression of creative power. It might have been scattered over the confused elements of matter, emerging from the womb of time, as a secondary agent, commissioned to promote their separation and subsequent constitution. In some localized form, apart from the orb of the sun, light might have arisen over the axal revolution of the earth, divided the day from the night in periodic times, and not have been transferred to the splendid station of one of the foci of an ellipsis until the fourth diurnal revolution. Hence it is evident, that though the earth had begun to move on its axis, and the relative evening and morning been already described, the globe might not, until now, have commenced its march in the plane of the ecliptic. When the transference of light took place, the sacred historian tells us, that the luminaries of heaven, "the greater to rule by day, and the lesser to rule by night," divided more specifically the day from the night,

^{*} J. F. Daniell.—" Meteorological Essays."—London, 8vo. p. 131, &c.

and were "for signs, and seasons, and for days, and for years." The "firmament" had now been established, and "divided the waters which were under the firmament from the waters which were above the firmament." The transfer of light, to its present station in the solar system, had taken place; and the earth, which before had only revolved on its axis, began its journey in the plane of the ecliptic, obedient to the astronomical laws discovered by Kepler, and resulting from the combined powers of the attraction of gravitation and a projectile force perpendicular to that of the sun. "The sun and moon were now lights in the firmament to give light upon the earth." The alternation of day and night, and vicissitude of the seasons were firmly established—days and years, signs and seasons were provided for.

When creation stood a finished monument, erected to the glory of the Creator, and emerged in all "the majesty of loveliness," we are informed that "the morning stars sang together." When the earth took its station in the sky no discord marred the heavenly orbs; the stars in the celestial hemisphere still moved isochronous in their orbits, describing the paths assigned to them, and preserving equal eras in equal times, which find their measure and expression in the vibration of a musical string, or that of a pendulum moving in a Respecting the nature of light, we have no knowledge; one thing, however, seems certain, that it is entirely unconnected with the dark nucleus it serves to envelope—a fact apparently obvious in the macula, occasionally observable on the luminous disc of the sun. Well might other stars "sing together" as they rose over the morning of a finished creation; and well might those glad spirits, who witnessed the magnificent scene, and the grandeur and glory of the celestial machinery, strike their harps, and "shout for joy." Modern astronomy seems to render it more than probable, that the solar system, of which we form a part, is advancing toward the constellation Herculis; and, moreover, that the whole hemisphere of stars moves round some common centre. Here may that Almighty Being, who is "higher than the highest," have stretched the curtains of his "Pavillion;" and here, though "the heaven of heavens cannot contain him," may his apocalyptic throne be set, while myriads of worlds revolve around, as so many moving miracles of that power "who spake and it was done, and commanded and all things stood fast."

When we survey the act of creation, it seems obvious, that the creative fiat was followed by instant obedience: matter started into being when the voice of the CREA-TOR vibrated on the TOHU BOHU, and became conscious from the infusion of living principles; distinct and definite periods marked the succession of creation. the third day the earth was adorned with a carpet of vegetation; there was fruit in the vine, and the pomegranate budded; the lilies of the field were clothed, the palm tree flourished, and the cedar spread out its roots like Lebanon. The sunbeam having played on the leafy and flowery scene, "redolent of beauty;" the realms of zoology were peopled; and the creation of man, "in the image of Goo," was the key-stone of the arch—the last link of completed creation. God gave them his benediction; the sacred pause of the "sabbath" succeeded; and, in order that it should be an immutable memorial, the CREATOR "rested on the seventh day;" and, by his own example, put an impress on it which man may violate at his peril, thus stamped, there can be no appeal. be seen that vegetation had unlocked its buds, and the sunbeam had shed its influence over it, before animal life had yet breathed either by lungs or gills. Now the discoveries of modern chemistry have clearly demonstrated that animal being, from almost its termo monas up to its more complex organization and perfect developement, yield, night and day, carbonic acid gas, which, though it would destroy life if re-absorbed, supplies nutrition for The functions of the plant, decompose the vegetation. compound gas, appropriate the carbon, and, during day, impart to the deteriorated atmosphere the principle of animal vitality, in oxygene its other constituent. animal life carbonic acid is elaborated without intermis-

sion; but this compound gas is only the produce of vegetation, when the sunbeam is withdrawn; its specific gravity is so great that it falls to the ground unless buoyancy be imparted to it by an increment of temperature, so that its evolution, in either case, by night, is null, being condensed by the cooling process which goes on at this period, while nocturnal dews would also absorb It is different with what the animal functions supply by day, for heat will give it a buoyant wing, and it would rise in the atmosphere; the winds, or aerial currents, would mingle the principles of deterioration and of consequent suffering, so that if there were no compensation balance to restore the lost salubrity, ultimate destruction would supervene and "chaos come again." Vegetation, therefore, by the issue of oxygene in the sunbeam, becomes the fountain of atmospheric salubrity. The antidote was established before the aerial poison was elaborated or had emanated. vegetable and animal forms act and re-act on each other; their dependance is reciprocal; the one cannot say to the other, "I have no need of thee." The whole phenomena of creation, as detailed in the annals of the Mosaic cosmogony, are fraught with wonder, and display a remarkable harmony, when compared with facts which modern science has substantiated, and which, therefore, may be adduced in evidence of the truth of these Oracles of Heaven. None but Omniscience could have described, at this remote era of antiquity, a structure and conditions that should perfectly correspond with the discoveries effected, by mental sagacity, in a more mature stage of its existence; and which could be only, at best, obscurely conjectured by intervening ages; -now, however, become palpable as the evidence of the senses and of science. All this may well make us wary of sporting our scepticism on some other questions, which, though we may not fully comprehend at present, a higher measure of intellect, in the progress of time, may entirely explain. If, as far as our investigation can reach, we see things clearly in the majority of cases, it is surely reasonable to give credit for the

lesser circumstances in what remain, since a time may come, when, compared with our present accession of knowledge, the luminous triumphs of the mind may be as "the light of seven days"—"and that day fully declare it."

No one can read the record of creation without being impressed with the conviction, that matter and motion were instantaneous acts of Almighty Power. The correct solution of the descriptive phenomena resolves itself into the opinion of Sir Isaac Newton, as its true interpretation: "God, in the beginning, formed all material things in moveable particles; variously associating and composing them, in the first creation, by his intelligent counsels; and setting them in the order most conducive to the end for which he formed them, with respect to size, figure, space, and all other properties." From this postulate there can be no warrantable philosophical dissent. Matter was instantaneously created by the fiat of the Supreme Being; and, we presume that Mr. Granville Penn's masterly argument cannot be successfully assailed on legitimate grounds. The circumfusion of a chaotic fluid for unnumbered ages, with a gradual deposition of rocks from its bosom, is a fiction as wild as the manwantaras of Menu, from which fabulous source it may have originally sprung. It is equally inconsistent and absurd to endeavour to give a new version to the periods of the demiurgic days. We may torture time, but Iom, by all the rules of criticism, can never be made to signify aught else than a natural day; and though "a thousand years are as one day, and one day as a thousand years," in the sight of God, as has been stated, were we to grant that they are to be understood as undefined and indefinite periods, "the sequel of error would be endless:" there must be a pause somewhere, and this must not be left to be deciphered by mere imagination. Geologists are generally a sceptical race; but whether such scepticism rests on a philosophical basis, we may well question. chronologists of the world's age are constantly petitioning their idol Chronos for immense measures of time;

their eras may be called definite infinitudes: affecting to distinguish periods, they will, however, condescend to no specific measurement. Time is stretched on the rack of invention to supply their pre-conceived notions and fanciful conjectures with a measuring reed; and after all, it is "the line of confusion stretched over the stones of emptiness." It has been very properly asked, "Who is to grant it (Time); or what would be the value of the grant, if it were conceded? Would it make the thing true?" Unquestionably not; and the sceptical geologist, when the concession is made, is just as near his object as before. Language is the symbol of thought, and should be that of truth; after making every allowance for metaphorical phrase, we cannot legitimately permit its introduction where truth propounds an historical event. With every concession as to an indefinite extension of time, the infidel geologist will still remain an infidel. Those who grant the question to this personage, only tamper with infidelity, while the geologist chuckles, in the meanwhile, over his neophyte. An infidel geology is anxious to carry us back to a state of being anterior to that described in the Sacred History; and, with unauthorized effrontery, presents us with a series of revolutions which have no foundation, whatever, in truth: the cycles of these revolutions, in the estimation of its votaries, demand the arithmetic of infinites, and an endless series of cataclysma and renovation, as we find in the fabulous annals of India. The six demiurgic days must, by the touch of this necromantic talisman, immediately expand into myriads of ages. Now all this is more than we dare grant, and much more than a sober and right-minded philosophy will require. After these requirements are conceded, we shall find the conclusions of some writers on geology to be little else than a modification of the monstrous idea of Demailet, who would gravely persuade us, that the human being began his career as a fish,—it may be, for aught he defines to the contrary, an oyster or a cockle: certainly an amusing whim, though no very flattering type in the physiology of man's creation. Indeed, we could refer to the early edition of an introductory work on geology,

which advocates dogmas of a somewhat similar complexion; as if man had passed through a series of avatars, the last of which was reserved for the genius of Lord Monboddo to discover. Some have fancied, that in the stratification of the globe, and in imbedded organic remains, there was all the evidence of history for the progressive developement of organic life, in the eccentric views we have already glanced at; and, that from the wreck of an antecedent formation, swept away by an overwhelming cataclysm, a new race, of a more perfect organization, arose, like a phenix, as their substitute. How the destruction of a race of zoophytes should give rise to fishes, birds, and other animals of a more perfect and complex organization, it is not quite so easy to discover. That the imperfect should become the prototypes of beings more perfect and better organized, and that the latter should be the necessary sequence of the ruin of the former, is novel enough, but is not the less nonsense. In this odd dogma it was altogether forgotten, that these types of primeval time remained hermetically sealed up in the solid rock; and that all the varied forms of animal organization, from the polype up to man, co-exist, and have ever been contemporaneous.

It has been supposed that the order of the Mosaic account of creation was stamped in the living rock, and might be read in the fossils which are found there, from the lower red sandstone to the tertiary series; and, in the formations which are deemed the most ancient, no organic remains, rounded pebbles, or carbonaceous matter being found, some accept as a proof that they were prior in existence to those that contain them; and if this is found an invariable rule, followed by no exception; if there be superadded a crystalline structure, to which the agents now in operation are unequal, the position may be reasonably granted; but it is by no means so evident, that any class of organic remains should determine the comparative age of the stratification of the globe. Dr. Fleming and Mr. Lyell have, accordingly, found organic remains of fish in the old red sandstone, in Perthshire, which is pronounced to be "decidedly older than the coal and mountain limestone of Fifeshire." The vertebra also of a saurian, or an animal belonging to the class of lizards, has been discovered in the mountain limestone of Northumberland. These facts, with many others, render altogether nugatory the hypothesis of the precedence of the simpler forms of animal organization. Exceptions like these are fatal to the dreams of those theorists who would find the record of creation transcribed in the rock; on which assumptions they have, however, raised the plea of their

petition for time.

Insects are rarely found in a fossil state, and their discovery is comparatively recent. This was the case with birds; but the organic remains of birds have been found in Kirkdale Cave, Gibraltar, and elsewhere. Prior to these discoveries it had been believed that birds came into existence at a later period in the order of creation, and were altogether subsequent to the epocha at which other animals were swept away, the impress of whose anterior living existence their organic remains attest. The researches of modern geology have proved the assumption altogether premature, and future discoveries, in all probability, will sweep away much of the dogmatism that has interwoven itself among the speculations of geologists. The fossil world has revealed no organic remains of quadrumanous animals; but it by no means follows, that they may not yet be found; and precisely the same process of reasoning applied by Mr. Lyell to this question, applies, in full force, to that of man.

It is really extraordinary to reflect on what a slender basis many a geological theory rests. In looking into the communications of Dr. Hutton, we feel almost persuaded that the structure of graphic granite contributed not a little to his geogony. Dr. Knight seems, in our opinion, to have been mainly indebted for his "Theory of the Earth," to the diffusion of a portion of powdered granite in water, and its subsequent subsidence, forming a mechanical deposit, as might have been expected, of particles, agreeable to the ratio of their relative densities. One of

these world builders, and whose work on the subject is before the public, shewed us a flint, having, as its nucleus, a univalve shell; and this, in his view, was a sufficient datum for his theory of the formation of a world. Such are some of the flimsy materials of a few modern geological theorists; and these are even moderate compared with the wild speculations of their predecessors. For myself, I am free to confess my obligations to the masterly disquisitions of Mr. Granville Penn, whose sound deductions and philosophical reasoning appear to me to be altogether unanswerable, and of a character satisfactory and complete. I am, by no means, prepared to say, that he is infallible throughout; but the opinion may be safely hazarded, that he has brought geology to the requisite test, and prescribed the proper rules by which it may be legitimately tried. The interminable reign of a chaotic ocean, circumfusing the globe, he has fully proved, in my mind, to be as unreasonable in its assumptions as it is repugnant to the principles of Revealed Truth and genuine science. Creation implies, in its very nature, an instant act; and it is surely most compatible with the dictates of sound reason, to believe that the first creation was not a slow process, carried on through a succession of ages, but the prompt obedience of nature to the mandate of an omnipotent fiat. The succession of periods, in the order of creation, in organized being, implies acts in which the process of time seems to enter; but this refers to the veil being gradually withdrawn from the scene of creation, and the introduction of determinate eras, "as sequence and succession," to measure the evolutions of natural phenomena. Time is only a relative term, and is altogether inapplicable to the Supreme Being. That the primitive rocks, which form the solid skeleton of the globe, were deposited by degrees, after a long and dreary night of chaotic darkness, it would be absurd to believe. The phenomena presented on the respective "days" of creation were creative acts, with which time could not co-operate, and therefore must be altogether independent of the succession implied in the term. The most

learned in Hebrew literature affix no other meaning to the word, Iom, used by the sacred historian, than that of a natural day; and the hebdomedal return of the SABBATH is a permanent memorial, transmitted from the most distant age of a venerable antiquity, to perpetuate its true and legitimate meaning. It requires no great penetration to perceive to what a tissue of absurdity the fourth section of the decalogue would be reduced, if we are to suppose that the six demiurgic days were indefinite periods, instead of natural days. Respecting the original creation of organized beings. Mr. Granville Penn supplies some pertinent remarks, and applies, with considerable force and effect, the same process of reasoning to the construction of the rocky materials of the globe. "Common sense discerns," says this acute writer, "that creation alone could give origin of existence, or first formation, to that which before did not exist; it discerns, that there can be no intermediate stage or degree between non-existence, and existence. and therefore no graduality in passing from the one state to the other. To the mode of creation, we cannot therefore ascribe that mode of succession to which we give the name of time. The action of creation, was therefore effected without the mediation of time, and consequently, in that mode which we express when we exclude all notion of the mediation of time; namely, immediately, that is instantaneously or suddenly.

"If a bone of the first created man now remained, and were mingled with other bones pertaining to a generated race; and if it were to be submitted to the inspection and examination of an anatomist, what opinion and judgment would its sensible phenomena suggest, respecting the mode of its first formation, and what would be his conclusion? If he were unapprised of its true origin, his mind would see nothing in its sensible phenomena but the laws of ossification; just as the mineral geology 'sees nothing in the details of the formation of minerals, but precipitations, crystallizations, and dissolutions.' He would, therefore, naturally pronounce of this bone, as of all the other bones, that

its 'fibres were originally soft,' until, in the shelter of the maternal womb, it acquired 'the hardness of a cartilage, and then of bone,' that this effect 'was not produced at once, or in a very short time,' but 'by degrees;' that, after birth, it increased in hardness 'by the continual addition of ossifying matter, until it ceased to grow at all.'

"Physically true as this reasoning would appear, it would nevertheless be morally and really false. Why would it be false? Because it concluded, from mere sensible phenomena, to the certainty of a fact which could not be established by the evidence of sensible phenomena alone; namely, the mode of the first form-

ation of the substance of created bone.

"Let us proceed from animal to vegetable matter; and let us consider the first created tree, under which the created man first reposed, and from which he gathered his first fruit. That tree must have had a stem, or trunk, through which the juices were conveyed from the root to the fruit, and by which it was able to sustain

the branches upon which the fruit grew.

"If a portion of this created tree now remained, and if a section of its wood were to be mingled with other sections of propagated trees, and submitted to the inspection and examination of a naturalist; what opinion and judgment would its sensible phenomena suggest to him, respecting the mode of its first formation; and what would be his conclusion? If he were unapprised of its true origin, his mind would see nothing in its sensible phenomena, but the laws of lignification; just as the mineral geologist sees nothing in the details of the formations of primitive rock, but 'precipitations, crystal-lizations and dissolutions.' He would, therefore, naturally pronounce of it, as of all the other sections of wood, that its 'fibres,' when they first issued from the seed, 'were soft and herbaceous;' that they 'did not suddenly pass to the hardness of perfect wood,' but 'after many years;' that the hardness of their folds, 'which indicate the growth of each year,' was, therefore, effected only 'by degrees;' and that, 'since nature does nothing but

by a progressive course, it is not surprising that its substance acquired its hardness only by little and little.'

"Physically true as the naturalist would here appear to reason; yet his reasoning, like that of the anatomist, would be morally and really false. And why would it be false? For the same reason; because he concluded, from mere sensible phenomena, to the certainty of a fact which could not be established by the evidence of sensible phenomena alone; namely, the mode of the first

formation of the substance of created wood."

According to the chronology of the Hebrew version, the creation of the globe took place 5835 years from the present date, or 4004 years before the Christian era. At the epocha of creation, by this calculation, the great axis of the ellipsis of the earth's orbit coincided with the line of the equinoxes. At the vernal equinox the earth was at the farthest point of her elliptic orbit, and at the autumnal equinox, when the earth may have commenced its revolution in the plane of the ecliptic, it was at its nearest point of approach to the elliptic focus. The period of revolution and elliptic orbit were equalized with respect to the seasons; or, in other words, the lapse of days and hours for each hemisphere, (for the period preceding the vernal equinox, and for that which succeeded it, comprising each six months,) were precisely alike. By Dr. Hales' chronology, the period of creation is stated at 5411 years before the era of Christianity. The deductions of this celebrated chronologist, have, however, been stated to be founded on an error of Abulpharagius, though they have been accepted by many as a correct estimate. The Samaritan version makes the age of the world, 6075, and the Septuagint, 7220 years. The ancient method of calculating by letters, considered as numerals, may be naturally supposed productive of error, and will account for the discrepancies. Dr. Pritchard seems to have reconciled the Egyptian chronology with that of the Scriptures, from which it seems indeed to have been originally derived. Sir Isaac Newton and Dr. Halley endeavoured to reconcile the discrepancies referred to, by astronomical calculations, and succeeded to a considerable extent; but the causes of the errors in the Samaritan and Greek text being unknown, the task involved much intricacy. When the complexity of the question is estimated, and its liability to fallacy, with the independent sources which must be reconciled, it is rather remarkable that the error is not of wider extent.

We never attached much consequence to Mr. De Luc's natural chronometers for determining the age of the world, such as the rapid encroachment of the sands of the desert, and the Talus formed of the debris of the rocks among the vallies of the Alps; all which phenomena may be modified by circumstances. But to claim a high antiquity for our globe from the extraordinary premises which some have assumed, is quite sufficient to excite our astonishment. We particularly allude to an attempt to determine the age of the world from the process of petrifaction in the piles of Trajan's Bridge, and Brydone's story about the alternations of lava and earth on the flanks of Etna. The term petrifaction is very equivocal, and has been too vaguely and indiscriminately applied. Sometimes it is used to mean nothing more than a calcareous or silicious deposition or crust investing the organic remain, and which simply envelopes it without the substance enclosed undergoing any material decomposition, or indeed any change at all; but this is very different from those cases wherein the organic remain has been altogether substituted or supplanted by new calcareous or silicious matter, the form remaining as perfect as the impress of a seal. The travertino, on the Anio, near Tivoli, which we have diligently examined, is an abundant and very remarkable deposit; the concentric shells of calcareous matter are moulded on roots or twigs; the wood becomes soft, and moulders away, as if affected with dry rot; it bears a resemblance to some other "petrifying springs," which deposit, on their rising into day, a subcarbonate of lime. It is altogether different, however, with the chalcedonic envelopes of Iceland and other silicious depositions; for the form alone is not merely

preserved but the substance itself is hermetically sealed up, and preserved from the agencies of decay. Moss agates afford a familiar example of this description. No definite idea can, therefore, be formed from what are called petrifactions, unless their nature is clearly defined, together with the circumstances under which they are found, and the agencies which have affected and changed them—in themselves altogether contingent, they vary from time to time, and are modified and con-

trolled by a variety of causes.

Nothing, certainly, can be deduced from the process and progress of petrifaction, as to the date or history The deposition of calcareous matter, from of creation. the thermal waters of San Vignone, near Radicofani, in Tuscany, amounts to six inches of solid travertino in twelve months. In quarrying this limestone, Roman tiles have been found at a depth of five or six feet; and we have the drawing of a *Celt*, an ancient warlike weapon, so called, excavated from the limestone rock, in Coalbrooke Dale, at a depth, as we were informed, of The calcareous deposit at San Filippo, near Acquapendente, is still more remarkable. It has been ascertained that a solid mass of limestone, thirty feet in thickness, has actually been formed in about twenty years. A hard stratum of travertino, a foot thick, is obtained from these thermal springs in the course of four months. The magnitude of the calcareous mass, which has been formed by these waters on the flanks of the hill, down which the current descends, amounts to a mile and a quarter in length, and one-third of a mile in breadth, the thickness being estimated at two hundred and fifty feet. Now as the flow of the waters is uniform, it is evident that this gigantic calcareous structure has been reared within a period of little more than EIGHTY YEARS; and, for any thing we know to the contrary, there may be other agencies, more powerful and rapid, at work, at the present period; or, at any rate, at some epocha of the past. Near Civita Vecchia, is a hot spring, which deposits alternate beds of a yellow travertino, and a white granular rock. not distinguishable from statuary

marble. In the vicinity of the spring, this formation is, in some places, about six feet thick. In the plains of Hungary, horizontal beds of travertino, including recent fresh water shells, are being constantly formed, and sufficiently indurated to be used as a building material. We would add to these a similar deposition of calcareous matter, which is in process of formation in the "Walker mine," near Newcastle, which possesses some curious features of a rather unusual character: it duly registers its own age; becomes a singular chronometer or calendar of time; and, from its inscription of lines, has been called the "Sunday or Walker Almanack." A fragment from the cabinet of the author is correctly delineated, fig. 24, PLATE III. During the operations of mining, the water is rendered dark and turbid, and the laminæ then deposited are of a dark hue; those streaks which are of a light tint are nocturnal depositions. when the miners cease from working; the double space, of a light colour, distinguishes the Sundays, and thus curiously indicates the several weeks; while a diminution in the number of the dark lines, which denote the working days, and corresponding increase of light space, exhibit occasional holidays, with the miners' cessation from work. Thus, a silent register has been kept in nature's book, in the "Walker mine," and the deposition exhibits palpable proofs of a natural chronometer. Twenty weeks are enrolled in a deposition of 41 inches in thickness; this amounts to one foot, nearly, in twelve months; and since creation, calculating by the Hebrew text, it would have reared, (had it commenced at that epocha, and continued uniform,) a mountain 5835 feet high. Nor is this equal to the deposit of the thermal waters of San Filippo, already referred to, which would have formed, in the same period, an alpine structure as lofty as the great St. Bernard; and, we have no reason to restrict similar agencies to such limits. These facts prove the absurdity of the foolish speculation of f unding chronometric data on the silicified process of the exterior of the piles of Trajan's Bridge, by the waters of the Danube. Silicious petrifactions are sometimes

slow, sometimes rapid: the case in question belongs to the former; and the phenomena of the geysers of Iceland, in the silicified basin, into which the waters descend, present examples of the latter, in the chalcedony, opal, and scinter, of which the basins are composed. It would be just as wise to raise a calculation on a pile driven into the earth, in which no silicifying process, whatever, goes on, and assume from thence, an undefinable and indeterminable period for the deposition of any sensible portion of silicious matter. As for Brydone's tale charged on the canon Ricupero, it is not likely that any thing of the kind was ever promulgated; though Brydone would have been glad of any plea, however absurd or erroneous, to have supported his infidel notions, even at the expense of exposing the friend, under whose hospitable roof he was so kindly treated, to censure or to ruin. And, after all, it was only the mere opinion of Ricupero, even supposing he was weak enough to hazard so silly an idea. The legend is as follows:-On digging a pit on the flank, or at the foot of Etna, seven strata of lava were discovered, superimposed on each other with intervening layers of decomposed earth. It was assumed, that it required a period of 2000 years for the lava to become thus decomposed at the surface; therefore, seven times 2000 amounted to fourteen thousand years. Now according to D'Aubuisson, the lava of Etna, of 1157, is covered with twelve inches of vegetable earth, proceeding from its own decomposition; and that of 1329, is covered with eight inches of decomposed matter. We have, personally, examined the subterranean recesses of Herculaneum and its volcanic covering, and presume it affords sufficient evidence of the absurdity of such sweeping deductions; but we may rest safely on Sir Wm. Within a period of 1700 Hamilton's examination. years, six eruptions of lava have, at stated periods, rolled over that which originally overwhelmed the city: veins of decomposed matter intervene between these strata. But Dr. Daubeny has proved, on the spot, that, the tale of this stratified well of Ricupero, is altogether a fable. He visited, in person, this well at Aci Reale. The vegetable mould, assumed to intervene, turns out to be a ferruginous tuffa, such as is produced by a shower of volcanic ashes, consolidated by rain, or by a contemporaneous eruption of hot water. Indeed, the volcanic eruption which overwhelmed Herculaneum, called lava, is merely consolidated ashes, composed of pumicestone, lapillo, &c. Similar mistakes have been often made, and require to be rectified. We have observed no chronometers in lavas or their decomposition to warrant any such visionary phantasies, though we have especially examined, and with tolerable attention, the volcanic phenomena of the Neapolitan territory, in detail.

The hieroglyphics of the obelisks and temples of Egypt, and the mystic characters of tombs and mummies; and especially of the famous planisphere brought from the temple of Dendera, seem to have excited imagination to roam over the vastness of ages and interminable periods of time; and all this because, without being possessed of a cipher to read their symbols, they seemed scarce to belong to our world; or, if they did, they pushed back the era of their history to a period the mind scarce dared to explore; and Count Forbin, if we remember right, assigned Forty THOUSAND YEARS as a moderate calculation for their antiquity. But all this latitudinarian speculation broke under the touch of truth, like a bubble on the stream; and the conceit now serves for pastime, at the expense of his penetration and judgment. The Count, could he have anticipated modern discoveries in hieroglyphic literature, would have been more cautious and circumspect. The frequent bouleversement of geological speculations, and revolutions in the theories of geologists, should read us a wholesome lesson, and teach them to check the reins of imagination, and put some restraint on the lapse of time. We happily now have a few excellent books on geology; for instance, that of Mr. Lyell, Foreign Secretary to the Geological Society, which forms a judicious arrangement of valuable and interesting facts.

Mr. Lyell does not speculate much, and progresses with caution; though it is not difficult to perceive, that he, like his brethren, would be glad to prefer a petition for time, under an impression, that the Mosaic cosmogony does not give full play to the indefinite measures of time required by a sceptical geology. The most unaccountable part of the matter is this, that individuals, such as Mr. Poulet Scrope, whose researches chiefly have had to do with volcanic phenomena, should have been so extravagant in their demands; when the agent operates on so extensive a scale, and is so sudden, powerful, and frequent, as to change the entire features of a country in a few short hours; and, in illustration of which, Mr. Lyell introduces so many remarkable examples. The lapse of time, according to the Hebrew text, between the epocha of creation and the circumfusion of the waters of an universal deluge; and the ages that have rolled away since that great event, seem altogether sufficient to account for present appearances in the stratification of the globe, and the phenomena of organic remains, as we hope to be able to prove; though, from our being a Fellow of the Geological Society, it may expose us to the charge of heresy, and its members exclaim, "there is treason in the camp." We advocate the truth, however, at the expense of every other consideration. Superadd to the circumstance of an universal deluge, the phenomena of extensive, as well as more limited local catastrophes, both in the antediluvian and postdiluvian era, and there will appear no necessity for the impulsion of time beyond the boundary of its legitimate history. It is found, that since the recession of the diluvial waters, "the gathering together of the waters, called seas," have shifted their original scites. Practical geology has in its researches clearly proved the comparatively recent formation of our present continents; and, that their origin cannot be traced farther back than the era ascribed in the Biblical Records to the deluge. The alveus or great bed of the ocean, now usurps the place of the former "dry land;" and, if we wanted further evidence, as to local catastrophes of considerable extent and duration, and in comparatively modern times, we have a very remarkable example and decided proof of the fact, in the Temple of Jupiter Serapis. "This celebrated monu-ment of antiquity," says Mr. Lyell, "affords, in itself alone, unequivocal evidence, that the relative level of land and sea has changed twice at Puzzuoli, since the Christian era, and each movement, both of elevation and subsidence, has exceeded twenty feet." Our own personal observations on the spot have amply confirmed Mr. Lyell's conclusions;—the appearance of the circumambient strata, coupled with the honeycombed appearance of the still standing columns of cipolino marble, commencing at a specific altitude, the work of pholades, (from whose cellular cavities, indeed, we have picked some of the shells,) prove the deduction to demonstration, and become a register and metre of the events. That these perforations have been effected in the present position of the columns, and of which Monte Pelegrino, in Sicily, affords so remarkable an example, there can be no doubt whatever; and we may add, that we have seen the work of a living pholas, in a fragment of indurated limestone from Bridlington Harbour. This extraordinary tunnel is effected by a mechanical act on the part of the animal, somewhat in the manner of the "centre-bit" employed by the cooper, its shell being altogether passive in the act. It had been assumed that the achievement was accomplished by the secretion of acid matter, in which it seems to have been forgotten that an acid which would have dissolved the marble, must also have dissolved the shell of the pholas.

The most interesting researches in literature, in modern times, are those which have embraced hieroglyphic symbols. The inquiries into the hieroglyphic literature of ancient Egypt, seem to have mainly originated with the late Dr. Thomas Young, who has exhibited sufficient proofs of his indefatigable and laborious exertions. This is said without the slightest intention to detract from the honour of M. Champollion, whose extensive investigations and interesting disco-

veries have been as warmly welcomed by the public as they have been gratefully appreciated; but in neither case more so than the importance and the interest of the research demanded. It appears clearly ascertained that the hieroglyphics of aboriginal Egypt, as we find them pourtraved on the walls of the tombs of the kings, and the temples of Karnac, Dendera, &c., and sculptured on obelisks and sarcophagi, together with the paintings and inscriptions of the sycamore coffins, bandages of mummies, and those of Papyri, are transcriptions of the sacred or hieratic characters of the priesthood of Egypt. This, in all probability, was the sole medium of expressing their mysteries, though it does not appear to have been altogether confined to the expression of mythological rites, ceremonies, and belief. Fortunately, there appears to have been another character called the enchorial, in common use, and which M. Champollion calls demotic, or popular, which seems to have been employed in interpretation; and to these, the ancient Greek character has been discovered in addition; the last forming a convenient key for deciphering both: and thus constructing an alphabet of hieroglyphic characters, which has, accordingly, been done both by Dr. Young and M. Champollion. It is, therefore, much to be regretted, that the hieroglyphics which Denon copied from the walls of the temple of Karnac and elsewhere, are not correct or faithful representations of the originals, and of course become altogether useless in the question of Egyptian literature. Those copied on the spot, by M. Champollion, during his recent visit to Egypt, and fac similes taken from specimens actually existing in this country, or at Paris, are alone to be credited. The exorbitant antiquity supposed to be attached to these inscriptions, had, down to a comparatively recent period, induced a belief, that the question was for ever lost in the night of ages, and that no key could be found for their solution, in such Greek and Roman inscriptions as were sometimes discovered in their immediate vicinity. The discovery of the Rosetta-stone, when digging for the foundations of Fort St. Julian, supplied

at once the cipher and the solution; and this interesting trophy now reposes in the British Museum,-a legend that all may read. On this fragment of the pillar of Rosetta, there are the hieroglyphic characters. as well as the enchorial and ancient Greek, in so many distinct bands*-three distinct inscriptions, as was the case with that which Pilate caused to be affixed to the cross,-"Hebrew, Greek, and Latin." Nor is the celebrated Rosetta-stone a solitary memorial of this triple inscription. The fragment of the obelisk found in the Isle of Philæ, has the same pictured language, accompanied by the enchorial and Greek characters; and it has been from the aid of the triple inscription, that the problem has been solved. We possess a fragment of papyrus with both hieratic and enchorial characters; and among some papyri, submitted by Mr. Grey to Dr. Young, there were found three Egyptian conveyances in the enchorial character, with separate registries, in very legible Greek, on the margin. the Greek was really designed as a translation, is evident from the circumstance, that in the inscription on the Rosetta-stone, Mr. Akerblad had pointed out, at the end of the hieroglyphical inscription, the three first numerals, I. II. and III. respectively, where the Greek has "the first and the second," the end being broken off. The Egyptian hieroglyphics, therefore, may be considered a written language in symbolic characters, somewhat intermediate between the picturewriting of the ancient Mexicans and the modern Chinese characters. We have deemed it necessary to preface these observations, to shew that the evidence deduced from hieroglyphic inscriptions is not fanciful, but alto-

^{*} The most curious part of the history of this remarkable monument of antiquity, consists in the accidental discovery, by Champollion, among a number of manuscripts, brought to Paris by M. Casati, of one which considerably resembled in its preamble the enchorial text of the pillar of Rosetta; and the value of which discovery was much enhanced by the existence of a Greek translation of the same manuscript, brought by Mr. Grey to London.

gether inductive; and it is important that a distinct understanding of the degree of credit attached to them should be clearly defined. The following remarks are made by Dr. Young, as the results of his inquiries into Egyptian literature, through the medium of these hieroglyphic characters. "I must acknowledge, that my respect for the good sense and accomplishments of my Egyptian allies by no means became more profound as our acquaintance became more intimate: on the contrary, all that Juvenal, in a moment, as might have been supposed, of discontent, had held up to ridicule of their superstitions and depravity, became, as it were, displayed before my eyes as the details of their mythology became more intelligible."* amusing to observe the folly displayed in the speculations of some of those individuals who had examined the hieroglyphic documents before these mystic symbols were clearly deciphered by the enlightened zeal of Dr. Young and M. Champollion. According to Kircher, they all contained metaphysical dogmas or mythological mysteries; but it seems to have been with him equally the same, whether he began to read the lines, at the commencement or the opposite end: and by Palin's account, it was merely necessary to translate the Psalms of David into Chinese, and write them in the ancient characters of that language, in order to re-produce the Egytian papyri that are found with the mummies. "The mathematicians," says Dr. Young, "of France, and the metaphysicians of England, have continued to argue upon elements which it was impossible either to prove or disprove; while the fortuitous coincidences of some accidental results, with the collateral testimony of history or of astronomy, have been forced into the service of the delusion, as evidences of the truth of the hypotheses from which they had been deduced. Nor are these amusements, even at this moment, discontinued, by some persons, who have shown themselves capable of

^{*} Discoveries in Hieroglyphical Literature.—London, 1823, 8vo. p. 19.

doing better things." As the geologist is now attending more to fact and less to speculation, so the genius of literature is conducting her inquiries with more calm and sober thought into the arcana of Egyptian learning. Let us not overlook the fact, that these mystic symbols were not disused entirely until a much more recent date than is generally supposed. Even on the coins of the apostate Julian, in the fourth century, we observe the deified bull, the obverse having Julian's head; and in the reverse of another, the cynocephalus or dog-head-

ed anubis, with the caduceus and sistrum.

Nothing can more decidedly expose the eccentric follies of the human mind, than the speculations in which it indulged, respecting the celebrated zodiacs of Esneh and Dendera. The period prescribed by Sacred Chronology was set at defiance; imagination took wing, and rioted, without restraint, in the regions of conjecture and obscurity; and by recording its whims and fancies, has reared a monument on which is inscribed its disgrace: but, if it should serve as a beacon to caution other adventurers from risking the credit of their mental sagacity, it will be not altogether unprofitable. culations were made, and conjectures were formed; these calculations were reconsidered and discovered to be erroneous, while conjecture was supplanted by the discoveries of truth. Hypotheses, multiplied on hypotheses, have only displayed the errors of intellect: subsequent discoveries have rooted up these idols of the mind, and exposed their authors to ridicule. Under these mysterious sculptures and paintings the names of PTOLEMY, CLEOPATRA, TRAJAN, and others, have been most clearly deciphered. While M. Letronne was engaged in researches on the several structures of the temples of Egypt, M. Champollion the younger was deciphering the hieroglyphic inscriptions, and both were conducted to the same result: others, at the same time, by an accurate study of the style of the sculptures and architecture, increased the evidence, which was further confirmed by manuscripts and mummies brought from Egypt. By several methods of induction, it is

indubitably proved, that these two famous zodiacs, which had excited the wonder of the world, and for the high antiquity of which there had been so stout a contest, are certainly posterior to the era of Christianity. Of a similar description is the plate of gold found under the foundation of one of these temples, which it had been pretended was anterior to the Hebrew cosmogonist. It has a Greek inscription, however, on which the names of Ptolemy and Berenice are distinctly legible. The zodiac brought from Egypt, by M. Calliaud, may be considered of no greater antiquity than the nine-

teenth year of the reign of Trajan.

Some remarks, as a lesson of caution, against receiving the speculations of men of eminent attainments in science, instead of the sterling deductions of calm and sober truth, may not be out of place; and may present a curious portraiture of the errors of the understanding, when bewildered by the ignis fatuus of romance and imagination. It would require a volume to particularize the assumptions, and deductions from false premises, which the history of these planispheres present; we shall, therefore, confine our attention to a very few. M. Fourier, a celebrated mathematician, affected to discover in one of the zodiacs, an astronomical representation of the state of the heavens at the heliacal rising of sirius, the sun being in the constellation cancer; and his inference was, that these symbolical figures were intended to adumbrate the epocha of the inundation of the Nile. Subsequent investigations have convinced him of his folly and his error; and his silence proclaims the triumph of truth. Dupuis referred the construction of the zodiac of Dendera to the epocha of the renovation of the solsticial period, about thirteen thousand years before our era! Burckhardt was of opinion, that the temple of Dendera must have been constructed four thousand years ago; but, he adds "On ne peut se tromper, que de très peu de siècles sur cette espace immense." Visconti considers the zodiac as a work of the Greeks; and Delalande observes, that the Grecian sphere, such as we find it described by Eudoxus and

Aratus, carries us about 1300 years before our era. Thus, Eudoxus may be readily believed to have carried it into Egypt. It is, therefore, very natural, according to Delalande, that we should find the sphere of Eudoxus pourtrayed in the zodiac of Dendera. M. Halma is among the most moderate in his calculations on the question of the zodiac: he launches forth a violent tirade against Dupuis, ridicules the idea of the Egyptians being astronomers, and treats with no measured courtesy, the folly of those who took the trouble to bring the villanous black stone into Europe, and disturb its repose in the ceiling of the temple of Dendera, where, for aught he cared, it might have for ever remained. M. Biot, an acute geometrician, viewing the planisphere as an astronomical document, concluded that the era of its erection might be about 716 years A. C.; and Alexander Lenoir, considering it as a simple calendar, assigns its antiquity to a period of 770 years A. C.

So far from the interesting researches which have been made in hieroglyphic literature at all impugning the truth of the Scriptural Chronology, in reference to the age of the world and of man, they strongly confirm its evidence. In Egyptian architecture there appears to be three distinct epochas: the most ancient possesses a style and character altogether peculiar, and is characterized by simplicity in its form, and an expression not unnatural or strained. The finest specimens of this earliest epocha of Egyptian architecture, are exemplified in the palaces of Karnac, Luxor, &c. in the Thebais; and in the temple of Isamboul, in Nubia. The temples of Edfou and Dakké belong to the second epocha of Egyptian art; and that of Dendera, to the third and most Besides the style of architecture, the alphabet of phonetic hieroglyphics enables us to read on the Egyptian monuments, of the earliest epocha, the names of the ancient kings of Egypt: on those of the second, the names of the Greco-Egyptian kings and queens; and in the structure of the third, and last period, the entire legends of the Roman emperors, from Augustus down to Antoninus Pius, inclusive. It has, in this manner, been decidedly proved, that the great temple of Dendera, from whence the famous planisphere was obtained, and which had excited so much stir, and occasioned so much fruitless metaphysical and mathematical speculation, belongs decidedly to the third and last period of the art; and so far from its being so very ancient as had been supposed, it is, in reality, one of the most modern structures in Egyptian architecture. In all the copies which had been made of the hieroglyphics by the French commission, as well as by modern travellers, M. Champollion the younger, has deciphered the names of Roman emperors; such as those of Augustus, Tiberius, Claudius; and chiefly those of Nero and Domitian, under whose reigns the greater part of the sculptures of the temple of Dendera seem to have been made. The typhonium of this structure appears to have been of even a still more recent date, and belongs to the reign of Antoninus Pius. The only edifice among the ruins of Dendera, (called also Tentyris or Tentyra,) which is of considerable antiquity, is the small temple of Isis, behind the great temple, and which is consecrated to the This structure exhibits the royal Egyptian Venus. legends of Pharaoh Rameses-Meiamoun, the grandfather of Sesostris. The most ancient sculptures of this edifice do not carry us further back than the reign of Cleopatra and Ptolemy-Neocæsar; all the rest belong to the period of the Roman dominion. A Greek inscription, indeed, with Roman names, and that of one of the Cæsars, was found sculptured on the exterior cornice of the portico of the great temple; and another, on the Eastern entrance, repeated over each of the listels of the cornice.

It is thus clearly demonstrated, that the temple of Dendera, which once contained the circular zodiac, (now in Paris) and of which a fac simile is now before us, is certainly not anterior to the reign of Augustus, or the Christian era; nor is it to be supposed, that the celebrated zodiac is more ancient than the temple, of which it was intended to be the ornament; which deduction is amply confirmed by the hieroglyphic legends

which are sculptured on the same stone which forms the zodiac itself, and in which the imperial Roman title, AOTKPTP, (Autocrator,) appears in phonetic hieroglyphics. M. Champollion the younger, from the circumstance of the simple title being alone enclosed in the cartouche, (a somewhat oval enclosure, which contains the imperial names and titles; and, indeed, is the distinguishing feature of royal names,) assigns it to Nero, whose Medals, struck in Egypt, bear, simply as their inscription, the word Autocrator. According to the same distinguished authority, the circular zodiac, as well as all the other zodiacs of Egypt, are merely horoscopes, or astrological themes, either of the nativity of an emperor, or of the foundation of the temple; and are not, properly speaking, of an astronomical nature. It may here be proper to add, that by a horoscope, is to be understood the point of the zodiac which coincides with M. Letronne has promulgated an opinion similar to that of Champollion, and thus expresses himself. "Nous pouvons, regarder comme un point de fait, que tous les Zodiaques d'Egypte ont été exécutés à l'époque romaine.—Ces monumens sont tous entièrement ou principalement astrologiques, dressés d'après les principes d'une prétendue science que l'Egypte avait vu naître, d'après le systême de représentation dont les Egyptiens avaient l'habitude, et par les procédés d'un art qui n'avait pas sensiblement varié."

The epocha of the Egyptian zodiacs is also inferred from the *style* of the sculpture, as well as the astronomical interpretation of the emblems which compose them. The examination of the inscriptions which are in Greek characters, together with the phonetic hieroglyphics sculptured in the temples where these zodiacs have been discovered, prove that none of them are anterior to the Roman dominion in Egypt. There is still another interesting corroboration of these important deductions, in the discovery of a zodiac on the cerements of a mummy, evidently expressive of a natal theme. These proofs, collected from several diversified sources, amount to demonstration, and set the

question for ever at rest. Thus has truth triumphed, and the Biblical Records have reaped fresh laurels in the keen scrutiny of a contested chronology, just as in geological science, the hopes of the infidel have withered.

We have no certain account of the period in which the pyramids were constructed, or for what purpose they were built: some have supposed they were intended as places of sepulture; and, therefore, are to be considered as mausoleums. The late Dr. E. D. Clarke was of opinion, that one of these piles enshrined the body of Joseph, who rode in the second chariot of Egypt, and whose remains, obedient to his last request, were removed at the exode. The inner chambers of the one which has been explored, afford no key to the solution; nor does it appear certain that it ever contained a human body. It was much more likely to have enclosed the sacred bull, if it ever contained any thing at all. The sarcophagi, in the British Museum, if they have not been monolithic temples, which seems to us most probable, were certainly sufficiently capacious to enshrine this chief figure in their idolatry. The attempt to derive the term pyramid from a Hebrew root, appears to us forced. We think it much more probable that it springs from the Greek $\Pi \tilde{\nu} \rho$ —fire; and that instead of its Hebrew appellative, "Grave of the Dead," it is rather to be considered as an altar, connected with pyrolatry, from whence the sacred fire ascended, as in ancient Mexico: nor is it at all improbable, that it may, like the altar which Joshua built in Mount Ebal, to the North of Sichem, have been "plastered over with plaster," and had the creed of their mythology recorded on it in hieratic symbols. For any thing we know to the contrary, these structures may have been contemporaneous with the patriarchal age, or of the Pharaohs; or they may have been of the era of the Ptolemies. The literature of hieroglyphics may eventually solve this question.

We have not considered it at all necessary to introduce the question of Indian chronology: it is so entwined with fabulous legends, that a key, to what truth it contains, is not easily found. The high antiquity once claimed

for it, turns out to be a mere farce; and Colonel Mark Wilks, who has distinguished himself in the literature of the East, informed us, he had, in his researches, invariably found, that neither their literature, science, nor arts, had any just pretensions to a high antiquity. The Hindoos, like the Egyptians, have a train of fabulous gods, and demi-gods, figuring away in the legends of their mythology, prior to the deluge; but sober science has to deal with a different succession of terrestrial being. The gigantic excavations in the granitic mountains of Elora, forming the temples of Indra and Visvacarma,* and other temples and dwellings; with those of Karli, Elephanta, and Salsette; seem, in their majestic grandeur, to dispute with the pyramids, a title to overpowering effect, without the slightest pretence to any useful purpose whatever. Effect seems to have been the design kept in view, in order to overawe the devotee, by the unearthly majesty of giant forms. These excavations somewhat resemble those of the vast Necropolis of ancient Idumea. Not to trace out other resemblances, it may be mentioned, that in the Keylas, (or Paradise,) an insulated temple, hewn out of the Elora mountains, among the various figures, there is Bhavani sitting on a Lotus, (Kumala,) conspicuously displayed; and in which it requires no discrimination to discern the Harpocrates, or Arueris of Egyptian mythology. The Lotus may be also seen on the seat of the Colossus of Gournou. The massive forms of Indian architecture are the precise character of that of Egypt. Add to these remarks the fact, that during the expedition into Egypt, the Bombay Siphauees, (Sepoys) forming part of the army which proceeded by the Red Sea and Suez, recognized many of the mythological figures; for instance, the bull, and some stone figures of serpents. It is even added, that they welcomed these as old acquaintance, and fell down and worshipped: while their officers were told by them, that the ancient

^{*} This enormous excavation penetrates 130 feet into the mass of the granitic rock.

people of Egypt must have been Hindoos Whether the aborigines of Egypt borrowed their mythological characters from the plains of Hindostan, or the Hindoos from the country of Osiris, it is, at least, certain that both must have had a common origin; and we have just seen what degree of credit is to be placed in the high antiquity once claimed for Egypt:—her pyramids and temples,-her tombs and obelisks. The same reasoning applies to the obelisks of Axum, and the most ancient pagodas of India. Dr. Grotefend, of Frankfort, has succeeded in translating some of the cuneiform, (nailheaded, or arrow-headed) characters, from the ruins of Persepolis, and one from those of Pasargadæ. These characters seem to be very ancient, and by comparing their form and arrangement, with those of the quartz crystals, in the feldspar ground of graphic granite, in some specimens in our cabinet, we have been much struck with their resemblance. There is a specimen of Persepolitan characters on a fragment of stone, brought from the ruins of Persepolis, in the British Museum:they are precisely similar to those of Nineveh and Babylon. A specimen of the cuneiform letters found among the ruins of Nineveh, has been described by Mr. Rich; and specimens of Babylonian bricks are in the British Museum. There is also a beautiful cylinder from the ruins of Babylon, in Trinity College Library, Cambridge, where we have examined it with interest. According to the interesting researches of Dr. Grotefend, what had been considered three species of Babylonian writing, are only varieties of writing the same characters; there being, in reality, only one distinct kind of Babylonian cuneiform writing. It is, we think, worthy of particular remark, that the inscriptions deciphered by Dr. Grotefend, are of the times of Cyrus, Darius Hystaspis, and Xerxes. We believe M. Champollion is engaged in the same interesting question, which we cannot doubt will, in its solution, cast a new light over the Scripture Chronicles.

As to the legends of Indian deities, and pretensions to antiquity, the entire routine is a mass of fable, with

a faint combination of truth, rendered almost obscure by the tissue of absurdities with which it is perplexed. Mr. Seely makes the following remarks on the adventures of the deities, which compose that interminable theme, the Hindoo Pantheon. "It is one of those, that, after the deepest research and closest investigation, produces neither amusement nor information, being monstrous lies and fabled impostures from beginning to end, as I know by the experience of many a weary and ill-spent day of study."* We may yet refer, by way of corroboration, in the sequel of this work, to some of the ancient books of the Hindoos; but we feel surprised that Mr. Lyell, after passing sentence of condemnation on cosmogonies, and protesting against the identification of the objects of geology with those of cosmogony, should, immediately enter on the cosmogonies of India and Egypt, and quote some extracts from the institutes of Menu, as translated from the sanscrit by Sir W. Jones, to which that distinguished oriental scholar had assigned an antiquity of about 880 years A. C. These extracts seem to have been made with some complacency, because they treat of a vast succession of periods, each of which is composed of an interminable length, "and creations and destructions of worlds innumerable." Some of these passages, though "mysterious," possess, it would appear, "much grandeur of conception and sublimity of diction;" but it is admitted there are "puerile conceits and monstrous absurdities." Were we in search of sublimity and grandeur, truth and beauty, we should at once abandon these fabulous sources of error and romance, and proudly appeal to the BIBLE; in the full radiance of which the most splendid rays of poetry and pagan literature, with all their romance and fiction, suffer an overwhelming eclipse; but that Volume of Truth amuses not our fancy with "a long succession of periods, each of the duration of many thousand ages," and "creations also and destructions of worlds innumerable." We by no means suppose that

^{*} Wonders of Elora.-London, 1825, 8vo p. 132.

this is a reason for Mr. Lyell's omission in regard to the Sacred Volume, which seems, however, by some accident, to have been overlooked. It does not, indeed, propound "a system of geology," as has been stated, but it certainly records facts which cannot be separated from the annals of legitimate geological science. The data we possess are altogether insufficient for the construction of a system of geology—and such an attempt, is just as absurd, in the present state of our knowledge, as an endeavour to make a rope of sand.

"The connection," says Sir Wm. Jones, "of Mosaic history with that of the Gospel, by a chain of sublime predictions, unquestionably ancient, and apparently fulfilled, must induce us to think the Hebrew narrative more than human in its origin, and consequently true in

every substantial part of it."

CHAP. III.

THE FALL OF MAN—REMARKS ON PHRENOLOGY—THE MYTHOLOGY OF PAGANISM.

THERE is no Biblical evidence of RAIN having ever fallen to water the earth, in antediluvian history, nor is there the least necessity to suppose it indispensible. There are many parts of the earth which are never visited by a shower, and the abbreviation of human life, may be partly dependant on a change in the hygrometric character of the circumfused atmosphere. The Hebrew prophet informs us,-" There went up a mist from the earth, and watered the whole face of the ground;"-a simple and beautiful solution of the phenomena of evaporation, and the formation of dew: the latter reserved for the genius of Dr. Wells to demonstrate, though the fact had already been unequivocally recorded in the Volume of Truth. We have been delighted with the various gems of scientific truth, which we have met with, scattered up and down the Volume of Inspiration; but our limits do not permit the digression, else we presume the evidence that could be collected from this source alone, would put the infidel to the blush,—if, indeed, the infidel be a man of science. In illustration we might adduce the following paragraph:-"The rivers run into the sea, yet the sea is not full; to the place whence they came, thither they return again." It requires some skill in science to yield a ready assent to the truth,—the literal truth, which this beautiful description implies. Thus, too, is it with the sublime

expression: "HE weighed the hills in scales, and the the dust in a balance,"—" and measureth the seas in the hollow of his hand;" but, who does not now see embodied in that language, the theory of definite proportions, on which is founded the scale of chemical equivalents? It has been proved beyond doubt, that all material forms are constituted by weight and measure, and aggregated and adjusted according to fixed and determinate laws.

The fall of man is a terrible event in the history of the species. It is related with affecting brevity, and with all the simple emphasis of truth. The inspired historian informs us that "The LORD GOD planted a garden eastward in Eden; and there he put the man he had formed." The CREATOR, by a mysterious process, created Eve to be the partner of the prototype of our species, and share with him in the delights of "the garden of the LORD." The Deity held converse with his creature, man; and man rejoiced in his heavenly Friend, and walked with his MAKER amid the flowery scenes of creation, and all the varied blessings which a beneficent and bountiful Providence had profusely The precise situation of this lovely spot cannot now be ascertained. The waters of the deluge have, it is probable, obliterated all traces of Eden's beauties; and the ocean may now roll over the place where Eden was. So long as the crown of innocence was seated on his brow, and "Holiness to the LORD" was the sacred motto which sparkled in the halo that encircled it-"it was well with him." The range of enjoyment was ample, and the cup of blessing full.

Pæna metusque aberant :—
Ver erat æternum,—
natos sine semine flores.

Man was a free agent, and a test of fidelity was propounded:—the duty of obedience to the acts of a heavenly legislation would be crowned with immortal life;—a "hope blooming with immortality" was the price of his obedience. Disobedience would be followed by the forfeiture of the friendship of God, and all communica-

tions of heaven; from that instant the seeds of mortality were to be infused into his frame; man "should surely die," and his posterity feel the shock of their progenitor's disobedience to the Almighty. But this assurance seems to have been "like an idle tale, which they believed not." In all this arrangement we can see nothing but wondrous condescension. The test was simple, and the task was easy. - Only one tree of Eden's glorious variety was forbidden: the principle of EVIL, however, under the insidious form of a serpent, seduced the credulous pair from their allegiance to their CREATOR. They were not ignorant of the consequences which an act of disobedience to the mandate of their Maker would entail; and Gop had, in his heavenly conduct to these his creatures, given them no cause for distrust, no plea for doubt. The colloquy betwen the tempter and the tempted is full of sophistry; and the consequence in the tempted forcibly displays "an evil heart of unbelief." "The serpent said unto the woman, ye shall not surely die."-" For Gop doth know that in the day ye eat thereof, then your eyes shall be opened; and ye shall be as gods, knowing good and evil." The fatal chord was touched; and man, by an act of treason and rebellion, forfeited his allegiance, and "fell in the first transgression."

We are perfectly aware that this fearful transaction has been considered metaphorical or figurative—a flourish of orientalism; but the Bible no where deceives us, and the event detailed is perspicuous and palpable. It would be curious to know by what mental process these kind of reveries have been acquired, or by what special act of revelation such important knowledge has been communicated. The Jews understood it as a literal event, and do now receive it as such; it was so understood in the apostolic age. Nothing but a bold inversion of the principles of reasoning, and a vain conceit founded on the rash assumption, that we are wiser than He who made us, could have dared to go such lengths: and why stop here, and not apply the same unwarrantable dogmatism to the entire fabric of

revelation? the Creation,—the Deluge;—in a word, the Exode and Pilgrimage of the Jews through the wilderness of the peninsula of Sinai, to Palestine, together with their whole history. Metaphorical, indeed! A new edition of Berkeley's Idealism! We may well demand from these new illuminati the test of discrimination between the palpable figure and the shadow :-- some safety-clue to guide us through the woven web of the reality of circumstances, and the metaphor of imagery. In one of the MS. papyri, discovered in Herculaneum, the author sports some speculations of this kind in respect to the heroes of Homer, whom he considers allegorical. Agamemnon was ether; Achilles, the sun; Helen, the earth; Paris, the air; Hector, the moon; and so on. Of a similar nature were the arabesque notions of Père Hardouin in the last century; who, after a profound study of antiquity, made the notable discovery, that the whole world was the dupe of extravagant imposture. According to him, Homer and Virgil, Cicero and Demosthenes, never existed but in fancy; Rome and Greece had never conquered or enlightened the world; the chefs-d'ouvres of the genius of antiquity, were only decoys to deceive posterity; and so we were desired to believe that all these things were the work of some clever monks of the middle ages. Apparently following in the footsteps of this eccentricity, Sir William Drummond wrote a work entitled EDIPUS JUDAICUS, in which we were gravely assured, that the entire structure of the Old Testament was metaphorical, and astronomically emblematic. According to Sir William Drummond's views, the twelve children of Jacob (Israel) were merely the TWELVE SIGNS OF THE ZODIAC; and the Israelites fleeing before the men of Ai, the sun cutting the plane of the ecliptic. These were, indeed, notable discoveries, that might well excite "our special wonder." The truth of the matter is, that on the petitio principii assumed by Sir William Drummond, we might come to any conclusion however ridiculous or absurd; and, accordingly the author of the ŒDIPUS ROMANUS shews as clearly, that

the TWELVE CÆSARS were the twelve signs of the zodiac, and consequently must have been the twelve children of Jacob, on Sir William Drummond's principles: and, that CESAR PASSING THE RUBICON is only another version of the children of Israel fleeing before the men of Ai. But, waving the consideration of such trash, what, we may well ask in astonishment, are we to think of Sir William Drummond's pretensions to astronomical science, on which he founds such sweeping and monstrous absurdities, when we PERSONALLY KNOW that Sir William Drummond, after smarting under the severe and just censures of the "Quarterly Review," submitted a copy of that work, full of MS. marginal notes, to a celebrated astronomer on the continent of Europe, in order to have his errors rectified, and his blunders adjusted. In the possession of this astronomer, (as distinguished as any that the science can boast of) we saw this copy; and were at the same time assured, that he had found it to be a tissue of

astronomical errors from beginning to end.

The Westminster Review, not long ago, in its advocacy of a sceptical geology, made the following absurd and preposterous remark:-"whether there are any unquestionable physical proofs of the Mosaic deluge, or not, is a question far from settled; but even should there be none, we cannot see how that is to affect our belief in the record of the historian. It is a moral and not a physical fact which is here meant to be inculcated -the destruction of a sinful race!" This is quoted to shew the counterfeit which some men will venture to promulgate as genuine currency. It would, however, be too much to expect common sense to believe, that a deluge could destroy a sinful race by the operation of moral causes, without constituting a physical fact. Well, indeed, might it be said of this proposition of the reviewer, that "it wears to the understanding as rich a livery of solemn nonsense as any that have fallen under his lash." Happily, for all these flights of fable and romance, inductive philosophy propounds a test:-of this description was that proposed for the idealism of Bishop Berkeley; namely, to cast himself headlong from one of the arches of London Bridge, and trust to his idol to save him. We should have made short work with Père Hardouin, by simply leading him to the house once tenanted by Salust, in Pompéi, exhumed after a lapse of seventeen centuries; and having pointed to the name C. SALVSTIVS, inscribed on the door post, there left him to ruminate. This would have been a simple argumentum ad hominem; and, where the question is susceptible of this kind of argument, it is generally convincing. Our readers will remember, in illustration, the solution of the notable problem touching motion, "a body cannot move where it is, and it cannot move where it is not, ergo there can be no such thing as motion:" Q. E. D. In order to demonstrate the fallacy of this proposition, an individual rose from his chair, walked across the room, and thus afforded palpable proof, that a body could move from one place to another; ergo, there was such a thing as motion. Absurd as these things, abstractedly considered, appear to us; yet, of such materials are composed many of the opinions that have made the world stare and wonder: —such is Hume's Essay on Miracles.

Hitherto Eden's happy pair had known only good; they had surely ample evidence that their CREATOR was a genuine benefactor, since not one ingredient of happiness had been withheld.-"What could he have done more to his vineyard?" Amid all this latitude of happiness. it was a natural inference that no "good would have been withheld;" but man would know EVIL, though the knowledge might be purchased at the expense of immortal life, and the friendship of heaven. Had it been a hard task, something might have been put in on the part of sophistry, by way of plea: but man is left without excuse.-"The gold has become dim, and the most fine gold changed." The act of criminality was much aggravated by the very simplicity of the test of obedience. Let those who delight to harp on the string of the "dignity of man," remember Eden. We consider it is not "a light thing" to sin with a high

hand, and transgress the commandments of God. Some there are who think that the crime was slight, and the punishment too severe. It will be perceived, we think, very differently. The sophistry, by which they endeavour to support their views, proves too much for them. Since the test of obedience involved no severity, and was in itself easy of fulfilment, the crime of apostasy was thereby enhanced. The magnitude of the crime is not to be measured by the nature of the test, but by the fact, that it involved a direct act of disobedience to the commands of Gop; and, we presume, none will contend that the CREATOR has not full right to the allegiance and obedience of his creatures. The CREATOR was no hard task-master, and he had surely a right to expect obedience from the creature of his power and his providence. No sophistry can evade the conclusion, that he was justly chargeable with treason and rebellion against his The temptation was not long continued, but it was too successful;-the pearl of his happiness was dissolved in the perilous experiment, and the link which united him to God, dissevered. Besides these considerations, there was a motive of another kind superadded to the act of obedience. His posterity should enjoy the benefits which obedience to the law of God secured; or should suffer in the act of rebellion, if his allegiance were for-Now a good man's benevolence is not entirely absorbed in self; the interests,—the immortal interests of those dependant on him, would be a powerful plea with him, and might produce a pause in his conduct, which might guarantee their safety, even though he put his own in jeopardy. The history of the event seems, in our humble view, compatible with what an inductive science would teach, right reason approve, and altogether consistent with the conduct and government of a just and good Being-infinite in purposes of mercy, and fraught with the attributes of holiness. It was meet that a test should be propounded to try the allegiance of the creature to the CREATOR. Man was a FREE AGENT, and therefore became accountable; for the freedom of his will was not interfered with.

therefore, an act of wilful disobedience, in its most aggravated form. It was giving Gop the lie, who had clearly informed him of the consequences; but he yielded on the very first suggestion of "a lying spirit." The dictates of conscience were despised, and reason trampled on by "an evil heart of unbelief." This seems the simple portraiture of an historical event, and as such we mean to consider it, while we think every unsophisticated mind will yield acquiescence. We are aware that it will be attempted to attenuate the delinquency. by shifting part of the blame from the tempted to the tempter; but this proxy plea will not avail:—it would be scouted in a court of justice. Had there been no temptation, there could have been no fall-no test of obedience-no proof of free agency nor of the nature of man's relation to Gop-no accountability. There could have been no palpable test of man's belief or faith, and of the proof of man's constant dependance on the strength of an omnipotent arm. The absolute necessity, therefore, of the test of man's obedience, must seem sufficiently obvious. The only objection that can be made by the most obdurate infidel, in full defiance of an inductive philosophy, is, that we should suffer in the fall of our prototype. Right reason must, at once perceive, however, that if we are branches of a common root, and if that root be tainted either with physical or moral disease; we, as connected branches, must suffer, as naturally as cause and effect succeed each other. An act of rebellion, the frightful magnitude of which we have adverted to, would leave a permanent impress and record of its virulence, both on the moral powers, and physical frame, as connected with it, and, which would, therefore, suffer in consequence. The mark of punishment would remain a living legend of the act of transgression. - And, alas! "the whole head is sick, and the whole heart is faint." Conscience, and the record of observation, attest the truth, that all is not right with humanity, and that some terrible catastrophe has befallen it:—it is not with it as in times past. The authority of every age, and the testimony of a world, proclaim

these tidings to the ear of reason; and reason admits an attestation so universal. Even the heathen world is heard to say,

" Video meliora proboque, Deteriora sequor."

While Paul, who embodies this admission in a more full and palpable form, only reflects a truth, which it requires an unusual share of infidelity to oppose. "The good which I would, I do not: but the evil which I would not, that I do." There are some who will say any thing; but, it requires more than an ordinary share of fool-hardiness to array the mind in opposition to a fact which is as evident as the fact of existence,—that the offspring does suffer the penalty of the parents' crime.—in disease entailed, or a debilitated constitution; and shall we dare, in this case "to charge God foolishly?" God is GREAT, and he his merciful. Here is a demonstrable fact, which proves the postulate. Unless some dreadful evil has befallen our race, how shall we account, on the principles of either the mercy or justice of God, for the agony and the death of children; -since these are innocent victims, as far as actual personal guilt is involved. The fact is notorious, and common as the visitations of pain and death. Here is evidence founded on "experience," as Hume calls it, and which lays even his sophistry in the dust. reality of pain and death would even dissolve the airy idealism of Berkeley, and reduce it to its invisible elements. We, however, as firmly believe that the "fulness of time" will develope a more splendid monument to the Divine goodness than if man had never sinned.

Let, on the other hand, the important motive which was altogether set at nought in this melancholy defection, and desertion from the standard of good, weigh with man in the intromissions of life and intercourse of society, namely, "that no man liveth for himself, and no man dieth for himself;" that he is not at liberty to do evil, and "he is not his own;" that he lives not for himself alone, but for others; the operation of that

motive would completely change the aspect of the moral world. In Eden it would have saved him from ruin, and the consequence of the most flagrant turpitude

that ever stained the annals of crime.

We shall next proceed to inquire what further evidence we have within ourselves, independent of the monitor conscience, and the amount of testimony from other sources of attestation Among the fictions of the poets, and the fables of the East, we cannot fail to discern the fatal truth so clearly and unequivocally pourtrayed in the Sacred Records. The golden age,

"—— que vindice nullo, Sponte suâ sine lege fidem, rectumque colebat;"

that happy period, when "righteousness and peace embraced each other." We read of a man formed of clay, animated by a spark from heaven; of a female adorned by the graces and gifted with all the charms of beauty; and of a fatal casket, which, being opened by her, sent forth over the face of the world a direful train of evils; but amid these calamities, was a reservation of hope, that a time would come when all would be well again, and man restored to the blessings of the golden age, which had, in a fatal moment, been forfeited. These adumbrate the great event which we have been considering. The classic will also remember, The Garden of the Hesperides, and the Golden Apple; -The Vale of Tempe;—The Paradise of Phaneas, and the Παραδεισος of Strabo. The Brahmins believe and teach, that man is a fallen being. The same fact is admitted by the entire pagan world, both in times past and present; while the universality of sacrifices is a palpable attestation to the truth of the position; they can on no account be otherwise explained, and are a proof that the fact is fully acknowledged, and by universal consent. The same thing is conceded in the necessity of intercession—in the Genii averranci of the Egyptian mythology, and the Penates, or Dii intercessores, of Rome and Greece: all of which are connected with the same belief that made Micah cling to his teraphim or telesms; and when they were stolen, to raise the bitter cry,—"Ye have taken away my gods which I made, and what have I more?"

We are by no means disposed to go to the full extent to which phrenologists have proceeded; and, while we are decidedly of opinion, that there is some truth in the case, we cannot but believe, that the minute nomes or districts into which they have mapped the head, (and which too, in many instances, seem gratuitous and fanciful,) expose their views to ridicule and question. This, however, is an abuse not legitimately chargeable on the question itself, which seems to be based in truth as far as our observations have been carried. may suffer very materially by injudicious opposition to what may, in due time, be established on the surest inductive grounds. Phrenology may, or may not fall ;if it be true it never can. The Bible, being THE TRUTH, must remain intact by the whimsical inductions which may be laid to the charge of phrenology; -but if there be truth in phrenology, we are quite sure that this truth will only be another ray of evidence. We are surprised that Mr. Godwin, in his recent work, entitled "Thoughts on Man," &c. should have reiterated some charges which we had considered altogether obsolete, and which seemed to have been completely answered long We advert to the charges of materialism and fatalism: but, if phrenology involved either the one or the other, we should not hesitate on its instant rejection. Mr. Godwin seems to consider it a modification or extension of Lavater's physiognomy; and to be estimated in a similar relative value with chiromancy, augury, and astrology: and truly, if it belongs to the same class as these, the sooner "the quackery," as he calls it, is got rid of the better: but if it be true, the author of "Caleb Williams," will not find it an easy task to overturn it. The advice of Gamaliel was excellent—we recommend the consideration of it to Mr. Godwin: "if this counsel or this work be of men it will come to nought; but if it be of God, ye cannot overthrow it." Truth is mighty and will prevail. "It is all a system of fatalism,"

says our author; but we may safely cause his own language to recoil on himself, in reference to this chargeit is "founded upon arbitrary assumptions and confident assertion." Certainly," says Mr. Godwin, "many of Gall's organs are a libel upon our common nature." We have already quoted Paul, (no mean authority in this matter,) as admitting the existence of principles acting in opposition to his better reason—" a law in his members warring against the law of his mind." A legitimate phrenology says no more, in our opinion, than the Scriptures have already taught us, and what every man must feel,-namely, that there do exist evil propensities; but, amid the ruin of fallen nature, there is still sufficient evidence in the existence of better principles -intellectual faculties, which are living legends that incontestibly prove, "Gop made man upright, though he has sought out for himself many inventions:"-that though "the gold has become dim," there seems to have been a period in his history when he walked with Gop amid the garden of creation, enjoyed his favour, and held converse with his great Benefactor. What do these propensities prove, but that "when we would do good, evil is present with us." Had there been no manifestations of better principles of action, which, (when suffered by the will to operate,) were sufficient to counteract these adverse and evil propensities, there might have been some pretence for the charge of fatalism; as the case, however, stands, there is none whatever. In the manifestations called veneration, benevolence, firmness, and the like, we perceive that "Gop has not left himself without a witness," that "he made man upright." We, therefore, see no danger whatever in the truth being known; but we do see serious danger arising from its inhibition. We are not called on to wage war with the abuse of principles, but with the legitimate exercise of reason on the deductions of truth; and when any conceit is brought forward that might impugn the Volume of Revelation, we cannot do better than apply the observation of Dr. Johnson on Brydone's commentary on the Canon Ricupero's notice of the stratification of the lava:

"Shall all the accumulated evidence of the history of the world; shall the authority of what is unquestionably the most ancient writing, be overturned by an uncertain

remark such as this?"

We really can see no ground for any charge of evil on the question of phrenology. The mind, distinct from matter, and altogether an independent immaterial being, proclaims its existence by the manifestation of distinct organs; and what does this teach? simply that mind can put its impress on matter, and is, therefore, superior to it in power. These manifestations prove that we are richly gifted by Gop. Whether the boon, bequeathed by the Divine "Giver of every good," (the existence of which afford sufficient evidence of the benevolence of our CREATOR,) be improved or not, does not affect the question. The creature becomes chargeable with a dereliction of duty by suffering these talents to run to waste, and is responsible for their nonimprovement. Lawrence asks, "Where is the soul of the fœtus?" And thus, by cunning tact, shifts the onus probandi from his own shoulders, by a question he has no right to propose, when he must feel conscious he cannot prove the negation. We, however, do not flinch from the challenge; we take up the gauntlet, and, on the principles of a science, which he professes to believe, meet his haughty demand. No sooner is the child born into the world, than the manifestations, which are called cerebral developements, strike the senses; and ere yet the infant's mind has been unfolded to the external world, the bias of its future character may be read: circumstances may change or modify these, but the "root of the matter" is in them:—to us this appears to be a sufficient rejoinder. Long before the mind can give evidence by its activity in mental research it hangs out its insignia in proof of its existence. Its non-manifestation by mental sagacity in affairs of thought, therefore, is no evidence of its absence. The eye is the telescope by which the mind takes cognizance of the beauties of external nature: that the mind uses it as a medium for the acquirement of this notice, is no proof against the absolute

independence or non-materiality of the noble prisoner. which a material frame encloses and confines. Just so it is with other senses, in relation to the organs by which their knowledge is acquired. That mind should operate on matter is only a proof of its independence of, and superiority to it, and may be safely admitted. Phrenology seems to require no more. The organs of benevolence, veneration, and other kindred organs, will keep in check and subordination the inferior principles and propensities; and even these last, when touched by the remoulding influence of the Holy Spirit, can be turned into a happier channel, and act in a new direction. Thus affected and operated upon, the organ of "combativeness" may employ its powers "to fight the good fight of faith,"-the Christian's warfare. Paul affords an admirable example of this description. In the early part of his remarkable history, by his own account, he bitterly persecuted the first Christians; "being exceedingly mad against them," said he, in his noble defence before Agrippa and Festus, "I persecuted them even unto strange cities." Arrested, at length, in his career, we perceive this noble genius contend for "the faith which he once laboured to destroy." How are we to account for this remarkable change, which really seems equal to a new creation; and of which those who are at all conversant with the world, must have seen numerous examples?-when even the man becomes a miracle to himself. By the principles of phrenology the solution does not seem difficult. The existence of evil propensities are proved; and they are made to operate in a way altogether at antipodes with their former tendency, demonstrating the control of a power possessed of opposite attributes, altogether superior to, and infinitely above them:—this is a demonstrated fact: it is not special pleading that we employ. We might extend the same principles of reason to the other organs, such as acquisitiveness, which might be changed to seek earnestly that "wisdom which is from above;" and if cautiousness be superinduced—a fear lest we "sin against Goo:"-thus too with others. There are some who

would degrade our species to a level with quadrumanous animals,* and view man as a kind of polished ape, or enlightened baboon. Happily, however, the facial angle may be safely appealed to; and phrenology comes in with her testimony, to shew that in man there is something superadded to animal nature, and which bears its evidence on his manly brow. What saith the Scriptures?—"The Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life, and man became a living soul." There is something more elaborate here, so to speak, than in the act of creation in reference to the inferior animals. As we grant it to be quite legitimate to draw our illustration from every ostensible source of information, we may quote pagan evidence to our purpose,

"Os homini sublime dedit: cœlumque tueri Jussit, et erectos ad sidera tollere vultus."

And here the heathen poet soars far above the philosophy of Monboddo, as he also is more in accordance with the spirit of enlightened reason, and the dictates of genuine science. We are, therefore, free to confess, that in phrenology, such as we understand it, we can discover nothing that opposes the sublime principles of Revelation, but rather the reverse. From some extent of observation, we have found that it carries the elements of truth; and our remarks on human nature verify many of its principles. We ridicule the extent to which it has been carried, and feel persuaded, that not a few of the too multiplied organs will be displaced from the "little Goshens" they now occupy, and still the main features continue the lime. Our opinion has not been founded on slight grounds, and we are not in the habit of thinking by proxy. We fully, therefore, concur with the justice of Mr. Combe's remarks: "If we have ascertained that the system is founded in nature, we are safe to conclude

^{*} It is clearly demonstrated that the upright posture in the ouran outan is an unnatural one; and Dr. Trail has proved that in the female, this attitude would produce abortion.

that the knowledge of it cannot lead to harm. This is the proper answer to those persons who allege that it teaches fatalism and materialism, unless it can be shewn that the knowledge of truth necessarily leads to evil. No inquiry is made into the nature, essence, or substance of the mind or soul itself. Phrenology teaches a knowledge of the works of the CREATOR; and, as his works are wisely and perfectly made, the legitimate presumption is, that those who see danger in a knowledge of them, are mistaken in their views. Every objection that the system is dangerous, presupposes its connexion with error. The answer to such an objection, therefore, is the demonstration of its truth. If it were false, human ingenuity might certainly discover and point out the evil consequences to which it would lead; but, if it be true, no human intelligence is entitled to condemn it."

The diversified mythologies of mankind afford sufficient evidence to the memorable event of Eden. Obscure. though the glimmerings of truth seem to be, they can still be traced in characters sufficiently legible; and however they may be distinguished in other features, and subsequent periods of their history, they bear ample proof that their source and origin are the same. In the mythologies of Budha and Brahma, we find strong attestations of some of the most distinguishing features of the early history of mankind; and, when separated from fable, are remarkably confirmatory of the Biblical Record. It would be truly absurd to suppose that the Hebrew legislator "drew his narrative through Egyptian conduits, from the primeval fountains of Indian literature." The information obtained through such a turbid medium, would have presented a very different aspect to what we find recorded, as the circumstantial characteristics of the antediluvian age. Tradition may be easily supposed to have been founded on an unbroken series of attestation from the patriarch and his family who survived the catastrophe of the deluge, and who might have scattered the elements of truth over the eastern hemisphere; but the atmosphere of oriental

literature is one, altogether unfavourable for the preservation of the simple beauties of truth. Poetry, the cradle of fable, and all its arabesque drapery, casts a tinselled veil over her form. It requires something more than such an atmosphere can afford, to those who breathe it, to rise above it, and separate truth from error. sun, which imparts that illumination, must be above the turbid firmament where truth and fable are so intimately combined, in order to promote their separation. The mental vision, beclouded with error, cannot be expected, without some superadded power, to "shuffle off its coil" and rise above the darkness which perplexes it. The mind cannot be supposed to act in opposition to itself: with an equipoise of truth and error, and the will inclined to the latter, by what talisman did it disentangle itself and rise superior to the world around it, and all its millions? Certainly, the record of antediluvian history might be preserved by a living link, which connected it with a postdiluvian age; and, though we do not know the species of register which transmitted so faithfully the history of the human family from its prototype to the last of the antediluvian race, it is altogether credible, and may be reasonably believed. This would be more decidedly and specifically secured by the protracted periods of antediluvian age. The patriarch, who witnessed both the one and the other, was a very appropriate vehicle to perpetuate the information, and preserve the annals of the past. He was the channel, through which his stream of knowledge flowed from the one world which was destroyed, to the other which yet remains. The ark was the repository in which the archives of a former world were preserved; and, by the descendants of the patriarch, these memorials would be dispersed hither and thither. In process of time, the details would become exceedingly obscure; poetry and fable would trouble the waters, so that truth would only faintly sparkle through the abyss of creative imagination. It is immaterial whether we believe that the Hebrew prophet, instructed of Gop, was enabled to collect the gems of scattered truth from the rubbish in which they were imbedded, or obscured, and set them in the diadem of a pure and spotless theism'; or, that the truth was immediately communicated, in one effulgent vision, to the prophet's mind; we prefer the latter. Brought up in the court of Pharaoh—the protegé of the daughter of a king he was nursed in the superstitions of Egypt, and cradled amid her idolatries; but he rose far above them. His father-in-law was one of the priests of Heliopolis; so that if his learning and attainments were commensurate with his opportunities, he must have been truly what the Scriptures describe him to be, "learned in all the arts of the Egyptians." Initiated into the ritual of Egyptian mythology, and from his family connexion with Jethro, thoroughly instructed in the literature and science of Egypt, which must have been the almost exclusive prerogative of her hierarchy; we perceive this favourite of fortune, suddenly emancipating himself from the thraldom of his situation, denuding himself of all the advantages secured by a Pharaoh, become a voluntary exile in the land of the stranger, illuminated by a pure theism, and inculcating its precepts with a steady His institutes remain in evidence; and, compared with the masquerade of Egyptian deities, and the entire paraphernalia of the mythology of that country, it is so dissimilar in every part of it, as to form a striking and bold contrast—as distinct as contrarieties as opposed as the sunbeam to Erebus—"Hyperion to a Satyr." That such a clear and luminous system should be drawn or should emerge from the legends of eastern fable, is not likely; nor can it gain an easy credit. The Hebrew prophet obtained it at once from a pure source, and it has, ever since, been preserved unmixed with the streams of error. Had Juvenal, without cause, written bitter things against the Egyptians, as the following keenly testifies,

"Porrum et cepe nefas violare ac frangere morsu. O sanctas gentes, quibus hœc nascuntur in hortis Numina!"

he could have been confronted by the evidence which we fortunately now possess; but these credentials sub-

stantiate, to their fullest extent, the charges of the Roman satirist. From whatever source Moses obtained the materials for his history of the primeval world, it is not conceivable that Egypt supplied the medium of information: and the Indian legends, when accurately considered, do not give the slightest countenance to the supposition, that the materials of his history, much less his theogony, could have flowed from thence. There must have been some common source; and seeing how infinitely that of the Hebrew prophet transcends all of them, we are compelled to believe, that he was led by the Spirit of truth immediately and directly to its fountain. Ever since, by good Providence, the heavenly flame has been preserved, and transmitted down to the present period. It presents itself fearlessly to the lynx-eyed investigation of severe induction and a philosophy exalted in its merits by time. We trace this luminous line through the flux of ages, with thick and palpable darkness on the right hand and on the left: this clearly demonstrates an over-ruling Providence, else the darkness would have broken in, and overshadowed it. We may expect some faint traces in the regions of the East, of the events so clearly thus brought to view; but let us not forget, that it is by this very Light that we are enabled to discover these vestiges of truth, and separate them; while they, on the other hand, operate as powerful auxiliaries to corroborate the Sacred Record, and prove, in terms too palpable to be misinterpreted, what would have been the fate of the TRUTH, had God abandoned it to the imaginations of men, "whose foolish hearts are darkened."

We can imagine that fable may possess a nucleus of truth, and that this truth may have suffered an eclipse, or at best be dimly seen through the fogs and mists which have condensed upon it; but we cannot comprehend how error can rectify itself, or truth be disentangled from a turbid sea of perplexity and uncertainty, by the bewildered mind, itself struggling with doubts and the darkness of error. In order to enable it to rise

UNIVERS

above this its native medium, it must receive a buoyancy from a source independent of, and altogether above itself. As a mythology, which enjoined the worship of LEEKS and ONIONS, is obviously a channel through which the sublime theism of the Old Testament could never have flowed to the divine legate; so it is equally a wild conceit to suppose that such a system could have proximately come from the legends of eastern fable. Can an impure fountain send forth a pure stream? On the principles of causation, the fountain of MARAH will only supply the waters of bitterness. A pure spring will supply a stream pure in its elements, but this may be rendered turbid in process of time by contingencies, which may either disturb its course, or infuse into it the principles of opacity. The Egyptians have left behind them their credentials sculptured in the obdurate rock or hermetically sealed up in the cerements of the tomb; we have, therefore, no necessity to draw our information indirectly from Juvenal, but directly from themselves, as the mummy holds immediate intercourse with us by virtue of the papyrus in his withered hand. This mythological document informs us too, mournfully, of the dark mysteries through which he contemplated a future state of existence, and of the doubts and fears with which the spirit had to struggle: shadows, clouds and darkness fell upon it. The entire transcription of the funeral ritual of the Egyptians, (parts of which are found in mummy-cases,) extended to more than fifty feet in length. This was the chart of the soul in its adventures through the valley of the shadow of death. We have already cited the opinion of Dr. Young, as founded on his researches into the literature of ancient Egypt, so that there can be no doubt about the matter. Their monuments remain, and we can now read their inscriptions for ourselves; yet, with the brighter lamp of truth in our hand, the "thick darkness" will be felt more palpably than in the "olden time before us." Hume's joke about Charon's fare did no credit to his understanding; it only supplied a proof how much he preferred fable to truth-"darkness to

light:" the piece of gold, between the lips of the mum-

my, supplies the commentary.

When we take a calm survey of the heathen world we can discover no pleasing images on which the mind can pause with delight. While wandering among the interesting models of the "tombs of the kings," (some years ago,) exhibited by Belzoni, in London, after his return from exploring the subterranean recesses of their originals, the vision of the son of Buzi, in Chaldea, flashed forcibly on our mind: "Behold every form of creeping things, and abominable beasts, and all the idols of the house of Israel, pourtrayed upon the walls round about,"-" Son of man, hast thou seen what the ancients of the house of Israel do in the dark, every man in the chambers of his imagery?"* Whether we survey the mythology of Egypt, Budha, or Brahma-Greece or Rome—we see evidence that cannot be controverted, that there is inculcated the worship of demons, and the "doctrines of devils." In the mythology of Egypt we perceive the *uræi* or basilisks bearing the symbols of divine life; and in that of Budha, the nagas or snake gods.

In the pagan world, "every hill was Olympus, and this Olympus heaven; every valley Erebus, and every prince a god." Whatever light dawned on some master-spirits of the heathen world, "was light from heaven." Nor is it, in many instances, difficult to descry the luminous point from whence the ray issued: what, for instance, is the το αυτο of Plato, but a fragment of the tetragrammaton of the Hebrew

prophet?

It may be interesting to select, by way of illustration, one of the most gifted spirits which the pagan world presents, as a decisive proof that "the world by wisdom knew not God." It is, however, necessary, for the purpose of elucidation, to observe, that the worship of devils is inculcated and enjoined by the doctrines of Budhism; and we perceive a cock in one hand of the devil,

^{*} Ezek. viii. 10, 12.

called Calloo-coomare, as well as in that of the demon Rirey: so that even Socrates appears to have been a worshipper of demons. Mr Upham, in his "History and Doctrine of Budhism," has supplied us with the picture of an actual scene from the woods of Cevlon. affording a melancholy portraiture of the "gross darkness" which brooded over, and still covers the heathen world. We quote his own words as affording an irresistible evidence of the melancholy fact—" However high," says our author, "his intellectual attainments, philosophy could not lift her greatest follower, (Socrates,) at his death, above the standard of the humblest disciple of the Budha when sacrificing a cock to the Bali, or planetary influences, as he lay languishing under sickness amid the woods of Cevlon: we see the same vow and offering, the same tribute to the deity, as marked the last hours of Socrates:-uncovering his head, for his head was covered that nothing might trouble him, 'Crito,' says Socrates, (these were his last words,) 'we owe a cock to Esculapius; discharge this vow for me, and do not forget it.'-A midnight scene which was witnessed in the forest of Ceylon, wherein a magical practitioner was addressing the sparkling host of heaven, 'the Bali,' in behalf of an unfortunate individual languishing under sickness, will demonstrate how precisely this last act of the greatest philosopher of the Athenian school sprung from the same root of doctrine as that of the sick Singalese."* Yes! THESE BE THY GODS! O PAGANISM! As we' consider the mythology of Budha anterior to that of Brahma, (and there is no evidence for believing that this source could supply materials for the theism of the Scriptures,) we need not consult its offspring, Hinduism. Our opinion, therefore, entirely coincides, it will be perceived, with that of M. Benjamin Constant, which we shall simply detail in his own words: "L'apparition et la durée du théisme juif dans un temps et chez un peuple également incapable d'en concevoir l'idée et de

^{*} London, Ackerman, 1828, folio edit. p. 13.

la conserver, sont à nos yeux des phénomènes qu' on ne saurait expliquer par le raisonnement. Le théisme qui s'y amalgamoit avec le panthéisme, ressembloit peu à la notion de l'unité de Dieu, telle que les livres hébreux nous la présentent, simple, claire, établissant entre la Divinité et les hommes des rapports moraux. Ce dernier caractère constitue la différence essentielle qui sépare

ces deux espèces de théisme "*

From our preceding remarks it will be perceived that we may naturally expect some gleams of truth, sparkling like fire-flies amid the wilderness of paganism. The following extract from a literal translation of a portion of the Maha-wansi, one of the most revered of the sacred books of Budhism, and considered as a faithful transcript of the doctrines of the devotees of Budha, is given by Mr. Upham. It presents an interesting corroboration of some of the most remarkable events and circumstances which characterize the antediluvian age. "At that time all beings lived an assankaya of years; no sin was there in the world: the immense duration of their life caused men to forget their birth, and be unmindful of their death; they knew not the infirmities of life, nor the miseries of the world. They derided the very deities, as these were not the fortunate partakers of such a length of days; so that at that time the life of mankind in this world outlasted the existence of the gods. Irrational animals had also their kings in those days; the narration of these facts appears in the ancient histories." In the sequel we have the translation of the king Maha-mandatoo Chackrawarty-raja: "This king having enjoyed great happiness in the world of mankind, ascended in that state of life to the world of the gods." We cannot fail to discern here several remarkable circumstances, having a distinct reference to events recorded in Scripture history:—the protracted lives of antediluvians;—the rationality of inferior creation, in which we may discover the serpent of Eden speaking with man's voice;—the sinless nature

^{*} De la Religion Considérée dans la Source, &c. Tome II. p. 219, &c.

of man before the fall;—man's subsequent rebellion, and the depravity of the world;—Enoch "walking with Goo," and his translation from earth to heaven, that he should not "see death." It may be necessary to inform our readers that a sanka or assankaya of years, is an incredible number of years;—an immensely long period. An assanka is represented by a unit followed by sixty-three ciphers; such as are the periods of geological theories.

In the Hindoo cosmogony, according to Maurice, there is a description of creation recorded, which has some obscure features of resemblance to that of the Mosaic history; and in the personification of Narain or Narayan, in the mythology of Budhism, one of the features of creation is presented to us, since the name Narain literally signifies "moving upon the waters:" while the fall of man from a state of primeval innocence and enjoyment, in the Satya Yug, or age of perfection, forms the basis of the metempsychosis of India, of which that of Egypt is the counterpart. In one of Mr. Upham's plates, we have a representation of Payay and Ritta, the latter presenting a twig with three leaves, or a flower, which the former seems to reject ;—the figures are surrounded by the symbols of the zodiac. It is not difficult to recognize here a reference to the first pair. In one of the most ancient pagodas of India, is a figure of Chreeshna,* one of the avatars of Vishnu, trampling on the crushed head of a serpent, the kali-naga, or black snake—it is his triumph. In another figure, the serpent is seen compassing Chrecshna with its folds. and biting his heel. In all this, and much more, we cannot fail to perceive adumbrated the remarkable prediction which accompanied the fall of man :- "The seed

^{*} A contemptible ignorance has, in its foolishness, endeavoured to inculcate an idea that the affix, Christ, applied to the Messiah, is a similar word to Chreeshna! The former is an appellation which belongs to our Saviour, as "King of kings;" whereas Chreeshna signifies black or blue, and is applied to the dark complexion of this idol of the Hindoo mythology. What strange rhythmical ideas some individuals possess!

of the woman shall bruise the serpent's head." Amid the shadowy forms that peopled the heathen mythology we observe abundant proofs of the same extraordinary description. In the maha-wansi of Budhism, the vedas and puranas of Hinduism, and the theogony of Hesiod, the same facts are enrolled. In the mythology of Egypt the serpent bears an important character: represented in an upright form, it enters into all its rites and ceremonies. In Apollo and Hercules, Thor and Chreeshna, the event of triumph is adumbrated, and cannot be mistaken. In ages the most distant, and lands the most remote, the same belief seems to have been infused into their mythology, and perpetuated from age to age. We remember to have been considerably interested in examining the war-helmet of, we believe, a New Zealand chief, in which was found a talisman, and the bruised head of a serpent, folded up. When we examine ancient coins and medals, we shall find that, in many cases, the serpent cuts no inconspicuous figure. We are by no means disposed to go so far as Mr. Deane has gone, in his ingenious work on "The Worship of the Serpent;" for many circumstances induce us to think that a number of these symbols are connected with the elevation of the brazen serpent in the wilderness—a question which shall be considered in its proper place. Among the coins of Augustus, however, figured by Dr. King, (Fig. XVIII.) is a very remarkable one. It represents a female with a mural crown, a palm branch in her hand, and a dove by her side;—she is trampling on a serpent. In the Tyrian coin, of which we present

a fac simile, a serpent appears twisted round a tree:—conical mounds, or perhaps petræ ambrosianæ, are seen on each side; and on what may be called the exergue of the coin, or that part of it which is out of the field, may be seen Hercules's dog, and the shell from which the famous Tyrian purple was extracted;



which appears to have been of different kinds, principally belonging to the genera Murex and Buccinum; for Tyrian coins seem to represent different shells. The legend of the discovery of this imperial dye will be readily recalled to mind. It was imparted to the lips of a dog which had devoured the shell-fish on the shore: the purple stain being accidentally observed by his master.

It cannot be out of place here to advert to the chronology of the Hindoos, about the antiquity of which so much has been said. According to the judicious remarks of M. Joinville, it is in the precepts not in the history of the religions of Brahma and Budha, that we are to decide the question of priority between them. According to the Budhists the world existed from all eternity; their calculations, therefore, relate entirely to the transmigrations of Gaudma, (whose living representative is the Lama in Tibet) from the time he first thought of becoming Budha, until he merged into Nirwana. There are, however, traces of Brahminical calculations to be discovered in those of Budha. The Brahmins calculate the antiquity of the globe on a most extravagant scale, and this shoots into an epocha immensely prolonged. In the assumption of the astronomical periods, on which they profess to found their calculations, they have cunningly displayed some ingenuity. Brahmins and Budhists," says Joinville, "are equally bigoted and extravagant, with this difference, that in the former religion, are found very deep ideas of astronomy, in the latter NONE. I have, till now, searched in vain for an instructive work in Singalese, relative to the heavenly bodies; and have found only uninteresting speculations on the influence of the stars upon the affairs of the world. The Brahmins respect fire, the Budhists The former eat of no animal, the latter are restricted only to the not partaking of the flesh of nine, of which the ox is the principal. I am rather of opinion, upon a comparison of the two religions, that that of Budha is the more ancient." Then follow his reasons, which seem powerful. "The religion of Budha, having

extended itself, in very remote times, through every part of India, was, in many respects, monstrous and unformed. An uncreated world and mortal souls are ideas to be held only in an infant state of society: and as society advances such ideas must vanish: à fortiori, they cannot be established in opposition to a religion already prevailing in a country, the fundamental articles of which are the creation of the world and the immortality of the soul. Ideas in opposition to all religion, cannot gain ground, or at least cannot make head, when there is already an established faith; whence it is fair to infer, that if Budhism could not have established itself among the Brahmins, and if it has been established in their country, it must be the more ancient of the two." In the astronomical systems of both the Budhists and Brahmins we see the number 432 selected as the ground of their periodic numbers: other traits of resemblance may be discovered; and since "the Budhists were possessed," according to our author, "of astronomy before the Brahmins; and as both religion and astronomy are united, is it not probable that the religion of the Budhists is the more ancient?" These remarks are extremely interesting, and the question is important; for the Brahminical calculations in astronomy must be posterior to the schism that separated the devotees of Brahma from that of Budhism, which seems to have been the parent stock; and in that case the high antiquity the Hindus claim entirely vanishes. In the Asiatic Researches there will be found many solid reasons for believing that the religion of the Brahmins was grafted on Budhism, and that the Brahmins are the later sect. and the reformers. The devotees of Budha and Brahma have ever maintained towards each other, an inextinguishable hatred and antipathy; remarkably resembling that bitter animosity and jealousy which existed between the Jews and Samaritans at the commencement of the Christian era; and this hostile schism between the followers of these two great sects of Indian mythology, may, providentially, be the means of deciding the question of their chronology with a precision which could not be

otherwise obtained. When we consider, with regard to this question, the extracts which have already been made from the Maha-wansi, there seems to be an evidence of some simple reference to early events connected with genuine history; a fact, which in our view of the case, goes far to confirm the priority of the mythology of Budha; and when, in the progress of oriental literature, we shall have more clearly deciphered the Singalese writings, we may gain information of importance on its more ancient history; and especially of that eventful period when the Brahmins expelled the Budhists from the Peninsula of India, and the latter became thenceforth located in Cevlon. The source and origin of this quarrel, still remaining in full force, will solve the interesting problem, and reduce the Brahminical pretensions, which are so "cunningly devised," to the limits of truth and the precincts of legitimate history. The only tangible epocha of antiquity which the Budhists can pretend to claim, will not carry us further back than 1000 years before the Christian era. Sakia, or Xaca Sinka, according to the Chinese, is placed 1029 A. C. The Thibetian accounts make the era of this Budha still more recent. In the annals of Magadan princes, a change of dynasty, connected with religious opinions, took place about 1000 years A. C.; and, according to the authority of Sir William Jones, and the Sanscrit inscription at Budha Gaya, a Budha was born 1014 A. C. The Budha Gaudma, who may be singled out as the most distinguished founder of the faith of Budhism, and whose adventures (in the harlequinade pantomime of Wessantara, and the 550 changes of his metempsychosis,) cut so conspicuous a figure in the Singalese mythology, and are seen in their "chambers of imagery, pourtrayed on the walls round about," cannot claim a more distant epocha than 550 years A.C. This is the only tangible graft on the parent stock of ancient Budhism. Mr. Upham remarks, that "Budhism is in itself a primitive doctrine of parallel pretensions with Brahminism; that the latter faith recognizes its earlier doctrine, and incorporates its author with its philosophy; that the

fatal wars which drove Budhism from India, originated in the principles which we trace in the revival of the present system of the doctrine of Budha; and that the most important link therein, is manifestly the doctrine of metempsychosis; a principle alike subsisting both in the anterior eras, and in the present Budha-verouse, or law of Gaudma."

"Turning your eyes," says that eloquent and accomplished scholar, Sir William Jones, "in idea, to the North, you have on your right many important kingdoms in the eastern peninsula: the ancient and wonderful empire of China, with all her Tartarian dependencies; and that of Japan, with the cluster of precious islands in which so many singular curiosities have too long been concealed. Before you lies that prodigious chain of mountains, which formerly, perhaps, were a barrier against the violence of the sea; and beyond them the very interesting country of Tibet, and the vast regions of Tartary." Over these immense territories, together with those beyond the Ganges, the Burmese empire, and the kingdoms of Siam, Cambodia, and Cochin-China, did the religion of Budhism once extend and hold the nations in subjection; and though Hinduism now sways, in these countries, the mythological sceptre of Brahma, it is not difficult to decipher Mackenzie, in the ancient tenets of the parent belief. describing a temple of Budha at Villigaam, mentions, among the figures of the mythological paintings, a large white elephant; and we know how remarkably attached to the monopoly of this animal is the king of Siam, who covets no title more lofty than that of the "king of the white elephants:" with whom, the possession of a white elephant by a neighbouring potentate, would be the tocsin for war; and whose fourfooted estate seem to be fed in "lordly dishes," having their food served up to them in golden vessels, and their feet bathed in sil-The states of Indo-China admit their havver basins. ing received their arts and religion from the kingdom of Ceylon. There can be no doubt that Mexican mythology was connected, in one of the epochas of its history at any rate, with that bf Budha. We are inclined to attach little respect to the wild fictions and extravagant legends of the eastern mythologies, or to the moral qualities or mental attainments of the disciples of Budha or Vishnu, who would consider the relics of a Budha as the spolia opima of conquest; and for the possession of "the holy tooth of Gaudma" would provoke an exterminating war. We hold in low estimation the astronomy which teaches that, in an eclipse of the moon, a mighty dragon devours it; but is induced to let the morsel go in consequence of the hideous vells of ignorance. We think that geography little worth which teaches that the world is a flower, of which India is the blossom or golden chalice, and other countries the foliage; -neither are we inclined to attach confidence to the barometrical or geometrical measurement which assigns to the mountains of Meru an altitude of twenty thousand miles; nor to the chronology which ascribes to the first joque or age of the world, a duration of thirty-two millions of years; and to the life of man, in this period, a range of one hundred thousand years: his stature, too, being of corresponding dimensions. namely, twenty-one cubits, or thirty-seven feet nearly. These seem quite in character, and altogether conformable to the legends of the puranas and the fables of Bidpai.

The caves of Elora are in harmony with the land of elephants. The legends of fable are peopled with tenants of an unearthly size and mould. Interminable periods and awful forms of gigantic majesty bespeak the tone and temper of fable. Just as, when we ascend some lofty eminence, our shadow, falling on the mantle of mists which hover round the mountain, adumbrates a terrific and gigantic form; so, the legends of the past, when reflected from an opaque mass composed of the mists of superstition, seem to shadow forth beings like Ossian's ghosts—"dim forms of uncircumscribed shade." Let an enlightened philosophy take up the jutakas, (the chief books of the Budhists.) and the institutes of Menù, admitted by the Brahmins to con-

tain their purest code, and which embrace their vedas, and puranas, (theistic and philosophic works,) and compare them with the Sacred Volume; the well-informed mind will be at no loss about coming to a decision. The rays which fall on the shasters of the east, from the lamp of truth, only discover to us, "a darkness which might be felt,"—deeper than that which brooded over the land of Egypt, when "no man knew his brother."

The astronomical tables of the Hindoos, about which infidelity had been so busy, and which it had hailed as a triumph to its cause, must, from our premises, rest on debatable ground, and render the notions of M. Bailly and his commentator, Playfair, very suspicious. can be no doubt of Playfair's infidelity; but, it is truth that is the question at issue; and we, therefore, overlook the sneer about "superstition." It seems that Playfair avowed his conviction of the accuracy and solidity of M. Bailly's calculations and reasonings, which, according to him, made the observations on which the Hindoo chronology were formed, 3000 years before the Christian era; but, according to Delambre, notwithstanding these pretensions of Playfair, (which lead us to infer that he had absolutely verified, by positive calculations, Bailly's results,) he had not even discovered a gross error in the divisor, which neutralized the entire conclusions. This is a very serious impeachment of Playfair; but truth has reluctantly extorted it from Delambre, who had no friendly feelings toward the question of Revelation; and whose evidence, therefore, cannot be suspected. Laplace, in his Système du Monde, in reference to these tables of Indian chronology, says, that they are NOT of high antiquity, and tells us, moreover, that one of the epochas is necessarily fictitious, and the other not grounded on observation. None, at all acquainted with Laplace's works, will believe that he was much removed from downright atheism; at least, his "System of the World," and "Theory of Probabilities," seem to carry too lamentable proofs of this miserable defection; unless the figures he makes to dance at the close of the former work are to be accepted as the Deity. Delambre observes of Bailly—"he never writes but to prop a system framed beforehand; he glances slightly over the writings of the ancients, reading them in bad translations; and runs over all the calculations, in order to pick out obscure passages which may lend some countenance to his ideas." This portrait of Bailly, drawn by one of his own countrymen, is not a very flattering one.

" Fas est ab hoste doceri."

Cuvier's remarks are very interesting and conclusive: "The whole system of the Indian tables, so elaborately conceived, falls to pieces of itself, now that it has been proved that this epocha was adopted from calculations retrospectively made, the result of which is false. Bentley has discovered that the tables of Tirvalour, on which the assertions of Bailly were principally founded, must have been computed towards the year 1281; and that the Sourya-Siddhanta, which the Brahmins esteem their most ancient scientific treatise on astronomy, pretending that it was given by revelation more than twenty millions of years since, could have been composed only seven hundred and sixty-seven years before our own period." We have also the authority of Mr. Davis, who has diligently examined the Hindoo astronomical writings, and who confirms the conclusion, that they are founded on a retrograde calculation, exactly as our Julian period has been. M. Delambre thus concludes his remarks on the subject: "It appears, there does not exist, at present, a single Hindoo book which can possess an antiquity higher than one thousand three hundred years, if it makes the slightest mention of these enormous periods; and none of the romances called puranas, date farther back, from the present time, than six hundred and four years, while some of them are more modern still." Thus has the frost-work of the Hindoo chronology dissolved in the sunbeam of truth, and left the Biblical chronology triumphantly victorious. We are warranted, therefore, exultingly to

quote the conclusion of Sir William Jones, as a safe sequel. "There is no shadow, then, of a foundation for an opinion, that Moses borrowed the first nine or ten chapters of Genesis from the literature of Egypt; still less can the adamantine pillars of our Christian faith be moved by the result of any debates on the comparative antiquity of the Hindūs and Egyptians, or of any inquiries into the Indian theology."

CHAP. IV.

THE DELUGE—HISTORICAL AND TRADITIONARY PROOFS
—GEOLOGICAL EVIDENCE OF THE CIRCUMFUSION OF
THE DILUVIAL WATERS, AND COMPARATIVELY RECENT EPOCHA OF THE EVENT.

THERE is no event which has left such terrible physical monuments behind it as the DELUGE. The vestiges of the circumfusion of the mighty deep are thickly scattered over the surface of the globe; are seen in the ruin of rocks, and in their embodied organic remains. The quarry reveals "the secrets of their prison-house;" and the sea, while it washes away some projecting cliff, and transports the wreck to fill up the bed of the ocean, thus becomes the means of discovering to us some organic form that may have lived in an antediluvian age: or, some volcanic shock, in its messenger the earthquake, has upheaved, from the depths of the ocean, a monument where we may read the story of the past: the same terrific agency rends the mountain, and thus, in its fracture, exposes its history to the scrutiny of the geologist. No fact can be better substantiated than a universal deluge, which has rolled its impetuous waters over the globe, and inundated both hemispheres. "Y-at-il eu un temps ou le globe a été entièrement inondé? Cela est physiquement impossible?"* So wrote the flippant Voltaire; but if there is one truth in physical science better established than another, it is the fact which this petulant and flimsy spirit thus presumes to impugn.

^{*} Dictionnaire Philosophique. - Art. "Inundation."

In our geological inquiries we must ever carefully distinguish the great cataclysm to which we refer, from such local catastrophes as have, both in antediluvian ages, and the periods of time that have rolled away since that eventful epocha, left sufficient impressions of their power. We may not be able to weigh the evidence in the balance of a rigorous induction, in such a manner as to be able to apportion the amount due to each of these; but until this can be done, no geologist whatever has a right to adjudicate the terms of formation to any of the rocky features of the globe. Mr. Lyell stoutly contends that the same causes which are now in operation, have operated in times that are past; and we may safely grant the point for which he argues. Within the precincts of the Christian era, considerable districts on the surface of the earth, have undergone an entire change; and desolation has spread far and wide. Only a few weeks ago, a new island emerged from the waves of the Mediterranean, on the coast of Sicily, from a depth of upwards of 70 fathoms. Its circumference is a mile and a half, and its elevation from 200 to 250 feet. We are indeed too apt to underrate the power of an oceanic wave, or the action of subterranean fire. Let us not moreover forget, that there may have been heretofore, agents that no longer exist, and though they have left enough to attest their terrible power, supply no key to a solution of the precise species of agency concerned; and it is also very possible that even the same causes that operate now, may have operated with tenfold vigour, and in greater frequency in primeval times, than in our age, and within the limits of the Christian era. That organic remains were observed, and recognized as such, in earlier times than we are aware, seem to us probable. Let us take, for instance, the following remark from the book of Job, as a proof of the kind to which we refer; "Dead things are formed from under the waters, with the inhabitants thereof:"* and unless this refers to organic remains, we know not its meaning. Should it

^{*} Job xxvi. 5.

prove to be the case, it may well put to shame the foolish fancies of some of the dreams of even the sixteenth century; when a Professor of Anatomy considered some elephant's tusks, found near Puglia, as mere lusus natura.—That the vases of Monte Testaceo were accidental earthy concretions, was a very natural inference

and sequel to such an antecedent.

Before we proceed to adduce evidence, from geological discoveries, in proof of the universality of the Noachian deluge, and its comparatively modern date. (compared with the speculations of the votaries of a science vet crude and unformed, and as vet in its infancy,) we wish it distinctly to be understood, that with hypotheses and opinions we have nothing to do: and still less are we careful to attend to rash and presumptuous conclusions which have not the slightest tangible evidence in their support. We contend that the facts of geology are insufficient to constitute the structure of a system. We read the organic emblems of the rock, and find them confirmatory of the great catastrophe which overwhelmed a ruined world; but we nowhere find that they give countenance to those repeated revolutions, and as repeated renovations, which some suppose necessary. These rash assumptions have been the bane of true philosophy, and have impeded the advance of truth. Geologists are not agreed among themselves; and, so long as this is the case, they cannot expect to gain implicit credit with others. We have lived to see numerous changes rung on geological theories; and, if we compare some authors with themselves, in their first and last editions, we can scarcely credit the identity of the persons. Even Cuvier has abandoned former notions in consequence of recent discoveries; and both M. Cuvier and Mr. Lyell are sometimes found to withhold their assent to the announcement of facts because they seem to threaten their preconceived views:-the former, in reference to the quarries of Kosritz; and the latter, with respect to the existence of pachydermata in determinate strata. Professor Sedgewick, the present President of the Geological

Society, has said of the author of "A New System of Geology," that he is neither able to be the expositor of the opinions of others, nor to propound a system of his Not only has the same geological phenomena undergone different revisions, as to exposition in the hands of others, but have actually suffered various changes in the hands of the same individual. Opinions propounded with all the solemnities of truth, and proclaimed to the world with the authority of an oracle, have vanished before the progress of discovery; and, no pursuit, in which man has engaged, has suffered greater changes, or undergone greater revolutions, than geology—even by the testimony of eminent geologists: we allude particularly to Mr. Greenough and Professor Sedgwick. The dicta of no branch of research is to be received with greater suspicion, or merit severer scrutiny, than those set forth by many geologists. A brighter day, however, seems to dawn over a most interesting and fascinating pursuit. Fact is now supplanting fancy, and theories are scattered to the winds. Under this new aspect, its progress may be slow, but its advance will be sure.

The general belief which has prevailed among all nations, respecting the great event of the deluge, so clearly and fully described in the Archives of Truth, is very remarkable.—It mingles with the legends of every nation under heaven; in countries the most remote; and whose striking diversity of language seems to impose a decided interdict on any interchange of communication. The Hindoo and the Mexican, the Greek and the Roman, all attest and acknowledge a penal flood, which has swept their forefathers away, and consigned them to destruction. Such a memorable fact as this, proves beyond a doubt, that this traditionary legend must have been originally obtained from one and the same source of information: we thus trace these rays of tradition to a common centre, though its date has been lost sight of. Tradition is always troubling the stream of truth, and interfering with its simplicity, by adventitious additions; but the uniformity of the main

circumstances of the deluge, in "every kindred and tongue," is an unequivocal testimony to the truth of the event. The very fact, that every nation tells its own story about it, conformably to the peculiarities which distinguish its annals, (though the epocha of the event be consigned to the darkness of distant ages,) sufficiently attests that it must have been communicated before the nations "were scattered and peeled," when their language and their name were one :- but, though tradition has not preserved the record of the epocha, the Annals of Heavenly Truth reconcile the facts, and determine, with clearness and precision, the date and history of the event. The circumstantial details of this remarkable event are very satisfactorily recorded in the venerable document, whose claim to all acceptance as a register of truth, is so clear and decisive. The world had become guilty before Gop. Fratricide had long before stained the annals of the primeval world. Crime pressed on crime, as wave succeeds to wave; the moral beauty of that world which the CREATOR had surveyed on its completion, and pronounced good, was marred by the ravages of evil. Man became an apostate from his Gop, rose in rebellion, and defied HIS legislation :- "His thoughts were only evil, and that continually." The holiness and justice of heaven required a terrific monument to be perpetuated to the end of time, written in the adamantine rock, and stamped in the frame-work of the globe; to be seen and read of all men:-evidence to a world, that "Gop will not be mocked." The symbols which are so clearly seen in the organic remains of a former world; the register of its wreck and ruin, cannot be obliterated while the mountains remain, and the earth endures. Earthquakes may overturn the pyramids, or overwhelm the temples of Egypt, or the pagodas of Hindustan be swept away by an inundation of the Ganges; but these awful legends will remain until the period of the Ecpyrosis, for which they are reserved; -- "When the heavens shall pass away with a great noise, and the elements shall melt with fervent heat; the earth also, and the works that are therein shall

be burnt up:"* and, it is a remarkable fact that the chemical elements of that very agent (water) which was employed in the destruction of an antediluvian world, have in modern times been proved adequate to this. No mineral substance can resist the energy of a flame the elements of which are the constituents of water. Platinum, one of the most refractory of the metals, enters into fusion before it, the diamond burns away, and plumbago rises in vapour; thus it is proved beyond all question, that "the elements can melt with fervent heat." So that, as the late Dr. Clarke remarked, we almost see in this fact a physical illustration of "the rape of Proserpine by Pluto, from the Fountain

of Cyane."

The deep delinquency of man before his MAKER is thus described, and the terms are fearfully expressive: "God saw that the wickedness of man was great in the earth, and every imagination of the thoughts of his heart was only evil continually." It is added, "the earth also was corrupt before God, and the earth was filled with violence." The "goodliness" of creation was tarnished, and its beauty "consumed." The sentence of destruction went forth, and "Gop said unto Noah, the end of all flesh is come before me, for the earth is filled with violence through them: and behold I will destroy them with the earth." In this language there is something more implied, we think, than a cursory observation might suppose. "The whole creation groaned" under a load of guilt. We are cautious in speculating on questions for which we possess insufficient data. It is difficult to determine how the inferior creation had "become corrupt;" but it seems to be connected with, or refer to, the laws of their original creation; yet, to us, there really do seem to be some palpable proofs, in the evidence revealed by the exhumation of organic remains, of some dislocation in the links of being, and the order and harmony of creation even in inferior animals-"violence" done to those distinctive lines of demarcation, by which the various tribes of animals are preserved separate, and distinct. There seems, somehow, to be a violent rupture of those laws which were imposed on them, for "that which is against nature." We do not advert here to gigantic remains, merely as such, but to the incongruous union of animal forms:-"chimeras and gorgons dire," on which the laws of God seem to have put a restraint, that nothing might, with impunity, change that order of creation which, in the beginning, his wisdom had pronounced "good." Among other organic remains which might be mentioned, we may cite, by way of illustration, the ichthyosaurus or lizard fish, and the plesiosaurus. Perhaps, however, the most wonderful specimen, of this description, is the pterodactylus or winged lizard, connecting, by an extraordinary link, birds and reptiles. Professor Buckland thus describes this strange fossil production: "In size and general form, and in the disposition and character of its wing, this fossil genus. according to Cuvier, somewhat resembled our modern bats and vampires; but had its beak elongated, like the bill of a woodcock, and armed with teeth, like the snout of a crocodile; its vertebræ, ribs, pelvis, legs and feet, resembled those of a lizard; its three anterior fingers terminated in long hooked claws, like that on the forefinger of the bat; and over its body was a covering neither composed of feathers, as in the bird, nor of hair, as in the bat, but of scaly armour, like that of an iguana: in short, a monster, resembling nothing that has ever been seen or heard of upon earth, excepting the dragons of romance and heraldry. Moreover, it was, probably, noctivogous and insectivorous, and in both these points resembled the bat; but differed from it in having the most important bones in its body constructed after the manner of those of reptiles. With flocks of such like creatures flying in the air, and shoals of no less monstrous ichthyosauri and plesiosauri swarming in the ocean, and gigantic crocodiles and tortoises crawling on the shores of the primeval lakes and rivers—air, sea, and land, must have been strangely tenanted in

those early periods of our infant world." The ichthyosaurus deviates from the saurian or lizard. It resembles a fish in its vertebral column. The paddles are intermediate between feet and fins. "It has the snout of a dolphin, the teeth of a crocodile, the head and sternum of a lizard, the swimmers of a whale, and the vertebræ of a fish." The plesiosaurus somewhat resembles the crocodile, but has a double number of vertebræ; the neck is like the body of a serpent, and the head is that of a lizard; it has no feet, but swimmers like a whale, or paddles like a turtle. The celebrated fossil of Maestricht belongs to this class of beings; the name mosasaurus has been assigned to it; its extreme length is computed to be nearly twenty-six feet; and, from the structure of the tail, it seems to have been designed for a marine purpose: at one period it was supposed to be a crocodile, at another time a lizard, and finally a cetaceous animal or a fish. Another fossil body, somewhat intermediate between the crocodile and that class of lizards called monitors, but of very inferior size compared with the mosasaurus, has received from Cuvier the name of geosaurus. The fossil organic body called megalosaurus, is of a gigantic lizard-like form, and computed by Dr. Buckland to be from thirty to forty feet in length: it combines the characteristics of the monitor and crocodile.

Inferior creation did suffer, along with man, in the cataclysm of the deluge; but its tribes might have reaped corresponding advantages, had he sustained his innocence. They formed part of man's estate, and must necessarily suffer in the ruin of man's inheritance, as is even now the case in secular affairs. In the wreck of fortune, the integrity of property is destroyed, and the materials which contributed to happiness are disordered. There certainly seems to have been some terrible defection from the law of their being. We cannot fail to observe checks or reins imposed on animal nature, which the inferior tribes of creation, in their native haunts and wilds, do not seem to violate; which even when interfered with by the agency of man, cannot

progress beyond one link .- "Hitherto and no farther." Hybridism is a positive infraction of the laws of Nature. It is thus that the uniformity of creation is not defaced, or its links dissevered. Not only does the aspect of the material world extinguish the wild and incoherent notion of a fortuitous congregation of atoms, and dance of dust, but indisputably proves the constant preservation of the beautiful and wondrous structure, which originated in the first creation from intelligence and design. The oak that flourishes in our forest is as the oak of Eden. The cedar of Lebanon is but a scion of that cedar which was first planted by an Almighty hand ;-"All things continue until now;"-fac similes of their antitypes, as they flourished in grandeur and in beauty at the close of a magnificent and beautiful creation. The type transmitted from age to age, shall continue until time shall be no longer, to attest creative power, wisdom, and goodness. The stability of material things is a record of the immutability of JEHOVAH: and since no new forms start up around us, to startle and amaze, we have a sufficient assurance that the Creator is the "Gop of order, and not of confusion."

From what has been said, we need not be surprised should we find entire races of nondescripts exterminated; and such as have no living analogues in existing genera and species. We mention these things incidentally, and merely as ideas that have, in our geological researches, flashed across our own mind, without at all being anxious to give them a prominent place; just as we have adverted to the subject of phrenology, en passant, indifferent as to its rejection or belief, and solely with a view to prove that it is not so terrible as some, without investigation, have considered it to be ;—that it has been assailed by ridicule, is not a warrant for despising the claims it urges on attention. Time may discover an error in judgment, and inform us that we have been deceived;—when that error is discovered, it will be soon enough to cast phrenology from us, but as it may also contain the constituents of truth, let it receive the audience it seeks. Let us never forget that any thing may

be turned into ridicule, and that this has been the fate of the greatest discoveries that have ever dawned on the world of intellect, or benefited mankind. Ridicule,

therefore, is not the test of truth.

While the foregoing remarks are submitted as subjects for reflection, and subsequent investigation, we are by no means prepared to limit the trophies of future research, which may eventually reveal the living analogues of many genera and species which have been too hastily pronounced to be extinct. Modern discovery has unfolded strange sights, and its torch is not extinguished. We may only mention the clamyphorus, or shield bearer; the ikan dugong, or mermaid of the Indian seas; and above all, the six-legged animal of Stronsay, and the ornithorhynchus paradoxus* of New Holland. A few years ago the trigonia was pronounced to be an extinct genus, but its living analogue has since been found on the coast of New Holland. The sentence of extermination had also already been passed on the pentacrinus, when Mr. Thompson discovered a living species, the pentacrinus europæus, in the

^{*} This anomalous animal possesses a very remarkable struc-It is distinguished from all mammiferous animals yet known, by the extraordinary formation of the jaws, which closely resemble the broad flat bill of a duck; covered like the latter with a soft membrane supplied with nerves, as an organ of taste; and serrated also like the hill of a duck, at the lateral edges. Its feet are provided with webs, which, in the front ones, project beyond the claws, and can therefore be expanded or folded up like a fan. No trace of mammæ can be detected There is a spur on the hind leg of the male of in either sex. this curious animal, which it has been asserted possesses the property of injecting poison into the wound it inflicts, similar to what takes place in respect to that of the poisonous fang of a serpent. We have been informed, however, that Mr. Joshua Brookes, by a careful inspection, has not been able to discover any poisonous sac; or hollow duct connected with a gland. Our own particular examination of the structure of the spur has not detected any aperture or sulcus: we are therefore inclined to believe that this is a mistake. The habitation of this wonderful creature is on the verge of the lakes in the vicinity of Botany Bay.

Cove of Cork; and a living analogue of the pentacrinus has also been ascertained to exist on the coast of Barbadoes. Modern research is perpetually adding new species, and even new genera, both of plants and animals, to the former acquisitions of the mind, and enhancing the amount of the captive spoils of human enterprize Counterparts in magnitude, equivalent to the gigantic structure of the mammoth, may not be found in the genus to which it belongs; but our globe has still its terra incognita. The discovery in 1818, by Dr. Arnold, in the Island of Sumatra, of that magnificent Titan of the vegetable kingdom, the Rafflesia Arnoldi, is too recent an event to be forgotten. The human mind had scarcely ever conceived of such a flower:-the circumference of the full expanded flower is nine feet, -its nectarium calculated to hold nine pints,—the pistils are as large as cows' horns, and the entire weight of the blossom computed to be 15ths. Temple, in his recent travels in Peru, states that he shot a condor, and from notes taken on the spot, gives us the following dimensions of its size. "When the wings are spread, they measure forty feet in extent from point to point; the feathers are twenty feet in length, and the quill part eight inches in circumference." This certainly draws largely on our credulity, and seems almost to realize the fabled Roc of Sinbad; but we do not know that we are authorized to reject it. In the year 1719, a condor was shot in France: the extent of wing, from tip to tip, when fully expanded, was eighteen feet. A quill feather of one from Chili, measured twelve feet four inches;—the diameter of this quill was half an inch, and the extent of wing sixteen feet. The least of these certainly far exceeds the dimensions of the lämmergyer or bearded griffin of the Alps.

Wherever we turn our eyes, the fame of the deluge meets us: "There is no speech nor language where its voice has not been heard:" "Its line is gone out through all the earth, and its words to the end of the world."* The four divisions of the globe have heard

^{*} Ps. xix. 3, 4.

of this event, and have told it to their "children's chil-Lucian, from the archives of Hierapolis, gives an account of the deluge, the main features of which do not materially differ from the details of the prophet of the Hebrews. He tells us that Deucalion was the only one saved; that it was on account of his piety; that this was effected by means of a great ark, which he and his wife occupied; that there were also therein, along with them, goats, horses, lions, serpents, and such other animals as live on land-two of each; that all were rendered harmless, and all floated in one ark, λάρνακα, as long as the waters prevailed. Plutarch mentions the dove which was dispatched by the patriarch from the ark. This author states, that the dove, being sent from the ark and returning, became a certain index of the prevalence of the tempest; but, its flying away proved that the storm had ceased. Juvenal thus records the event of the deluge and the ark:

> "Ex quo Deucalion nimbis tollentibus æquor Navigio montem ascendit, sortesque poposcit, Paulatimque animâ caluerunt mollia saxa.""

And Ovid thus speaks of it:

"Hîc, ubi Deucalion (nam cætera texerat æquor) Cum consorte tori parva rate vectus adhæsit Corycidas nymphas, et numina montis adorat.

The Mexicans believe, that the original pair, from whom their ancestors sprung, were saved from the deluge by

then ancestors sprang, were selffloating on a raft. We give the fac simile of a medal, in second brass, which refers to this belief. It is one of the coins of Pertinax. By the stars over the figures, we infer their deification. Indeed, there is no difficulty in identifying the patriarch and his wife with the Osiris and Isis of Egyptian mythology; and it seems



to us, that the figures, which Mr. Rich has copied from a Babylonian brick, refer to the same fact. The Boat

Baris is a conspicuous figure in the mythology of Egypt. In the most ancient book of the Chinese, which is called chouking, mention is made of one of their deified personages, named Yao, who is there represented as drawing off the waters of the deluge, which had rendered impassible the lower levels, submerged the lower hills, bathed the skirts of the highest mountains, and risen up to the heavens. Yao is antedated at about 4166 years, or thereabouts, before the present period, which remarkably coincides with the chronology of the Sacred Volume. M. Cuvier has an interesting and apposite observation in reference to the epocha of the deluge:-"Is it possible," says this distinguished philosopher, "that mere accident should afford so striking a result as to unite the traditional origin of the Assyrian, Indian, and Chinese monarchies to the same epocha of about 4000 years from the present time? Could the ideas of nations who possessed almost no natural affinities; whose language, religion, and laws, had nothing in common; could they conspire to one point did not truth bring them together?" We shall, before adducing geological facts in confirmation of an universal deluge, advert to the celebrated Apamean medals ;one of these, (Plate II, fig. 15,) is that of the elder Philip; and the other, (Plate II, fig. 17,) of Pertinax: in the former, it is extremely interesting to observe, that on the front of the ark is the name of Noah, NOE, in Greek The design of these medals remarkably corresponds, though the legends somewhat vary. In both we perceive the ark floating on the water, containing the patriarch and his wife, the dove on the wing, with the olive branch; and the raven perched on the The medals, also, represent Noah and his wife on terra firma, in an attitude of devotion for their safety. On the pannel of the ark, in the coin of Pertinax, there is the word NHTON, perhaps a provincialism from Nησος, an island, or Nέω, to swim. In the exergue of this medal we read, distinctly, A Π AME Ω N, as we do also in that of the other; the first syllable terminating the first line. The genuineness of the Apa-

mean medals is confirmed beyond all doubt by the researches of the learned Mr. Bryant. Ortelius recognizes six cities of this name; the most celebrated was Apamea, in Syria; next to which was that of Phrygia, called also Cibotus, or Kibotos, as a surname; -the Greek word Κιβωτος, signifying an ark or hollow vessel. This city was built on the river Marsyas, near which, tradition states, the ark finally reposed. Accordingly, we find on a medal, struck in honour of the emperor Adrian, the inscription, AΠΑΜΕΩΝ ΚΙΒΩΤΟΣ MAPSSIA, or "the ark and the Marsyas of the Apameans." There were numerous traditions commemorating this event; and several cities, while they boasted of the distinction, appealed to it in proof of their antiquity. This Apamea, which ranked in importance next to Ephesus, is doubtless that to which these medals refer. The surname would not, in all probability, have been adopted on an insufficient and unsubstantial basis. Besides these, however, there was a city bearing this name in Bithynia; and, according to Strabo, another in Media. Our representations in the plate are copied from Sequin's "Selecta Numismata Antiqua."

We may, therefore, state, that the evidence on this question is universal and conclusive. The Chaldeans, Phænicians, Assyrians, Greeks, Romans, Goths, and Druids, Persians, Hindoos, Burmese, Chinese, Mexicans, Peruvians, Brazilians, Nicaraguans, the inhabitants of Western Caledonia, the Otaheitan and Sandwich Islanders; all have recorded the event of the deluge, and it is incorporated in their annals. universal testimony is wonderful, and we should think amply sufficient to satisfy the most sceptical mind. Josephus says, in reference to this event, "Now all the writers of the barbarian histories make mention of this flood, and of this ark; among whom is Berossus the Chaldean. For when he was describing the circumstances of the flood, he goes on thus: 'It is said, there is still some part of this ship in Armenia, at the mountain of the Cordywans; and that some people carry off pieces of the bitumen, which they take away, and use

chiefly as amulets, for the averting of mischiefs.'—Hieronymus the Egyptian also, who wrote the Phœnician antiquities, and Mnaseas, and a great many more, make mention of the same. Nay, Nicholas of Damascus, in his ninety-sixth book, hath a particular relation about them; where he speaks thus: 'There is a great mountain in Armenia, over Minyas, called Baris, upon which it is reported, that many who fled at the time of the deluge were saved; and that one who was carried in an ark, came on shore upon the top of it; and that the remains of the timber were a great while preserved. This might be the man about whom Moses, the legislator of

the Jews, wrote."*

It has been supposed that the ark rested on Mount Ararat in Armenia: Josephus countenances this view of it, and it is interesting to observe, that the name of the Armenian city where it has been supposed the ark at last grounded, signifies the Place of Descent, from the Greek απορατηείον;—others have, however, urged that it rested upon Mount Caucasus, near Apamea, in Phrygia, from the circumstance that in Genesis xi. 2, the sons of the patriarch are represented as journeying westward from the place of descent, and Mount Ararat in Armenia being west of this country. The language of the sacred writer does not particularly define the question. Mount Ararat, according to Morier, is at once awful in its elevation, and beautiful in its form. Robert Ker Porter describes this celebrated mountain as divided, by a chasm of about seven miles wide, into two distinct peaks, called The Great and The Little Ararat, and is of opinion that the ark finally rested in this chasm. This pleasing and elegant writer gives a beautiful description of Ararat. "I beheld Ararat in all its amplitude of grandeur. From the spot on which I stood, it appeared as if the hugest mountains of the world had been piled upon each other, to form this one sublime immensity of earth, and rock, and snow. The icy peaks of its double heads rose majestically into the

^{*} Antiq. Book I. Chap. iii.

clear and cloudless heavens; the sun blazed bright upon them, and the reflection sent forth a dazzling radiance equal to other suns. This point of the view united the utmost grandeur of plain and height, but the feelings I experienced while looking on the mountain are hardly to be described. My eye, not able to rest for any length of time on the blinding glory of its summits, wandered down the apparently interminable sides, till I could no longer trace their vast lines in the mists of the horizon; when an inexpressible impulse immediately carrying my eye upwards again, refixed my gaze on the awful glare of Ararat; and this bewildered sensibility of sight, being answered by a similar feeling in the mind, for some moments I was lost in a strange suspension of the powers

of thought."

Though we have distinctly stated, that all which geologists say is by no means to be taken for granted, and without examination, yet we are not to be understood as attempting to impress a belief that geology is not a worthy science, or that its legitimate pursuit is to be lightly esteemed. The reverse of all this is the fact: we know not, within the compass of human knowledge, in physical science, a more curious or more interesting subject of research. The legend of an antediluvian age is unfolded for our inspection, and shall we feel no anxiety to know the flora and the fauna, the botany and the zoology, which adorned and peopled the ages of primeval history,-the wreck, superinduced by the action of a universal deluge, which destroyed our forefathers, and marred the features of the globe? It is appalling, indeed, to gaze on the monuments of crime, and read in the organic remains of a former world, the punishment of guilt; but that lesson may be an interesting one; and as we gaze, we may "stand in awe." The fearful ruin of an antediluvian world presents us with some hideous and gigantic forms. It cannot be expected that we should enter on any thing like a geological discussion; simply because such a question, insulated from every other topic, would occupy more than could be comprised within the limits of this little

volume. While we profess the highest respect for the valuable researches of a Cuvier, a Brongniart, a Buckland, a Sedgwick, a Greenough, a Lyell, and many others, we consider that they are not infallible. We much esteem the interesting facts which they have presented, but their deductions may not always correspond with the legitimate requirements of inductive truth: and, it is admitted on all hands, that our advancement in geology must extend very far beyond our present attainments, before we have any right to think about the structure of a theory. Geology was formerly called "a system of paradoxes." Is it consistent with induction to overlook the only authentic record of the infant history of the world, and yet introduce eastern fables, because they happen to exceed the limits prescribed by the Mosaic cosmogony, and dance to the tune of millions of years; and that because such a term of years has been pre-conceived to be necessary? This takes for granted the thing that remains to be proved, and is in direct variance with the maxims of inductive science. It will be time enough to grant the requirement when positive and substantial facts shall have proved it to be necessary; but we deny the concession on the mere dictum of pre-conceived opinion, or bold assumption. We cannot establish our premises better than by referring to geologists themselves. Are not the proteus forms of geological speculations, systems of geology, and theories of the world, at this moment, the laughing-stock of well-informed men? Cuvier pays a well merited compliment to Professor Buckland for steering his bark of observation clear of these whirlpools of fantastic opinions, in which so many have perished. M. Cuvier calls this distinguished geologist, "a philosopher, who does honour to geology by precise and consistent observations, as well as by the steadiest opposition to random hypotheses;" and in geology these "random hypotheses" have been almost as numerous as the authors who have written on this branch of science. Nothing can be more opposed to true science, than to pronounce on the priority of formation, or the comparative age of rocks,

from either their structure or the organic remains they present:-the entire question remains just as it was. M. Alexandre Brongniart thus propounds his opinion: "In those cases where characters derived from the nature of the rocks are opposed to those which we derive from organic remains, I should give the preponderance to the latter." This seems to us to imply an admission, that nothing definite can be inferred from the nature of the rocks; moreover, that between the nature of the rock and the organic remains there may be a palpable discrepancy; and that these may even be at complete antipodes with each other. The event has proved, from what we have already mentioned, that no evidence as to priority can be obtained from the nature of the fossil remains displayed in particular strata. In addition to what has been said on this subject, we may further state, that encrinites, entrochites, and pentacrinites, are found in clay slate, grauwacke, transition limestone, alpine limestone, lias, muschelkalk, and chalk. It may be reasonably asked how these three species of fossils could indicate any particular formation, when they are found in so many types and structures of rocks altogether different? If they would go to prove any thing at all, it would be that of a contemporaneous formation; but certainly not distinct epochas. The same observation applies to madrepores, belemnites, &c. which are equally diversified in their abodes. It follows, therefore, that they afford no clue whatever either as to "the order of creation," or priority in the question of the "epochas of formation." We find the same evidence when we take up the fossil bones of quadrupeds in their more complete and perfect organization. To this interesting topic we shall again recur. We, therefore, infer as a matter of fact, that the theory of successive developement is founded in error. Certain organic remains have been considered peculiar to certain formations, at once supplying data to determine the identity of such formations in remote countries, and becoming a chronometer to determine the relative epochas of formations; but, this is altogether illusory; and yet these have been

propounded with an effrontery sufficient to overawe, for a time, the disciple of truth. These errors, though now completely exploded, are still, however, by some, promulgated at the present moment as truths. "It is," says Mr. Lyell, in a foot note, "an encouraging circumstance, that the cultivators of science in our own country, have begun to appreciate the true value of the principles of reasoning most usually applied to geological questions:"—he then adverts to the expression, a geological logician, used by the President of the Geological Society, in an address to its members, and adds -"a smile was seen on the countenances of some of the audience, while many of the members, like Cicero's augurs, could not resist laughing; so ludicrous appeared the association of geology and logic." It is almost unnecessary to say, that however the doctrine of repeated destruction, and as repeated creation, might coalesce with the slumbers and waking hours of the mythology of Menu, it laid the axe to the very root of the Volume of Revelation. Those have been greatly deceived who expected to see the order of creation registered in the rocks of the globe; who supposed that zoophites were historic medallions of the most ancient formations; that other rocks, agreeably to their presumed relative age, carried the series from this point upwards, until it terminated in the more perfect types of organization displayed in quadrupeds; and that all these had been swept away before the creation of quadrumanous animals and of man, just as if the destruction of inferior tribes was the necessary pioneer for monkeys and humanity. It did so happen, however, that other animals, in their fossil remains, had accidentally escaped the first epocha of ruin, and found their apotheosis in those epochas of destruction which succeeded. Insects and birds had not been found, and until they were discovered, their recent creation was dogmatically asserted. Worlds of living beings alternating with worlds of death; destruction and death supervening before the creation of man and the first transgression, were the opinions of geologists. On the principles of mere theistic philosophy, how is this to be reconciled? Playfair makes an attempt, and a sorry attempt it is. "The inhabitants of the globe," says he, "like all other parts of it, are subject to change It is not only the individual that perishes, but whole species, and even, perhaps, genera are extinguished:"-"a change in the animal kingdom seems to be a part of the order of nature." This process of reasoning will not satisfy the mind: Revelation, however, gives every satisfaction. There are many doubts which may be reasonably entertained by the honest inquirer after geological truth. M. Cuvier's osteological knowledge is unrivalled: the simple fragment of a bone supplies this eminent naturalist with a sufficient datum wherewith to determine its owner, as well in respect to size as its place in the system of zoology: thus, from only a few fossil bones of that great clawed species of sloth, called the megalonix, an entire animal has been built in idea; and so on with others, where a single bone has contributed to the aerial fabric. We make no mention of building up an antediluvian fossil from pieces obtained here and there, some on the Continent and some in Britain; but, on the supposition of an anomalous structure like that of the ichthyosaurus or plesiosaurus, this reasoning would scarcely be warranted; and in consequence of inferences of a similar kind, Professor Buckland now entertains doubts whether the birds' bones, (or rather what were called so) found in the Stonesfield quarry, may not be rather supposed to belong to the flying reptile which we have already described.

When we survey the rocky features of the globe, we observe a marked diversity in their structure and conformation. Sometimes they are presented in horizontal beds or strata, and parallel with respect to each other, like the leaves of a book; at other times, this order of superposition is changed for vertical masses without form, and altogether void of stratification;—sometimes these vertical masses rest on rocky strata, the latter maintaining a perfectly horizontal plane, being more or less inclined: occasionally, we find the

stratification forming a mantle for the central unstratified mass, which seems to have burst through the in-

cumbent strata, and now overtops them.

There are other interesting phenomena exhibited, which claim equal attention. Some rocks are crystalline in their structure, and others present simply the features of mechanical deposition, more or less consolidated and indurated. We also perceive that one class of rocks is entirely free from organic remains, carbonaceous matter or rounded pebbles; another class exhibits them very sparingly, and sometimes peculiarly; a third class presents fossil remains, lacustrine or marine, in great abundance and vast variety; and, in a fourth class, we discover fossil remains of birds, quadrupeds, quadrumanous animals and man. These have been divided and subdivided according to the whim or fancy of the respective writers; but, when it is considered that there is scarcely a single geological opinion which has maintained its ground, we should be cautious in drawing inferences, or adopting any specific classification; since such an arrangement may be totally overturned in the progress of discovery. Generalization is the safest ground to occupy in an uncertain and variable science. No doubt classification and arrangement are necessary, and perhaps essential for the promotion of the important inquiries which geology has in view; but let not an artificial scheme be made to supply the place of nature's truth, or be reverenced as an infallible oracle of appeal. The celebrated Werner, of Freyberg, characterized the petralogy of the earth, under several great divisions :- I. The PRIMITIVE CLASS, comprehending granite, gneiss, mica slate, clay slate, &c.; II. THE TRANSITION CLASS, which embraces grauwacke, old red sandstone, mountain limestone, &c.; III. FLÆTZ (or flat) CLASS, embracing magnesian limestone, oolitic formation, (or calcareous freestones) new red sandstone, chalk, &c.; IV. THE NEWEST FLETZ CLASS, which includes alluvial formations; and finally, V. Volcanic Those assumed by Professor Sedgwick, as the Third Class, comprising the secondary formations

of England, correspond with the flætz rocks of Werner. The Fourth Class of Sedgwick, called tertiary deposits, including the Isle of Wight, Paris, and London "Basins," agrees in its order with the alluvial rocks, forming the Fourth Class of Werner: while volcanic rocks, &c. with alluvial formations, are arranged by Professor Sedgwick, so as to correspond with Werner's Fifth Class. order in which we have placed these various classes, have been assumed to correspond with their relative ages :- the First Class being as it were, the foundation stones of the globe; and the other reared on them, in the order of superposition, determined by this classification ;-the Fifth Class being the top stone of the rocky structure of the earth.

In the Primitive Class, there are no organic remains whatever; but the character of the rock is indeterminate. Granite and trap rocks often pass into each other, by such imperceptible shades, as not to be distinguished without difficulty. The coarse-grained has been supposed anterior in formation to fine-grained granite. Whether granite has ever been found stratified does not seem, as yet, a settled point; nor is it even determined, whether or not it has been found incumbent on other rocks. Orbicular granite, and graphic granite, are beautiful varieties: we have an elegant specimen of the former, from Corsica (its locality); and have seen specimens of the latter from the Peninsula of Sinai. Talcy slate, clay slate, and gneiss, possess no determinate order of superposition. Under particular and various circumstances, superior stratified rocks may assume the appearance of inferior stratified rocks; notwithstanding all this, we think one fact sufficiently clear: - primitive rocks, whether stratified or unstratified, and which have never been found to contain organic remains, are the original rocks of creation; all fossiliferous rocks are, on the other hand, posterior formations; either local, and as such antediluvian or postdiluvian; or, the product of the action of diluvian waters. Rocks, that are crystalline and of a chemical structure, must have been formed. under different circumstances, from such as are non-

crystalline, yet mechanical in their deposition. Conglomerated rocks, formed of the debris of particular rocks, must be posterior in formation to those rocks, the fragments of which compose them. A vein shooting through a rock, may be contemporaneous with that rock; but if one vein traverse another, as a metallic vein passing through a lapideous one, that which bisects it, must be of a later date than that which is bisected, though the period of time may be inconsiderable:-copper veins traversing those of tin, afford an example. Rocks which contain no organic remains must have either been formed before those that contain them, or under circumstances altogether different: at any rate, rocks enveloping organic remains must have been formed posterior to the existence of such organic remains. In the former case, if they superadd a crystalline structure, and in no instance whatever are found to contain organic remains of any kind, or under any circumstances, we may safely admit them to be the genuine rocks of the primitive creation, and monuments of the OMNIPOTENT FIAT. From what has already been stated, fossil remains afford no key whatever to the question which involves the solution of the relative age of rocky formations; we must, therefore, abandon the intelligence they are supposed to afford, which is altogether equivocal, and is as changeable as the movement of the figures on a chess board. We may merely state, generally, in order that the question may be fairly brought before our readers, that, in the clay slate of Snowden, organic remains are rare. The Dudley fossil, (as it has been called,) or trilobite, occurs in grauwacke limestone, &c. Fossil wood, or vegetable remains, frequently of a tropical character, and encrinites, are found in the great coal formation ;-these belong to the transition series. The oolitic formation, called sometimes the jura limestone, and lias, or magnesian limestone, contain ammonites, belemnites, corals, lizards, fishes, and vegetable remains. These form the third class. Primitive rocks have a crystalline appearance: transition rocks are less crystalline than the former, and flatz rocks may be considered altogether mechanical deposits. Primitive rocks are generally more lofty than transition rocks; and the latter are more inclined than the flætz. Flætz rocks are less elevated than the transition series, and are much more horizontal. Sometimes they are traversed in various directions by metallic and other veins, and are occasionally distorted or dislocated by vertical walls of basalt or whinstone, called by miners, faults, dykes, or troubles; which produce what is called a shift: on one side the strata are considerably elevated, and the line of continuity being thus broken, the miner incurs much labour and expense before he can recover the lost vein.

The volume of geology reveals to us many interesting and remarkable phenomena. There appear to be entire genera and species of animals, which have (as far as our researches have gone) no living analogues; and we must consult the records of geology if we would extend our knowledge of the wonders of creation, because these being now extinguished, their counterparts can be found nowhere else. In the exhibitions of geological phenomena, we are further presented with combinations of incongruities which are without their types, even in the wildest creations of imagination: when monstrous pseudo-saurians in mockery of the laws of congruity, "grinned horrible," and the pterodactylus, in defiance of the laws which regulate zoology in postdiluvian ages, floated on wing through the aerial abyss. Nor does the interest terminate here:-we find gigantic beings so immense that the tenants of our present world are Lilliput to Brobdingnag; gigantic ferns and reeds of monstrous growth whistled in winds that our tornado, compared with them, for aught we know, might be considered as only a zephyr's sigh;—the trees of the forest "were so high that they were dreadful," and, had there been clouds, and they descending as low as the stratus does sometimes now, would have interfered with their meteorology; -mammoths, and mastodons, and megatheriums peopled the forests; -lizards were like our crocodiles-tapirs (palæotherium) like our elephants, and the megalonix (a gigantic sloth) was as large as our

rhinoceros; while in the lanoplotherium we have an animal with a tail composed of twenty-two vertebræ, which exceeds the length of its body, the thickness being proportionally enormous. Surely a science which reveals the beings that existed in the world before the flood, in forms as palpable as the skeleton can make them, has no slight pretensions or claim on a world's reflection. Some of these organic remains are wonderful, others extremely beautiful, and all are interesting.

I. Insects. Among the discoveries of geology, fossil insects are comparatively rare. They are found in the coal shale of the oolitic series of Yorkshire, and in the older coal slate, along with vegetable deposits. Their beautiful preservation in amber is well knewn. Among the most interesting discoveries of this kind, is a collection of fossil insects, found near Aix, in Provence: they are all of European forms, and, it is believed, have living analogues in existing genera: with the solitary exception of one, none of the species are aquatic.

They were found in marl stone.

II. BIRDS are also of rare occurrence. The celebrated flying reptile, (pterodactylus) has been found both in the lias of Dorsetshire, which belongs to the third class of formation; and in the tertiary beds of the famous Paris basin, which belong to the fourth class of formation. It has been computed that birds are five times more numerous now than mammalia. From this it has been hastily concluded, that in an antediluvian era, this order was reversed. Bones of birds are found in the oolite, and ferruginous sandstone, in the third class. In the gypsum quarries of the Paris formation, ten species of birds have been found. Bones of birds have also been found in the breccia of Gibraltar, the diluvium of Kirkdale cave, and in other diluvia-formations which are supposed still more recent than the preceding.

III. FISHES are numerous in fossil representatives, and are common to various formations. Fossil fishes are found to accord, more than other organic remains, with existing genera and species: indeed, we are not

aware that any have been found that are without their living analogues. The product of various seas are jumbled together in one indiscriminate mass. Bolca is a fruitful source of beautifully preserved fossil fishes, some fine specimens of which we were enabled to obtain when at Verona. Of one hundred ascertained fossil fishes in Bozza's Collection, four had their living analogues in the seas of Polynesia; of sixty-two species of fishes in the Jardin des Plantes, twenty-eight were considered to be European, fourteen to belong to Indian seas, two to African, thirteen to South American, and five to North American seas: one hundred and five species M. de Saussure thus disposes of,-thirty-two European, thirty-nine Asiatic, three African, eighteen South American, and eleven North American. distribution cannot, however, be received as accurate. or otherwise than as an approximation. Those assigned to European seas are, in all probability, too limited. This indiscriminate assemblage of fishes, from the four quarters of the globe, appears to us quite conclusive as to the fact of a universal deluge; for unless the waters had circumfused the globe, and

"Omnia pontus erant: Deerant quoque littora ponto;"

how could they have assembled together?

Mr. Coneybeare is of opinion, that IV. AMPHIBIA. eleven or twelve distinct species of crocodiles, monitors, &c occur in secondary strata, and in as many different geological scites, commencing with the new red sandstone. In this sandstone, in a quarry near Lochmaben, in Dumfrieshire, there is distinct evidence that it must have been traversed by living quadrupeds, while in a soft state—inferred to be the crocodile or the tortoise: and which, from a series of experiments, made by Dr. Buckland, with a living tortoise on a sand bank, is supposed to have been left by that animal before the sixty or seventy feet of solid strata with which it is now covered had been superimposed. On one surface there were no less than four separate tracks of as many different kinds of animals. This discovery, though at

complete variance with pre-conceived ideas in geology, we consider extremely interesting, as proving the existence of quadrupeds before this formation of the new red sandstone, which belongs to the third class. Saurians are also formed in the lias, and upwards to the 'London clay.' These saurians are of gigantic dimensions, and incongruous forms; they scarcely find analogues in living saurians. We have already adverted to the ichthyosaurus, plesiosaurus, and megalosaurus, &c. Among these may be included the iguanodon, (so called from its supposed resemblance to the iguana,) which is stated to be a gigantic herbivorous reptile, and inferred to have been, like the cayman or alligator, an animal which frequented primeval fresh water lakes and rivers : though, according to our present notions, it is not so evident how an herbivorous animal could be an inhabitant of lakes or rivers. Its teeth are of a very remarkable structure, being serrated on the edges, and grooved on the surface. It has been supposed to be sixty feet long, and to have had a small horn on the forehead. somewhat resembling the smaller one of the rhinoceros: but the measurement rests on a fragment. gigantic fossil is found in the Tilgate stone. The vertebræ of another saurian has been more lately found in the Portland stone, near Oxford: it is double the size of that of the iguanodon, and four times that of the mastodon. The Stonesfield slate contains a most remarkable association. In this formation, are marine, amphibious, and terrestrial animals, associated with terrestrial, lacustrine, and marine plants, together with birds and insects all reposing together in a bed not exceeding six feet in thickness. "Tell us, ye who best can tell," how could these have been brought together, except by a cause which at once invaded the sea, "the dry land," and the regions of the atmosphere: for, had not the "windows of heaven been opened," insects would not have been precipitated from the "bosom of the air." In the sandstone of Tilgate Forest we find a proof of the same kind:-fossil remains of turtles, birds, shells, and tropical vegetation, are blended in one

indiscriminate mass of confusion, with the leptorynchus, iguanodon, plesiosaurus, and megalosaurus.

Of mammiferous animals, the bones of whales are found in the marine deposits of Norfolk, &c.; and Cuvier

has enumerated ten fossil species of the seal.

V. Fossil Vegetation consists of palms, tree ferns, cacti, euphorbiæ, canes, reeds, and grasses—most of them having living analogues in tropical vegetation, and some truly gigantic: there are, also, fossil remains of fruit, and seed vessels in the coal shales of Yorkshire, and these are found abundantly in the 'London clay' at

Sheppey.

VI. ZOOPHYTES, &c. The 'Dudley fossil' or trilobite, which, however modern research has proved to be by no means the exclusive property of the Dudley limestone, remains as yet without its living analogue. Belemnites are concamerated shells with siphunculi passing through the partitions as in the nautilus: their true character seems to have been determined by the late Mr. Miller, of Bristol, who published a valuable work on the 'Crinoidæ.' These are found in various formations from lias to chalk. The lily encrinite is a beautiful There is an exquisite specimen in the Rooms of the Geological Society, perhaps the finest and most entire in existence. According to Mr. Parkinson, the lily encrinite is formed of nearly thirty thousand distinct bones. It is supposed to be characteristic of what has been called the muchelkalk, (a kind of shelly limestone,) a formation unknown in this country.

"The organic remains of the secondary strata," says Mr. Lyell, "in general, consist of coral and marine shells: of the latter the British strata (from the inferior oolite to the chalk inclusive,) have yielded about six hundred species. Vertebrated animals are very abundant, but they are almost entirely confined to fish and reptiles: some remains of cetacea, have however, also been met with in the oolitic series of England, and the bones of two species of warm blooded quadrupeds, of extinct genera, allied to the opossum. The occurrence of one individual of the higher classes of mammalia, whether

marine or terrestrial, in these ancient strata, is as fatal to the theory of successive development, as if several hundreds had been discovered."* This we consider

correct and acute reasoning.

VII. Fossil Quadrupeds. Fossil ruminants are such as find their living analogues in genera and subgenera, at present most common in northern climesas the musk ox, reindeer, and elk; while the fossil pachydermata, t of the largest orders of animals, as the elephant, rhinoceros, hippopotamus, and tapir, find their analogues in those that range between the tropics. The bones of the elephant or mammoth are most abundant. Until the recent discovery of the mastodon on the banks of the Irawadi, its locality had been confined to America. Nearly forty species of extinct pachydermata have been found in the superior deposits of the environs of Paris, and among them a new genus, called, by Cuvier, palaotherium; t also another, which has been named anoplotherium, which literally signifies an unarmed wild beast: it was found in the gypsum quarries of Paris. The fossil elk has been found in Ireland, Isle of Man, and more lately, as we have heard, in Shropshire: it occurs in peat, marl, and gravel. We particularly investigated the shell marl formation of Ballaugh, in the Isle of Man: it is sixteen feet deep in the centre, and a peat bog is incumbent over it. While we were in the Isle of Man, some years ago, a fine and entire skeleton was dug up: the antlers measured eleven feet from tip to tip; on breaking some of the horns in the quarry, we found the interior cancelli full of blue earthy phosphate of iron; the peroxyde of the metal having filtered through the incumbent strata, and by decomposing the earthy phosphate, formed a metallic phosphate. The most in-

^{*} Principles of Geology.—London, 8vo. 1830. p. 150.

[†] Pachydermata,—thick skinned quadrupeds, (such as the elephant, rhinoceros, &c.) each foot having more than two toes; with incisive teeth in both jaws.

[†] Palæotherium, (ancient wild beast) allied to the tapir, but gigantic in size.

teresting circumstance, however, connected with these remains, was a coin of Ethelred, which was discovered with the fossil bones. There were also a considerable quantity of fragments of flints, which seemed, to us, as having been intended for arrow heads; but more rude than the neatly formed arrow heads, called, in Scotland, elf-stones—sometimes found in bogs. The authority which communicated to us the fact of the coin's having been found, is above all suspicion. By M. Cuvier's researches, it would appear, there has been an excess of ruminantia, such as the ox, deer, &c., preserved, compared with carnivora, such as the hyæna, &c.—the principal loss having fallen on the latter, compared with the present numerical distribution of animals. The remark of this great authority is highly valuable. It is interesting, as connected with this fact, to notice the command given to Noah:-" Of every clean beast thou shalt take to thee by sevens, the male and his female; and of beasts that are not clean by two, the male and his female."* We may reasonably infer that the latter division included the carnivora, and the numerical difference will thus be satisfactorily accounted for.

We believe that no quadrumanous animals, such as the ape or monkey, have ever been found fossil in the great formations of the globe; but it by no means follows from hence that the discovery is not yet to come. Quadrumanous animals are entirely tropical, having their dwelling in trees. One of the most important of recent discoveries in geology is the fact of the bones of the MAMMOTH having been found at North Cliff, in Yorkshire, in a formation entirely lacustrine; while all the land and fresh water shells in this formation, (thirteen in number,) have been accurately identified with species and varieties now existing in that county. Bones of the bison, whose habitat is now a cold, or at any rate, a temperate clime, have been found in the same place. That these quadrupeds, and the indigenous species of shells found along with them, had a contemporaneous

existence in Yorkshire, (a fact which Mr. Lyell justly considers to be of vast importance in geological science,) has certainly been demonstrated by the Rev. W. V. Vernon, who had a pit sunk to the depth of upwards of two hundred feet through undisturbed strata, in which the organic remains of the mammoth were found imbedded, together with shells, in a deposit which seems to have resulted from tranquil waters. Mr. Vernon considers these phenomena as proving that there has been but little, if any, change of temperature in the climate of Britain, since the mammoth lived there.* Dr. Schouw, of Copenhagen, had come to similar conclusions as to the climate of Palestine, from calculating the mean temperature necessary for the growth of the The date palm is as successfully cultivated now in Palestine, as in the earliest period of which we have "The city of palms," or Jericho, was so any account. called from the groves of palms in its vicinity; while pagan historians amply confirm what Sacred History has so unequivocally described. Thus there seems no legitimate ground to suppose, either that mammoths were non-contemporaneous with fossil remains of existing genera and species; or, that the climate of the globe has materially changed since the era in which mammoths lived. The indiscriminate mixture of the higher types of organization with the lower types of animal formation, bids defiance to their being legitimately considered as a test in the decision of the question of the comparative age of rocks. The date of formations cannot, therefore, be determined from any particular description of organic remains, because the same organic remains are found in other strata and other formations. The obvious inferences from these premises are,-1. The theory of the successive developement of animal forms has not the shadow of proof; 2. The various types of organization were contemporaneous; and as they now are, so they have ever been; 3. That geological facts, so far from countenancing

^{*} Phil. Mag. Sep. 1829, &c.

an entire change of climate, prove the very reverse; and it follows, therefore, 4. That tropical vegetation and tropical zoology, the organic wreck of which has come from every quarter of the globe, must have been transported by the violent action of the currents of an universal deluge, which has certainly circumfused the

globe.

We have already distinctly stated, that though the earth has been visited with a general and universal deluge, which has submerged both hemispheres, there have been also numerous local catastrophes in both the antediluvian era and in postdiluvian times. Of the latter class of phenomena, the "Paris Basin," as it has been called, affords a remarkable example; it seems to have been alternately invaded by the sea, and by the waters of a lake-there appear to have been three marine depositions, while three seem to be fresh water formations. The lowest of these is a basis of chalk, containing regular beds of dark flints; this is assumed to be the ancient marine formation; -and it contains shells: the univalve shells found here, however, have no regular or distinct spires. Incumbent on this substratum, is I. a deposition composed of sandstone, and plastic clay readily yielding when impressed; and lignite, a kind of fossil wood. The shells here seem to be a mixture of marine and fresh water, but are in distinct depositions. This fact proves that the sea had invaded the land; on its overflow the lacustrine or fresh water shells would perish, and be enveloped in the subsidence of the foreign matter, mechanically suspended; while marine shells would supply their place, and these, be either transported by the tidal current in an incipient stage of growth, in the form of spawn, or more mature. The fresh water shells, which have been defined as such, much exceed in number such as are of a marine origin. It must, however, be confessed, that it is not quite so easy to draw the line of distinction between the one and the other, as might be at first sight imagined. M. Beudant has proved that the inhabitants of fresh water lakes may be gradually inured to a salt water medium. Indeed the annual migration of the salmon from the sea to the river, is a fact allied to the same class of phenomena. remember a phenomenon of a similar kind; and which, if we mistake not, is mentioned in the statistical account of Scotland, of a sea plaice having been found in an inland fresh water lake: we know, personally, the fact as stated to have been perfectly correct. Generally, however, a sudden commixture of salt and fresh water would be fatal to the inhabitants of the latter. Water taken from a river, as the Thames, Neva, or Ganges, immediately above the influence of the tide, cannot be well preserved at sea, and soon becomes corrupt, because the mollusca borne on the marine wave perish in the conflicting stream of fresh water which blends with it. There is another fact, of considerable interest, which will perhaps serve to explain the deposition of fresh water and marine shells. Salt water is of greater specific gravity than fresh water; and river water, it has been clearly ascertained, is borne bodily upwards on the marine wave in every tide: - such is the case, for instance, with the river Dee, at Aberdeen, as clearly ascertained by Mr. Stevenson, Civil Engineer. Whether the flux and reflux of the ocean were, in antediluvian times, subject to the same periods of duration as they now are, cannot perhaps be determined; but a change of period here would operate in producing phenomena exhibiting characters very dissimilar, in cases like these, compared with those now in operation; and as, for aught we know to the contrary, such may have been the case, it should induce us not to draw our inferences too hastily from things that do appear. We do not believe that the axis of rotation was changed at the deluge. Laplace, in his "Systeme du Monde," has endeavoured to shew that the rotation of the earth on its axis in past times could not have materially differed from the present; this, however, must ever perhaps remain an undetermined point. We have already glanced at the distribution of temperature, which certainly appears to have remained unchanged in our postdiluvian world, since the deluge, which overwhelmed the globe; and as far back as historical documents

extend, or the evidence adduced by Mr. Vernon goes. There is, therefore, good reason to believe that the isothermal lines, or lines of equal temperature, have been precisely the same as they now are. II. On the formation adverted to, reposes a coarse limestone; also sandstone: fossil shells are found therein, and they are referred to marine production. The superior stratum is, III. a formation which it has been concluded is that of fresh water: it is composed of silicious limestone, containing sea and fresh water shells; a kind of connecting stratum, or junction link, explicable on the principles already adverted to. This introduces gypsum, remarkable for the bones it contains: these are palæotheriums, anoplotheriums; carnivorous and various other mammiferæ; several species of birds, reptiles, and fish. The fresh water marls contain fossil remains of palms, fish, and fresh water shells. The marine gypsum and marls contain marine shells and fragments of crustaceæ, &c. This leads us to the IV. which is a marine formation, in the ascending series. It is composed of sandstone, limestone, and marine marls. This limestone imbeds sea shells. To these succeed V. the third and last fresh water formation, which includes marks and the millstones called burstones, (so valuable for that purpose). The best burstones contain no organic remains whatever. In this formation, are found fossil shells which possess living analogues, almost all of them having counterparts in the genera now inhabiting the lakes and marshes of France: altogether there have been found in the beds of the Paris Basin, not less than twelve hundred species of testacea. These interesting depositions are overtopped by formations having diluvial and alluvial characters.

The Paris Basin forms an interesting legend of past times: these various formations are explicable on the principle of local convulsions, and the entire number may be of an antediluvian character, while the diluvial depositions are the consequences of the deluge; and the alluvial, the action of recent and postdiluvial changes now in operation. Even Mr. Lyell says, "The strata of the Paris Basin are partly of fresh water origin, and

filled with the spoils of the land. They have afforded a great number of skeletons of land quadrupeds, but these relics are confined almost entirely to one small member of the group, and their conservation may be considered as having arisen from some local and accidental combination of circumstances." It has been customary to group together with the Basin of Paris, those of the Isle of Wight and London, as if they were individuals belonging to the same family and had a contemporaneous formation. This, however, is an entire mistake. The substratum of chalk is found in all of them; but gypsum and its mammiferæ, &c. is to be found neither in the Basin of the Isle of Wight nor in that of London. In the London Basin are found organic remains of ele-

phants, hippopotami, &c.

It has been often asserted that MAN, from never having been found in the state of a fossil, must needs belong to a creation comparatively recent, as the commencement, perhaps, of what Mr. Lyell would call a "geological cycle;" which, however, we confess our inability to comprehend: and if there is one more decided attempt to strike at the very foundation of Revelation than another, it is this;—but, it is not more repugnant to Revelation than to sound philosophy and right reason, nor is there a single fact that can be brought forward to warrant such an assertion. Suppose that nothing of the kind had really been found, would it not be rash in the present infant stage of geological science, to infer that such may not be found? and yet this has been received among geologists as a species of axiom; when the vast diluvial beds of clay and gravel, and the superior strata in Asia, shall have been explored, it will be time enough to venture on such a conclusion; but to hazard this opinion at present, is of a piece with the sweeping assumptions of geologists from first to last. History and profane writers agree that the cradle of the human race was in the East, and in a geological point of view, at any rate, that quarter of the globe is a complete terra incognita. The very record of creation presupposes an universal distribution of vegetation, and

of the tribes of inferior animals all over the globe. But it was not so with man, he was solitary, and confined to a little Goshen of his own. We are not warranted to think that the human family was as multiplied and dispersed as some have supposed, or had increased to any thing like the extent, it has been assumed. Besides, man is a gregarious being, and his diluvial wreck may be discovered in some vast charnel deposits in districts yet unexplored. We pity the evasive shifts to which those who reject Revelation are reduced in considering this question. Let us take Mr. Lyell's remarks. "But another and a far more difficult question may arise out of the admission that man is comparatively of modern origin. Is not the interference of the human species, (!) it may be asked, such a deviation from the antecedent course of physical events, that the knowledge of such a fact tends to destroy all our confidence in the uniformity of the order of nature both in regard to time past and future? If such an innovation could take place after the earth had been exclusively inhabited for thousands of ages by inferior animals, why should not other changes as extraordinary and unprecedented happen from time to time? If one new cause was permitted to supervene, differing in kind and energy from any before in operation, why might not others have come into action at different epochs? Or what security have we that they may not arise hereafter? If such be the case, how can the experience of one period, even though we are acquainted with all the possible effects of the then existing causes, be a standard to which we can refer all natural phenomena of other periods?" Now these are certainly very heavy reasons, and entirely neutralize Mr. Lyell's assumptions, (for they are no better); while our author, in these very admissions, becomes suicidal to the whole drift of the argument for which his volume was written. The title of this certainly otherwise interesting volume is this ;-"Principles of Geology, being an attempt to explain the former changes of the earth's surface, by reference to causes now in operation." Let us examine how Mr. Lyell meets his own inferences.- "Now these objections" says he, "would be unanswerable, if adduced against one, who was contending for the absolute uniformity throughout all time of the succession of sublunary events." Then follows an assurance that he is not disposed to indulge in the philosophical reveries of the Egyptian and Greek sects. He, however, says nothing about those of India:—shall we call Mr. Lyell a "geological logician," and is this to be accepted as a specimen? If Revelation is to be encountered with this kind of logic, it may be safely met with pity and

contempt.

It is a very curious circumstance, that geologists have so contrived to overlook all evidence of the existence of the fossil remains of man, that the discovery of the gallibi, or human skeletons, found imbedded in a grey limestone in the island of Guadaloupe, does not even receive an incidental remark. Some attempt, it is true, has been made to set aside the important fact, and to consider it a mere modern incrustation, referrable to the commencement of the last century. Those who with us have attentively examined this fossil remain, cannot, we think, be quite so easily persuaded that it is so; and such opinions are by no means reconcileable with the facts which Mr. Koenig has detailed in the Transactions of the Royal Society, for 1814. Organic remains more completely fossilized it were not easy to find; and they are certainly much less equivocally so than many to which this character is granted without reserve. When men are determined to reject facts because they militate against pre-conceived ideas, they will do so at all hazards; -accordingly, this has been done in reference to the human skulls which have been found associated with the remains of the rhinoceros, hyæna, lion, &c., and consolidated in the limestone rock of Kösritz. In one quarry, (winters) the human bones were found eight feet below those of the rhinoceros, and twenty-six feet below the surface. But because many species of bones of recent animals have been found with human remains in the gypsum quarries, these are presumed to be of later origin than

those in the limestone. "I am far from thinking," says M. Schlotheim, in reference to the organic remains of man in the caves of Kösritz, "the explanations satisfactory which I have attempted of these phenomena, and am disposed to consider the human bones to be of a later epoch than the larger land animals of the ancient world; all other reported cases of human remains accompanying the bones of beasts of prey have not been confirmed." This is a specimen of geological logic, in reference to our question; accordingly, Dr. Buckland, while he readily admits that M. Schlotheim's hypothesis is altogether unsatisfactory, coalesces in the opinion, "that the human bones are not of the same antiquity as those of the antediluvian animals that occur in the same caves with them." These afford good examples of geological logic,-the petitio principii being first assumed, facts are made to pay homage to fancy and whim. Since these may be antediluvian remains, for aught that can be proved to the contrary, Dr. Buckland is not warranted to say, (except as a "geological logician") that "the case of Kösritz affords no exception to the general fact, that human bones have not been discovered in any of those diluvial deposits which have hitherto been examined."—In June, 1829, M. Cordier read, before the Academy of Sciences, part of a memoir addressed to him by M. de Christol, Secretary of the Natural History Society of Montpellier; this interesting communication related to two caves that had been recently discovered in the Department of the Gard, which contained bones. It appears that these caves were discovered by M. M. Dumas and Bonause: one is situated at Pondre, and the other at Jouvignargue, near Sommières. M. de Christol seems to have examined them with considerable care and attention; and from an acute examination of the specimens obtained by digging, is convinced that they exhibit incontestable evidence of a mixture of human bones with bones of mammiferæ belonging to extinct species. According to M. de C. the organic remains of animals mixed with those of man belong to the hyana, badger,

bear, stag, aurochs, ox, horse, wild boar, and rhinoceros. Some of the bones, according to M. de Christol, bear evident marks of hyænas' teeth; and the album græcum of these animals was also discovered in the caves. M. Cordier seems to consider these facts as very im-Besides these instances, human bones have been found in the caves of Bize, near Narbonne. Some of the bones, being apparently of much more recent origin than any fossils hitherto discovered, seem to connect, it is said, the present geological period with that which preceded historical records. It is stated. that at Bize, in the same beds, are found human bones mixed with bones of extinct species, all possessing the same physical and chemical characters. These bones are entire, and bear no evidence of their having been gnawed: while there is also the entire absence of large carnivora, which, had such been found there, in a fossil state, might have had all the blame of having carried in these bones. Professor Jameson admits that if M. de Christol's discovery be correct, it is more in favour of a mixture of human bones with the remains of antediluvian animals, than the evidence of the caves near Narbonne: and Mr. Lyell promises, in his forthcoming volume, to bring a little "geological logic" to play on the caves of Bize. We have only to state, in addition, that a grotto has been lately discovered near Palermo, the capital of Sicily, by Sig. Bernardi, containing considerable remains of human bones, as well as those of hippopotami, mammoths, and other mammiferæ. Numerous other instances might be added; but these are, perhaps, the least equivocal: and if the phenomena can, by possibility, be explained away in any manner, geologists will not listen to any thing which may threaten this their favourite hypothesis-for it has no right whatever to the name of a theory—Vox et preterea nihil: it is now their favourite pet. The theory of successive developement has been wrested from the grasp of the geologist, and he will not part, without a severe struggle, with the non-contemporaneous existence of man in an early epocha of the world. This is a point for which,

without any legitimate grounds, he so stoutly contests. Though we are not easily satisfied with evidence, we are free to confess that the foregoing circumstances, in conjunction with others, are to our mind perfectly As the point is one of first rate imconclusive. portance, we cannot abandon, in this place, the opportunity of adverting to the caverns in the transition limestone near Torquay, which were first announced toward the beginning of 1825; particularly as we have seen an immense assemblage of the bones of the hyæna, tiger, elephant, rhinoceros, elk, hippopotamus, &c., in the possession of a gentleman who has diligently explored the cavern called "Kent's Hole," in which they were found. In Pixy's Hole, the upper stratum of stalagmite was cut through, and there was discovered on the lower excavation, charcoal, pottery, flint knives, &c.; and the individual referred to, informed us, that, in the very middle of the stalagmite, in "Kent's Hole," which was about eight inches thick, there was found a piece of wood with a ledge on one side, resembling a sandal,-it was completely embedded-animal matter was also found; and in Pixy's Hole, a black layer, apparently manganese, was discovered in the mud, about four feet from the surface, and running in a direction parallel to it for a distance of twenty or thirty feet. Here we have works of art belonging to the aborigines of Britain, and in the middle of the stalagmite. Bones are also found frequently incrusted, and in some instances, teeth have been discovered, half in the mud and half in the incrustation of stalagmite. It has been stated, and with some shew of truth, that the substratum of stalagmite is antediluvian, and the superstratum postdiluvian:-the intermediate mud is diluvial, and the reliquiæ being in relief, the stalagmite would incrust and embed them.

In opposition to the numerous revolutions, not merely local and confined, but universal, which geologists have been in the habit of taking for granted, it affords some relief to find that there are honourable exceptions: among these may be mentioned Mr.

Granville Penn, and Mr. Young, of Whitby, who think, with us, that one universal deluge is quite sufficient to account for the facts and phenomena of geology; and to suppose any thing more, is a positive infraction of Sir Isaac Newton's celebrated maxim, that if one explanation is sufficient, it is superfluous and unnecessary to assume more. Besides these authorities, it is cheering to learn that M. Constant Prevost has lately laid before the Academy of Sciences, a treatise on the great geological question,-Whether the continents. which are now inhabited, have or have not been repeatedly submerged? This author maintains firmly, in opposition to modern geologists, that there has been only one great inundation of the earth; and that the various remains of animals and plants, which have given rise to the supposition of successive inundations, have floated to the places where they are now occasionally found. Every successive investigation. and every new discovery weaken the speculations of geologists; which are, at the present moment, only, at best, "a bowed wall and a tottering fence:" and though they may, for a little longer, be able to satisfy themselves on the principles of "geological logic," we doubt whether they will be able to convince others. None, who are capable of reflecting, will be disposed to abandon Revelation, the credibility of which is adamant at every link, for the fooleries of a sceptical geology; and if there are any, who, on a calm survey of geological facts, can discover a solitary one counter to the palpable truths of the Mosaic cosmogony, his opinion is at antipodes with our own ;-we view things through media that are altogether different. Truth will instantly convince us. Fable and romance, however playful and amusing, we treat as idle tales, not worthy of the least attention from the votary of scientific truth.

The circumfusion of the waters of the deluge has been already stated, and nothing seems to be better substantiated and established than the fact in question. The language of the Sacred Volume is clear and decisive on this point. "The waters prevailed exceedingly

on the earth; and all the high hills that were under the whole heaven were covered. Fifteen cubits upwards did the waters prevail, and the mountains were covered." The attestations to this fact, in organic remains, are universal, and completely conclusive. In Italy entire skeletons of whales have been found at an elevation of not less than one thousand two hundred feet above the level of the Mediterranean. In a letter of the 5th May, 1830, to the Asiatic Society of Calcutta, M. Gerard states, that he had collected shells among the snowy mountains of the frontiers of Thibet: some of them were obtained on the crest of a pass, seventeen thousand feet above the level of the sea. Here were also found fragments of rock, bearing impressions of shells, detached from the contiguous peak rising far above the elevated level: generally, however, it would appear, that the rocks from whence these shells were collected, rise to an altitude of about sixteen thousand feet: one cliff was no less than a mile in perpendicular height above the nearest level. M. Gerard continues, "Just before crossing the boundary of Sudak into Bassalier, I was exceedingly gratified by the discovery of a bed of fossil oysters clinging to the rock as if they had been alive."* No doubt many of the rocks are in more sublime relief now, than they were in the antediluvian world. The subsidence of the land and lower levels, and the action of submarine currents would scoop out deep vallies; and no doubt, much that is now "dry land," once formed the bed of the ocean. Alpine structures have emerged from the deep, and volcanoes have heaped up elevations on mountains already lofty and sublime; as Cotopaxi, Antisana, and Tunguragua, amid the range of the Cordilleras of the Andes. Geological Society has a series of ammonites from India. These fossils are objects of adoration to the Hindoos: they fall on the S.W. side of the Himālā mountains from an altitude which exceeds that of perpetual congelation: they are picked up by the natives, and religi-

^{*} Asiatic Register.

ously preserved, being concealed as much as possible from the scrutiny of Europeans. Mont Perdu, among the Appenines, which rises to an altitude of eleven thousand feet above the sea's level, encloses an innumerable multitude of testacea: and Humboldt found sea-shells among the Andes, fourteen thousand feet above the level of the ocean. At Touraine, on the Continent, is a bed of shells which extends nearly twenty-seven miles, having a depth of twenty feet. Monte Bolca contains upwards of one hundred species of fish from the four quarters of the earth, and collected together in one

immense assemblage.

It is quite refreshing to quote the simple narrative of the deluge as described by the inspired prophet, after considering the perplexing and conflicting speculations of geologists. In the seventh chapter of Genesis, we are informed, that the patriarch and his family went into the ark which was prepared, and along with them such animals as were to be preserved to replenish the new earth, which was to emerge from the waters of the deluge. "It came to pass," says the sacred historian, "after seven days, that the waters of the flood were upon the earth: in the six hundredth year of Noah's life, in the second month, the seventeenth day of the month, the same day were all the fountains of the great deep broken up, and the windows (or floodgates) of heaven were opened. And the rain was upon the earth forty days and forty nights." "And the flood was forty days upon the earth; and the waters increased and bare up the ark, and it was lift up above the earth. And the waters prevailed, and were increased greatly upon the earth; and the ark went upon the face of the waters. And the waters prevailed exceedingly upon the earth; and all the high hills that were under the whole heaven were covered. Fifteen cubits upwards did the waters prevail; and the mountains were covered. And all flesh died that moved upon the earth, both of fowl, and of cattle, and of beast, and of every creeping thing that creepeth upon the earth, and every man: all in whose nostrils was the breath of life, of all that was in the dry

land, died. And every living substance was destroyed which was upon the face of the ground, both man and cattle, and the creeping things, and the fowl of heaven; and they were destroyed from the earth; and Noah only remained alive, and they that were with him in the ark. And the waters prevailed upon the earth an hundred and fifty days."* This description of a catastrophe, which is attested by the universal consent of mankind, and confirmed by the testimony of geological phenomena, is, though brief, a very circumstantial and explicit ac-We have already shewn, that, in the organic remains of the antediluvial world, which have been discovered through the researches of the practical geologist, fossil types of "fowl, and of cattle, and of beast, and of every creeping thing, and of man," remain in attestation of the fact. That these have been the fruit of modern research is a remarkable confirmation, by an independent testimony, of the important and awful truths developed in the Sacred Narrative. The fact that fossil fishes, which have living analogues in the four quarters of the globe, now separated by distinct lines of demarcation, are found collected together in one place, is a decisive proof that the universal tide, which had circumfused the globe, must have been the medium of transport—no other supposition will account for the phenomenon. This fossil assemblage bears all the impress of a medallion destined to perpetuate the event of the deluge to the remotest posterity. Tropical animals and tropical plants, whose fossil remains are found far distant from the soil that gave them birth, must have been swept away by a mighty flood which overwhelmed the land, and rushed onward to other regions, loaded with the spolia opima of the tropics. We by no means doubt that there may have been, in former times, animals, and perhaps plants, indigenous to temperate and polar regions, not now extant, and whose prior existence can only be ascertained by their fossil types; but irrespective of this admission, the great diversity of

^{*} Genesis vii. 10, &c.

zoological and botanical forms clearly determines that all these could not have coexisted in any one determinate and specific clime; and the only inference is, that they must have been brought from afar by a cause similar to that which congregated the fossil fishes. We have also adverted to facts which prove, incontestably, that "the high hills that were under the whole heaven were covered." It does not affect the question, whether we believe that the Himālā, Andes, and Alps, were in such sublime relief in an antediluvian world, as they now are; the fact that organic remains are found in all of them, however highly elevated, excepting only the Primitive Class, proves the position as far as it is susceptible of proof from this class of evidence. There are many causes which will account for the superior elevation of individual mountains, and even a continuous chain of mountains. The vast power of the submarine volcano, in elevating mountains from the unfathomable depths of the ocean, presents us with sufficient evidence of an agent adequate to such great events; and it seems highly probable that volcanic energy is now far more feeble than in an early period of the world. The numerous vents by which that energy is expended by division, may be supposed sufficient to account for a diminution of power—the continued operation of volcanic action would be ever increasing the number of those vents, and in the same ratio would their subterranean energy be attenuated. Antisana, Jorullo, Cotopaxi, and Tunguragua, have doubtless added many "cubits to their stature," as well as Etna and its congeners. The denudation of valleys by the action of diluvial currents would increase the previous relief, as the boulders of granite pitched on the mountains of the Jura, and transported from their aboriginal scite and birthplace among the aiguilles of Mont Blanc, seem sufficiently to prove.

In giving full effect to the operation of volcanic action, we must not be supposed as inclined to a belief, that volcanoes afford any evidence of a central fire: On the contrary, we think their products sufficiently attest

that they are by no means so deeply seated as many believe. The seat of volcanoes may be based on the primitive rocks; but there seems to us to be no grounds whatever to suppose them below primitive rocks. We are aware that Hutton and his disciples contend for a central fire, but that is no reason why TRUTH should be sacrificed. Cordier and others have endeavoured to prove, that the temperature of the earth increases with the depth to which the miner penetrates; but even had a uniform ratio given plausibility to such an assumption, there seem to be incidental causes which would contribute their part to the increment referred to, irrespective of the circumstance that the temperature of the atmosphere would increase with the increase of density, which density would affect subterranean springs. The greatest depth, however, to which the miner has been conducted by his operations, may be considered so superficial, compared with the radius or semidiameter of the globe, that it would be utter folly to assume any datum from such premises. From some curious and interesting researches, by Mr. Robert Ware Fox, in the mines of Cornwall, we have an interesting solution of this increase of temperature altogether irrespective of volcanic action. Mr. Fox, from a belief that there existed a connexion between electric action in the interior of the earth and the arrangement of metalliferous veins; and, that on this electric action depended the progressive increase of temperature in the strata of the globe, as we descend from the surface of the earth, instituted a series of experiments to determine the question. Accordingly, considerable electrical action was discovered in the Huel Servel mine. Mr. Fox's inferences are, that the intensities of heat and electricity, and consequently of magnetism, increase in proportion to the depths of the strata under the surface of the earth. We have already stated, that we feel surprised that any one, conversant with volcanic phenomena, should claim vast and indefinite measures of time, as Mr. Poulet Scrope has done for the basaltic formations of Auvergne.

1

There has, however, been discovered, in one of the libraries at Rome, a letter from Sidonius Apollinaris, in the fifth century, to Mamertus, which refers to the then active volcanic action in this district.

There is a fact stated in Scripture of considerable importance when considered in this relation: "the fountains of the great deep were broken up:"—this unequivocally implies the issue of torrents from the bosom of the globe; and it seems, to us, more likely that the nucleus of the earth is an abyss of water than a lake of fire, however the latter view of it might coalesce with Buffon's notion, of which that of Hutton was a more elaborate transcript. The synchronous mention of the fountains of the great deep, along with the floodgates of heaven, is very remarkable, and seems to refer the effect to a uniform cause. The Supreme Being. if we may be permitted to hazard an opinion, seems to have accomplished this great event, by effecting a vast change in the DENSITY of the atmosphere; to this circumstance we are inclined to refer, as a secondary agent in the fiat of deity, the rush of the waters from the recesses of the earth, "when they brake forth as if they had issued out of the womb." This increased density, in the first creation, might be the "bars and doors" referred to in the Book of Job.* In pursuing our inquiries, we shall perceive that this greater density of the atmosphere, in an antediluvian world, will account for the gigantic size of the animals and plants, whose fossil remains, modern times have revealed to us. It would also account for an increased temperature in climate; and perhaps, too, be connected with the extended term of human life in the antediluvian world; since a diminished density, would be accompanied with, not only a change of temperature, but a change in the hygrometric character of the atmosphere. Such an increase of density presupposes the absence of clouds and of rain in the primeval world, while its attenuation would account for the deluge of waters,

^{*} Job xxxviii. 10.

which would then descend from the aerial medium; and on the completion of the purposes for which this mighty catastrophe was designed, clouds, for the first time, would be seen suspended from on high; and for the first time also, would the "bow of promise in the storm" be "set in the heavens," and be seen by the patriarch. Had it been seen before, its being seen again could not, in itself, be an apt symbol of peace. and pledge of security. We have stated, that there is no mention, in Sacred History, of rain having fallen in the antediluvian world; and, from the greater mass of water that would be suspended in an atmosphere possessing an increase of density, with the total absence of clouds secured by that increased density, nothing would interfere, except winds, with the formation of dews, which would be, from these combined circumstances, very copious and uniform. It may be asked, and the question has certainly been often put, What has become of the surplus water of the deluge? We have already stated, that the mountainous chains, which diversify the surface of the globe, may be now much higher than they were in antediluvian times; but if they really be not, the fossils they embed are sufficient proof that they must have been submerged; and though we were altogether unable to account for the disappearance of the waters, the fact of the circumfusion of these waters, and the palpable proofs that both hemispheres of the globe have been simultaneously submerged, cannot be However, when we reflect on the imcontroverted. mense expenditure of water which has entered as water of crystallization into the composition of fossiliferous rocks, and diluvial and alluvial strata, it will account satisfactorily for a vast proportion if not the entire quantity. The electricity of the earth, and perhaps that of the heavens, may have, in like manner, been incessantly in operation in resolving the subterranean waters, and the atmospheric vapour, into gaseous constituents. Though the waters only "prevailed on the earth for one hundred and fifty days," it by no means follows, that, when they were "assuaged," or

began "to abate," they were so soon reduced to their present limits. Centuries might have rolled away before they had contracted their bounds to the dimensions that now restrain them. Seeing that a universal deluge is confirmed by testimony of the most satisfactory and complete kind, a very obvious question arises, How did the patriarch gain the extraordinary intimation of the coming deluge and prepare such a remarkable medium of escape from the catastrophe? There is no other conceivable method of accounting for it but by a direct and positive communication from the Almighty CREATOR. Calmet has some very pertinent remarks connected with this question. "The labour (of constructing the ark) was long; this was not the work of a day; he must have foreknown so astonishing an event a considerable time previous to its actual occurrence. Whence did he receive this foreknowledge? Did the earth inform him, that at twenty, thirty, forty years' distance it would disgorge a flood ?-surely not. Did the stars announce that they would dissolve the terrestrial atmosphere in terrific rains?—surely not. Whence, then, had Noah his foreknowledge? Did he begin to build when the first showers descended? This was too late. Had he been accustomed to rains formerly—why think them now of importance? Had he never seen rain—what could induce him to provide against it? Why this year more than last year; -why last year more than the year before? These inquiries are direct: we cannot flinch from the fact. Erase it from the Mosaic records; still it is recorded in Greece, in Egypt, in India, and in Britain: it is registered in the very sacra of the pagan world." "It implies a communication from God to man." "By faith, Noah-being warned of Gop-of things never seen as yet-in pious fear-prepared the ark (Kibotos) to the saving of his family-by which he condemned the world."

All geologists are agreed on the question of the recent formation of our continents, and they cannot be justly considered older than the period assigned, by Sacred Chronology, to the deluge. Dolomieu, an acute geologist and observer of nature, was of opinion, that a great catastrophe had taken place after the birth of the primitive rocks, and before that of the other classes of formation. Mr. Greenough holds deserved authority in geological matters; and his excellent work, we believe, first aroused geologists from their cosmological slumbers, by shewing them that many doubts might be reasonably entertained on questions which had gained acceptance with too pliant a credulity; and that all was not so finally settled as geologists ("good easy men!") had been led to suppose. This author, in reference to Dolomieu's opinion, observes: "Without assenting to every part of this doctrine, I cannot but consider the almost universal occurrence of conglomerate and grauwacke on the confines of what are called primitive rocks as one of the most important and striking facts yet established in geology: it seems to prove, that, at the epoch at which these beds were formed, a deluge took place." This, Mr. Greenough supposes to have been more ancient than the deluge described in Scripture, and to which last was to be ascribed the "present outline of the earth;" but it may be very properly asked, in the words of Mr. Young, whose excellent work on the Geology of Yorkshire is now before us, "Why may we not regard it as the very same? The beds alluded to seem to mark the extent to which the primeval strata were dissolved by the deluge."* This excellent author mentions a remarkable break and dislocation at Peak, where a dreadful convulsion seems to have occurred. and where the quantity of subsidence is estimated at not less than three hundred feet. "Life," says M. Cuvier, "has been often disturbed on this earth by terrible events: calamities, which at their commencement have, perhaps, moved and overturned, to a great depth, the entire outer crust of the globe; but which, since these first commotions, have uniformly acted at a less depth, and less generally. Numberless living beings have been the victims of these catastrophes; some have been de-

^{*} A Geological Survey, &c.—4to. 1828, p. 346.

stroved by sudden inundations, others have been laid dry in consequence of being instantaneously elevated. Their races even have become extinct, and have left no memorial of them, except some small fragments which the naturalist can scarcely recognize. Such are the conclusions which necessarily result from the objects that we meet with at every step of our inquiry, and which we can always verify from examples drawn from almost every country. Every part of the globe bears the impress of these great and terrible events so distinctly, that they must be visible to all who are qualified to read their history in the remains which they have left behind." The force of these truths demands our ready assent; we only contend that there is no evidence whatever in the facts presented to us, of more than one general and mighty deluge, though there be sufficient proof of local catastrophes, both referrable to the primeval history of the globe, and to postdiluvian times. Modern geologists have, at length, consented to ascribe to the Noachic deluge, the formation which they designate by the term diluvium, for "by such an agency," say they, "alone can these phenomena be accounted for:" though it be qualified thus, "there appears ample evidence of the frequent occurrence of similar catastrophes, the consequence of inundations more or less extensive:—that to which we refer was, therefore, the last of these revolutions." This is a specimen of "geological logic." We consider the Noachic deluge universal and general, and therefore independent of "inundations more or less extensive;" an expression which can only be considered as applicable to local catastrophes, however extended they may be considered. At Castle Rising, near to Lynn Regis, in Norfolk, where the sea is making rapid encroachments on the land, in sinking a short time ago for water, there were found at a depth of six hundred feet, horns perfectly straight, supposed to be those of the unicorn: these were two feet long, an inch in circumference, and hollow; the medullary substance seemed to be petrified. In prosecuting these discoveries, there were further found, at a depth

of six hundred and forty feet, numerous oysters with the shells half open; and at a depth of six hundred and sixty feet from the surface, a large oak tree was met with; it was black, and of a hard texture. According to M. de la Beche, the depth of diluvium in Jamaica, is about eight hundred feet; and in Switzerland it has been estimated at more than six hundred feet. This diluvium is composed of the detritus of rocks, with clay, sand, gravel and other ruin. Diluvial formations contain the organic spoils of mammiferæ, both ruminantia and carnivora, in great abundance. Respecting this diluvium, Dr. Buckland, from the numerous interesting facts which he has accumulated, and presented in his valuable work, titled RELIQUIE DILUVIANE, comes to the following conclusions: "All these facts, whether considered collectively or separately, present such a conformity of proofs tending to establish the universality of a recent inundation of the earth, as no difficulties or objections that have hitherto arisen, are in any way sufficient to overrule;" and "which, without the admission of a universal deluge, it seems not easy, nay utterly impossible, to explain." As to the chronology of this epocha, Professor Buckland states it to be that of Holy Writ. Our author seems to have shaken the creed of Baron Cuvier, who gives way to the facts substantiated by Dr. Buckland; -- "Je reviens," says M. Cuvier, "donc a l'idée que Je n'avois osé embrasser autrefois; celle que ces dépôts des brèches osseuses ont été formés aux dêpens de la population contemporaire des rhinocéros et des éléphans fossiles,"-"les brèches osseuses paroissent aujourd'hui sous un point de vue d'un intérêt tout nouveau," &c. &c. An admission which is very creditable to the candour and integrity of this distinguished naturalist. We have only further to adduce the opinion of Mr. Greenough, in reference to the same interesting question: "The order of things," he observes, "immediately preceding the deluge, resembled the present order, and was suddenly interrupted by a general flood, which swept away the quadrupeds from the continents, tore up the solid rocks, and reduced the surface to a

state of ruin: but this disorder was of short duration. The mutilated earth did not cease to be a planet; animals and plants similar to those which had perished. once more adorned its surface; and nature again submitted to the regular system of laws which has continued uninterrupted to the present day." It is of considerable importance in the present inquiry to notice the opinion of the Baron Humboldt on the temperature of the globe. The primitive world, he observes, unveils to us a distribution of organic forms which is in opposition to the present existing state of climates. Various have been the hypotheses propounded for the solution of the problem, -as the advance of a comet, a change in the obliquity of the ecliptic, the increase of solar intensity, and the like. But these opinions have been insufficient to satisfy all parties. Humboldt leaves the axis of the rotation of the earth just as it now is, nor does he venture to reduce the intensity of the solar heat. He conceives that there exist in each planet, independently of its relations to a central body, and of its astronomical position, numerous causes of the development of heat; such as the chemical processes of oxidation, precipitation, and changes of capacity in bodies; an augmentation of the electro-magnetic intensity, or the communication between the internal and external parts of the globe, through the medium, for instance, of volcanoes. This ingenious view may certainly serve to explain some local phenomena which are independent of the transport of the debris of rocks and organic wreck, by the waters of the deluge. The diamond, both in India and the Brazils, as well as the precious stones of Ceylon, are found in diluvial gravel.

Alluvium is a term employed to express those comparatively modern accumulations of sand, earth, &c., resulting from causes now in common and constant operation. Dr. Fleming, a distinguished naturalist, in opposition to the hypotheses advanced by Baron Cuvier and Dr. Buckland, is inclined to attribute the extinction of such early quadrupeds as are sometimes found blended, as it were fortuitously, with more recent species, in al-

luvium, not to the deluge, but to the destructive influence of the chase.

As the security of the full complement of animals was guaranteed in the ark, "to keep seed alive upon the face of all the earth," it would seem that none were finally extinguished except incongruous and monstrous forms, or such whose variation of structure can be accounted for, very satisfactorily, on the principles of diversity of clime, and a change of density in the atmosphere at the deluge, with a corresponding one in its thermometric and atmometric character. In reference to the first of these, we may compare, for instance, the Asiatic with the African elephant; the gavial or crocodile of the Ganges with the crocodile of the Nile and the cayman of South America.

CHAP. V.

PHENOMENA OF CAVES ENCLOSING DILUVIAL MUD AND ORGANIC REMAINS—THE BIRD OF NOAH—DROMEDARY—THE RAINBOW—GIGANTIC REMAINS—CONCLUDING GEOLOGICAL REMARKS.

HOWEVER geologists may speculate, shift their ground as to the age of the world, and assume numerous revolutions, opinion seems now to be tolerably unanimous as to the chronology of a terrible deluge of waters by which the earth has been entirely inundated; and it is not pretended to have been prior to that recorded by the legislator of the Jews. Professor Buckland has the capital merit of this triumph in geology; and it is enhanced by the reluctance with which favourite dogmas were parted with, and the slow assent with which it was embraced. "In the whole course," says this writer, "of my geological travels, from Cornwall to Caithness, from Calais to the Carpathians, in Ireland or in Italy, I have scarcely ever gone a mile without finding a perpetual succession of deposits of gravel, sand, or loam, in situations that cannot be referred to the action of modern torrents, rivers or lakes, or any other existing causes; and with respect to the still more striking diluvial phenomenon of drifted masses of rocks; the greater part of the northern hemisphere, from Moscow to the Mississipi, is described by various geological travellers, as strewed on its hills as well as valleys, with blocks of granite and other rocks of enormous magnitude, which have been drifted (mostly in a direction from north to south) a distance

sometimes of many hundred miles from their native beds, across mountains and valleys, lakes and seas, by a force of water which must have possessed a velocity to which nothing, that occurs in the actual state of the globe, affords the slightest parallel." We have only further to adduce the testimony of M. Cuvier, second to none in the determination of this important geologi-"I conclude with M. M. Deluc and cal question: Dolomieu, that if there be any fact well established it is this, that the surface of our globe has suffered a great and sudden revolution, the period of which cannot be dated further back than five or six thousand years. This revolution has, on the one hand, engulfed and caused to disappear the countries formerly inhabited by men, and the animal species at present best known; and on the other, has laid bare the bottom of the vast ocean, thus converting its channel into the now habitable earth." Nothing, whatever, can overturn this evidence. Mr. Penn's conclusions also deserve considerable attention; they are thus expressed: "This globe has undergone two, and only two, general changes or revolutions of its substance; each of which was caused by the immediate will, intelligence, and power of God, exercised upon the work which he had formed, and directing the laws or agencies which he had ordained within it—

"That by the *first* change or revolution, (that of gathering the waters into one place, and making the dry land appear,) one portion or division of the surface of the globe was suddenly and violently fractured and depressed, in order to form, in the first instance, a receptacle or bed for the waters universally diffused over that surface, and to expose the other portion, that it might become a dwelling for animal life; and yet with an ulterior design, that the receptacle of the waters should eventually become the chief theatre of animal existence, by the portion first exposed experiencing a similar fracture and depression, and thus becoming, in its turn, the receptacle of the same waters, which should then be transfused into it, leaving their

former receptacle void and dry.

"That this first revolution took place before the existence, that is, before the creation of any organized

being.

"That the sea, collected into this vast fractured cavity of the globe's surface, continued to occupy it during 1656 years, (from the creation to the deluge;) during which long period of time, its waters acted in various modes, chemical and mechanical, upon the several soils and fragments which formed its bed; and marine organic matter, animal and vegetable, was generated and accumulated in vast abundance.

"That after the expiration of those 1656 years, it pleased God, in a second revolution, to execute his ulterior design, by repeating the amazing operation by which he had exposed the first earth, and by the disruption and depression of that first earth, below the level of the first sea, to produce a new bed, into which the waters descended from their former beds, leaving it to become the theatre of the future generations of man-

kind.

"That this present earth, was that former bed.

"That it must, therefore, necessarily exhibit manifest and universal evidence of the vicissitudes which it has undergone; viz. of the vast apparent ruin, occasioned by its first violent disruption and depression; of the presence and operation of the marine fluid, during the long interval which succeeded; and in its ultimate retreat."

It seems, to us, not improbable that the inhabitants of the antediluvian world were engulfed in the vortex of the new oceanic beds, with the exception of some few, whose fossil remains are scattered here and there to confound, as it were, the scepticism of the geologist.

Before we enter on the interesting evidence afforded by the phenomena of caverns, we may quote the language of Scripture, in reference to the subsidence of the diluvial waters. "And God remembered Noah, and every living thing; and all the cattle that was with him in the ark: and God made a wind to pass over the earth; and the waters assuaged:—the fountains also of the deep, and the windows of heaven were stopped; and the rain from heaven was restrained:-and the waters returned from off the earth continually: and after the end of the hundred and fifty days, the waters were abated. And the ark rested, in the seventh month, on the seventeenth day of the month, upon the mountains of Ararat. And the waters decreased continually (were in going and decreasing) until the tenth month: in the tenth month, on the first day of the month were the tops of the mountains seen." Before we proceed to a brief notice of caverns containing organic remains, it may be well to remark, that the dimensions assigned to the ark seem altogether sufficient for the important purpose for which it was destined. By the calculations of Dr. Arbuthnot it was eighty-one thousand and sixty-two tons. In extent it must have been longer than St. Paul's Cathedral from E. to W., and about fifty-four feet high. According to Snellius the ark must have been nearly half an acre in area.

The phenomena of caves present us with conclusive and irresistible testimony on the question of a universal deluge, certainly not referable to an epocha prior to that which Sacred Chronology assigns to the Noachic deluge. No sophistry, however subtile, can resist this evidence; nor the most mischievous infidelity with-Professor Buckland, in his interesting and stand it. delightful work, "The Reliquiæ Diluvianæ," has presented us with such a body of evidence, as to put for ever to silence "the gainsaying of foolish men." We consider this work, indeed, as one of the most sterling and valuable contributions to this science in modern times; and, though we by no means coincide with many of the opinions of this eminent geologist, the facts are stated in so clear and luminous a manner, as to leave us at liberty to accept or reject the inferences he draws from them. Both on the continent and in this country caves have been found, the floors of which are carpeted with diluvial mud, full of the spoils of organic remains of animals, savage and tame; and generally hermetically, so to speak, sealed up from the agencies of decay by an

incrustation of stalagmite which has been formed in process of time by the infiltration of water, containing calcareous matter, from the roof of the cavern. Wherever these caves are met with they present so remarkable a uniformity, that the contemporaneous introduction of the organic spoils they contain, is entirely referable to one and the same cause. Thus the depth of stalagmite in "Kent's Hole," and Kirkdale Cave, in England, remarkably correspond with that of the stalagmite which forms a cerement for the bones in the caves of Scharzfeld, Bauman's Höhle, Biel's Höhle, and Gailen-

reuth, on the continent of Europe.

The caves in question occur in LIMESTONE; and that of Kirkdale belongs to the oolitic series. That these caves were antediluvian, there can be no doubt. It seems altogether unnecessary for us to advert to any of the opinions which have been adopted to explain the use to which these caves have been subservient: the only hypothesis which demands particular attention is that of the author of "Reliquiæ Diluvianæ," whose opinion must ever claim deference and respect. Before proceeding to this question, however, Mr. Granville Penn's idea of their formation requires mention. He is of opinion, that the animal spoils were enveloped in calcareous matter during the prevalence of the deluge, and that gaseous matter being developed during the process of decay, the soft calcareous mass would expand and a cavern be formed in its interior; that in fact,

"The earth hath bubbles as the water hath, And these are of them."

This is sufficiently ingenious, but cannot be substantiated; because the chief and indispensable condition necessary for such an effect is altogether excluded; namely, the contact of atmospheric air. In the case supposed by Mr. Penn, the animal matter would be as completely sealed up, as the mummy in its sycamore coffin. Under such circumstances, decay and decomposition would be prevented in both cases. The orifices of the dens are generally, it is true, too small to admit the entire skele-

tons of the larger animals, but the diluvial waters would introduce them piecemeal. Entire skeletons of larger animals have, however, been found under such conditions; that of the rhinoceros, for instance, in the Dream Cave, near Wirksworth, Derbyshire. The very existence of any orifice, however small, would be fatal to Mr. Penn's conclusion. A tolerable idea of the nature of these caves may be formed by inspecting the sections of two of them in Plate III .- Fig. 22 is a section of Kirkdale Cave, in Yorkshire, and Fig. 23 that of Gailenreuth, in Franconia. The diluvial mud is seen represented in both; and in each, the diluvium contains a multitude of organic remains:—in both these limestone caverns, stalactites are observed to depend from the roof, and a crust of stalagmite to invest the floor of the caves. To the same class of phenomena, and of contemporaneous origin, must be referred the breccia of the caves at Gibraltar; of which Major Imrie has given a very interesting ac-It is concluded that the formation here is of two distinct eras, and of this conclusion there can be no doubt, from the fact, that in the concretion at the base of the rock, below King's Lines, which concretion consists of pebbles of the prevailing calcareous rock, there was found part of a green glass bottle, at a considerable depth under the surface. As it is altogether impossible to do justice to the interesting question of antediluvian caves, which would require an exclusive volume, we must be content with a mere glance at a limited number, and three shall be selected for this purpose; namely, the Cave of Gailenreuth, and those of Kühloch and of Kirkdale. The Cave of GAILENBEUTH is very interesting, not only for the quantity of the organic remains contained in it, but for the high state of preservation in which they are found: diluvial mud and pebbles are found mixed up with the bones interspersed through the mud, and these are interposed, as represented in the plate, between the floor of the native rock and the stalagmitic covering which is superimposed. On the crust of stalagmite being penetrated, there is revealed a bed of brown diluvial loam and pebbles, mixed with

angular fragments of rock, bones, and teeth. The entire depth of the diluvium was not ascertained by Professor Buckland, but it exceeds four feet. quantity of bones which the cavern contains is immense. According to this distinguished author, the phenomena presented by the Cave of Gailenreuth, are in entire harmony with the caves of England. Dr. B. concludes that the cavern must have been an antediluvian den of wild beasts; but, according to his description of the cave, there is no evidence whatever of its ever having been used for such a purpose by antediluvian animals. The diluvial mud, the rounded pebbles, the angular fragments of rocks, and the organic wreck, however, prove indisputably, that the animal remains and mud, &c., must have been washed into the cave by a diluvial wave. The Cave of KÜHLOCH is remarkable for the black animal matter which it contains. Dr. Buckland describes this single cavern as equal in its dimensions to the interior of a large church:-"There are hundreds of cart-loads," says this interesting writer, "of black animal dust entirely covering the floor, to a depth which must average, at least, six feet; and which, if we multiply this depth by the length and breadth of the cavern, will be found to exceed five thousand cubic feet. The whole of this mass has been again and again dug over, in search of teeth and bones, which it still contains abundantly, though in broken fragments. The state of these is very different from that of the bones we find in any of the other caverns, being of a black, or more properly speaking, dark umber colour throughout, and many of them readily crumbling under the finger into a soft dark powder, resembling mummy powder, and being of the same nature as the black earth in which they are embedded. The quantity of animal matter accumulated on this floor is the most surprising and the only thing of the kind I ever witnessed; and many hundred, I may say thousand individuals must have contributed their remains to making up this appalling mass of the dust of death. It seems, in great measure, to be derived from comminuted and pulverized bone; for the fleshy parts of animal bodies produce, by their decomposition, so small a quantity of permanent earthy residuum, that we must seek for the origin of this mass principally in decayed bones."* We cannot assent to Dr. Buckland's opinion, that this black animal matter proceeded from the bones of the animals which had perished. It is admitted that bones are found, or, at any rate, fragments of bones, among this immense mass of animal carbon; and if so. how came it to pass that they were not reduced to the same state of disintegration as the dust that embeds them? It is admitted that this animal earth has been stirred up, "again and again," in quest of the bones it envelopes; and which earth, indeed, is used as manure by the neighbouring peasantry: this fact will account for the state of the fragments: let it be remembered, too, that phosphate of lime, the solid matter of bones, is white, certainly neither black nor of a dark umber colour. The black animal matter is chiefly, there can be little doubt, derived from the decay of the animal muscle; the gelatinous cement of the bone could not furnish a sufficient supply for such an enormous mass as is presented in this charnel cavern. The bones would necessarily be stained with the carbonaceous matter in contact with them. Dr. Buckland, whose favourite theory is, that these caves were the dens of wild beasts—and who, of course, believes this to be one of the number-under the impression that the Cavern of Kühloch was an antediluvian bear's den, gives us the following curious calculation: "I have stated," says he, "that the total quantity of animal matter within this cavern cannot be computed at less than five thousand cubic feet: now, allowing two cubic feet of dust and bones for each individual animal, we have, in this single vault, the remains of at least two thousand five hundred bears, a number which may have been supplied in the space of one thousand years, by a mortality at the rate of two and a half per annum." A very natural question arises

^{*} Reliq. Diluv. Lond. 1823, 4to. p. 138

-Is this animal dust indeed that of BEARS? and on this question we may be fairly allowed to indulge our doubts. There is not the slightest evidence adduced to suppose, that the Cave of Kühloch had ever been a den for bears. The most difficult part of the question is. the presence of the black animal matter, and its absence in Kirkdale, &c. The unusual state of decay of the bones and teeth, in this black earth, Dr. Buckland is inclined to attribute to the exposed state of the cavern. resulting from its large entrance and contiguity to the atmosphere. We are inclined to attribute the entire phenomena more to the absence of the crust of stalagmite, and the non-infiltration of water from the roof of the cavern. The constant action of streams of water, impregnated with calcareous matter, in the Cave of Kirkdale and Gailenreuth, &c., it is obvious, would first separate and wash away the animal muscle from the bones; and finally, by investing the solid bones with a stalagmitic crust, preserve their integrity. The absence of such infiltrations in the case of Kühloch. affords an easy solution. Besides all this, from the large mouth of the cavern, the bodies of animals, in a state of comparative integrity, would be washed, by the influx of the diluvial tide, into the cave; whereas, from the contracted dimensions of the opening of the caves of Kirkdale, Gailenreuth, Bauman's Höhle, &c., the organic remains, as is proved to be the case, would only be transported into the interior, piecemeal or in fragments, as far as regards the larger animals. It is thus evident, that we might naturally expect to find a much greater mass of animal muscle collected together in this cavern. The brown diluvial loam, at any rate, refers the phenomena to the Noachic deluge.

The celebrated Cave of Kirkdale, near Kirby Moorside, in Yorkshire, must not be overlooked: its phenomena are interesting in a high degree; and Professor Buckland has the chief merit of having investigated its contents with great industry and indefatigable attention; he has described it with remarkable precision and particularity; and, indeed, his valuable communications, on the subject,

to the Royal Society, in 1822, gave it considerable eclât; and public attention was roused and excited, in an extraordinary manner, to the wonderful phenomena it developed. This cavern has been explored by numbers: among others, Messrs. Gibson, Salmond, Young. &c. Mr. Gibson, it would appear, collected not less than three hundred canine teeth of the hyæna; and Dr. Buckland estimates the total number of hyænas, of which there is evidence, at not less than two or three hundred. It is the opinion of this eminent geologist. that Kirkdale Cave has been an antediluvian hyæna den; but the arguments adduced appear, to us, altoge-The fossil bones which have been ther inconclusive. found in Kirkdale Cave, are those of the hyæna, tiger, bear, wolf, fox, weasel, elephant, rhinoceros, hippopotamus, horse, ox, deer, rabbit, (or hare) water rat, mouse, and birds. That hyænas should leave fragments of water rats, mice, and birds, is not likely; and it is more difficult still to account for the manner in which these animals came by the spoils of tigers, and bears: and, above all, the fragments of pachydermata, as of the elephant, rhinoceros, and hippopotamus: nor is it very likely they would devour their own species to such an extent. The birds, the organic remains of which were found in Kirkdale, appear to be the raven, pigeon, lark, a small kind of duck, and a bird about the size of the thrush.

Dr. Buckland observes, that he has information of about ten elephant's teeth having been found, and that most of these teeth are broken. Could the jaws of even a hyæna crack an elephant's tooth? It is hard to be believed. Our author has seen six molar teeth of the hippopotamus, and at least fifty of those of the rhinoceros, admitted to have belonged to aged animals. Dr. Buckland thus concludes: "It must appear probable, from the facts discovered, particularly from the comminuted state and apparently gnawed condition of the bones, that the Cave of Kirkdale was, during a long succession of years, inhabited as a den of hyænas, and that they dragged into its recesses, the other animal

bodies whose remains are found mixed indiscriminately with their own." There are many and serious objections to this hypothesis, irrespective of the fact that the hyæna now exclusively inhabits a tropical region: nor do the habits of the modern hyæna at all warrant such Dr. Buckland considers the inference as a conclusion. almost amounting to certainty by his discovery of the calcareous excrement, (or rather what has been supposed so) called album gracum, and adjudged to be that of the hyana: but why may it not also have been that of some other carnivora, whose fossil remains are mixed with those of the hyæna? It is true this animal may be greedy of bones beyond others; but it does not appear to us quite so obvious, how, this being granted, so many bones should be strewed around and lie neglected. As for the album gracum, though some of it may have belonged to the hyæna, part might have appertained to the tiger, &c., and have been liberated from the intestinal canal on the decomposition of the body. The only remaining tangible ground for Dr. Buckland's opinion, is the fractured bones which are concluded to be cracked and gnawed by the said hyænas: "the jaw bones also, even of the hyænas, are broken to pieces like the rest." Our author says: "In all the caves both teeth and bone are in an equal state of high preservation, and shew that their fracture has been the effect of violence and not of natural decay." On this subject there can be no dispute: the only question is respecting the agency by which it has been effected; and it appears, to us, far more likely to have been accomplished by the violence of the waters of the deluge and the sharp points and angles of the rocks against which the flux of the tide would impel them. Dr. Buckland's reasoning, though extremely ingenious and interesting, appears to us altogether unsatisfactory; and the comparative view given of the recent marks of the teeth effected by a living hyæna at Oxford, and those supposed to have been made by antediluvian hyænas from Kirkdale Cave, given in Plate XXIII of his work, are very fanciful and inconclusive. We have examined, with considerable attention, bones from Kirkdale Cave, and also from Kent's Hole, supposed to have been gnawed by hyænas; but we are free to confess, that, to us, at least, there seems to be no evidence to warrant Dr. Buckland's conclusion. "In many of the most highly preserved specimens of teeth and bones," says the Professor, "there is a curious circumstance, which, before I visited Kirkdale, had convinced me of the existence of the den, viz. a partial polish and wearing away to a considerable depth, of one side only." This appears, in several cases, to amount to more than one fourth of the entire thickness of the bone. This ingenious author observes: "I can imagine no other means than the repeated touch of the living hyæna's foot and skin, by which this partial wearing away and polish can have been produced." Our opinion cannot coalesce in this conclusion: and M. Cuvier, abandoning Dr. B's idea, attributes the phenomenon to the action of water. The continual dropping of the water from the roof of the cavern would produce this precise effect; and there is no need, whatever, to suppose such an agency, as Dr. B. has advanced hypothetically, when there is already one now in operation every way equal to this purpose. The specimen represented by Dr. Buckland* can be explained in no other way, as any one must be fully satisfied who will inspect the plate. The continued action of this water would first obliterate all the animal muscle investing the bones, and produce that polish and those cavities, &c., before the stalagmitic crust would invest the bones and cere them. We think that it would be no great difficulty to substantiate this position. We cannot do better than quote our friend Mr. Young's valuable and judicious remarks on this question, with which our own opinion generally coincides—

"Masses of animal matter might be floated at the deluge, from the equatorial regions to this part of the globe; yet we agree with Professor Buckland in thinking, that animals now peculiar to Asia or Africa,

might live here before the deluge. We also assent to his opinion, that the cave was shut up by the deposition of the alluvial beds, at that era, and that the relics which it contained are all antediluvian. We do not, however, see any force in the arguments which he employs, to persuade us that the cavern was an antediluvian den.

"The Professor's description of the cave and its contents is generally correct; but there are a few of his statements that are erroneous. He alleges, that the bones were covered and preserved by the mud: but many of the bones were partially, and others wholly, exposed on the surface of the mud; and the relics so exposed, were usually found in the best state of preservation. He supposes, that the bones which have one side smooth, and the other rough, had stuck fast in the floor of the cave, where the side that was uppermost was polished by the feet of the hyænas, in going to and fro; but, as far as we can learn, no bones of this kind, nor any other, were found sticking to the rocky floor. How, indeed, could they be fixed there, when there was no soft substance for them to stick in; the mud, by the Professor's own account. not being introduced till the deluge? The truth is, all the bones of this kind appear to have been found lying loose on the surface of the mud, not fixed under it; the exposed side being that which was smooth and fresh, while the side touching the mud was rough, discoloured, and often partially decomposed. This statement we make, both from our own observations, and on the authority of Mr. Salmond, who explored the cave more carefully than any other individual. Dr. B. is also greatly mistaken, when he asserts, that, "in the interior of the cave, there was not a single rolled pebble, nor one bone, or fragment of bone, that bears the slightest mark of having been rolled by the action of water." A great many of the bones, indeed, particularly of those found at the entrance of the cave, had scarcely any appearance of being waterworn; but by far the greater part of the relics, especially those extracted from the interior recesses of the cave,

were decidedly water-worn. In examining on the spot a large heap of bones and fragments which had just been brought out from the remote branches, we could not find one specimen that was not water-worn; and some fragments were so rounded and smoothed as to resemble pebbles. We saw also a few real pebbles from the cave, and sand is said to have been met with in some parts among the mud. Several rounded fragments, and a pebble or two, are in the Museum. similar cavern in the Manor Vale, near Kirkby Moorside, we found both sand, gravel, and decayed vegetable matter, though no animal remains were there discovered. Besides, we ought to consider, that in the bottom of the diluvian ocean, as in that of the present, there might be spots were mud prevailed, as well as others where sand and gravel predominated. On this head, we may also add, that the fact, of which we were eve-witnesses that the bones from the furthest recesses of the cave were all obviously worn and rounded, while those from the entrance were but partially so, directly favours our hypothesis, and opposes the idea of their being polished by the feet of the hyenas; for, according to our view, the bones that were drifted furthest into the cave would be the most worn, whereas, according to the Professor's theory, the smoothest bones ought to have been found in the entrance, the grand thoroughfare where the hyænas most frequently trode.

"Some of Dr. Buckland's collateral proofs of his theory appear to be the offspring of fancy, rather than the result of accurate observation. Such are his arguments drawn from the broken state of the marrow bones, and the curved fractures of some of them. The marrow or hollow bones are the very bones that we might expect to find broken, by whatever agent they were demolished; and a curved fracture might be produced by dashing against the ledge of a rock, as readily as by the bite of a hyæna's jaws, with which he supposes the curvature to correspond. Among the many hundreds of bones which we examined, we never saw any vestige of the gnawings of hyænas, which he

speaks of, nor any marks of the action of teeth, save

only of the teeth of Time.

"His proofs of the existence of successive generations in the cave are equally fanciful. The drifted animal matter might be expected to contain relics of beasts in various states, young and old, weak and strong; but the difference observed in their state of preservation, is less owing to these variations, than to their favourable or unfavourable position in the cave. Some of the teeth and bones, exposed to the action of water, were much decayed, and almost black; while others, occupying more favourable positions, were remarkably fresh.

"There are several of the phenomena of the cave, which the den theory does not satisfactorily explain. It does not account for the fact of our finding no entire skeleton of even one of the hyænas. The assertion, that they all fled to the mountains, on the rising of the waters, is a mere gratuitous assumption, contrary to the probabilities of the case; for it is far more likely, that they would flee into the recesses of the cave, especially as some of these recesses are considerably higher than

the entrance.

"The great disproportion of teeth in the collection does not, as Dr. B. alleges, militate against the idea of their being drifted in; for when masses of animal matter were floating or drifting about, the most ponderous parts, such as teeth, would be most likely to descend to the bottom, and be lodged in hollows or chasms. The fact alluded to, militates most against his own theory; particularly as it regards the teeth of the elephant, rhinoceros, and hippopotamus. The entrance of the cave was too strait to admit the head of one of these animals; and the pachydermata have such short and stiff necks, that it would be no easy task for the hyænas to behead their carcases. Unless the hyænas were actuated by sentiments of glory, they would be more likely to carry off their legs, than to attempt to pull their jaws to pieces, and bear off their ponderous teeth as a kind of spolia opima. The grinder of a large elephant, such as we have seen fragments of from the cave, would be a most unlikely morsel for a hyæna to chew; nay, it appears impossible, that an elephant's grinder could be broken into such splinters,

by the force of a hyæna's jaws.

"But there are other difficulties opposed to the den It does not account for the fact, that some bones or fragments were found in the sides of the cave, near the roof; unless we suppose that the Kirkdale hyænas were very playful, and amused themselves by tossing up bones, and lodging some of them on the shelves of the rock. The fact is easily explained, on the supposition that the relics were drifted in; as the jerking of the water would throw up some of the bones,

and leave them in crevices.

"A stronger objection to Professor Buckland's notions, arises from the discovery of so many broken bones of birds, rats, mice, weasels, and other small animals, among the relics. Granting that hyenas might feed on such small creatures, for lack of better prey, is it credible that they would tear their little carcases to pieces, break their bones, and scatter them all over the den? Supposing that the hyænas would make a prey of a mouse as well as of an elephant, and feed on a rat as greedily as on a rhinoceros, can we imagine, that they would take the trouble to convey such minute creatures into their den? Or, if we grant that a hyæna might scamper home with a couple of rats or mice in his mouth, would a creature of such "omnivorous appetite" have patience to dissect them, to break and gnaw their bones and to suck out the marrow? Would he not rather snap them up like shrimps, at one morsel; and leave us no chance of finding any of their relics in the den, except as forming a component part of the balls of album græcum?"*

We may now merely add to these observations, that a remarkable mass of remains was discovered in a bed of diluvial loam, covering gypsum quarries, at Tiede, near Brunswick. These organic remains were crowded

^{*} A Geological Survey, &c. 2nd. edit. 4to. 1828. p 302.

together within a space not exceeding ten feet square. Among them were eleven tusks and thirty molar teeth of elephants: one of the tusks was not less than fourteen feet long; and with these were various bones and teeth of the elephant, rhinoceros, horse, ox, and stag. Having enumerated the organic remains found in Kirkdale Cave, it may be mentioned, that those found in the caves of Plymouth, are traced to the hyæna, tiger, bear, wolf, fox, rhinoceros,* ox, and deer. In the caves of Paviland, near Swansea, the organic remains belong to the hyæna, bear, wolf, fox, elephant, rhinoceros, ox, and deer; while the breccia, at Gibraltar, supplies evidence of the wreck of the tiger, horse, ox, deer, rabbit, water rat, mouse, and birds: and at Kösritz, near Leipsic, there are entombed organic fragments of the hyana, tiger, bear, rhinoceros, horse, ox, and deer.

We have already stated, that we are not anxious to give too much importance to the "natural chronometers" of De Luc, Kirwan, and others; but we cannot approve of Mr. Lyell's stigmatizing the valuable researches of these individuals, on this subject, as "presumption." They believed Revelation to be true, and therefore naturally expected to find, in the works of the CREATOR, its chronology verified. The silt left on the invasion of the land of Egypt by the periodical inundation of the Nile, as well as the formation of deltas, present no proper data for the solution of so difficult and complicated a problem. They are reduced to the same uncertainty as those already referred to. however, are the agents in operation, even now, in changing the great features of the globe. It has been estimated, that the weight of foreign matter daily transported, by the waters of the Ganges, into the Indian

^{*} Mr. Whidby announced the discovery, in 1814, of the remains of a rhinoceros embedded in a mass of clay, in the solid limestone, near Plymouth. No opening connected with it could be traced; its enclosure, therefore, must have been contemporaneous with the limestone which formed its matrix.

ocean, during the monsoons, would be equal to seventyfour times the weight of the great pyramid of Egypt; and Ferrara estimated the enormous river of lava which rolled from the crater of Etna, in 1667, at one hundred

and forty millions of cubic yards.

It is extremely interesting to remark, that the stalagmite on the floor of Kirkdale Cave, at one angle, (see Plate III, fig. 22.) and beneath the diluvium and its organic remains, (concluded by Dr. Buckland to be an antediluvian deposit,) is about one half the thickness of that incumbent over the diluvium, and which is post-diluvial. A precisely similar fact is presented in Kent's Hole, near Torquay, already referred to. If we suppose that the infiltration of calcareous matter, in solution, commenced at the creation or some centuries afterwards, this would exactly correspond with the Mosaic chronology, double the period which had elapsed before having

passed away since the deluge.

Having now examined the phenomena presented by antediluvian caves, we shall quote the interesting account which the Sacred Volume supplies us, of the singular messenger employed by the patriarch, to procure information as to the state of the diluvial waters ;-" And it came to pass at the end of forty days, that Noah opened the window of the ark which he had made: and he sent forth a raven, which went to and fro, (in going forth and returning) until the waters were dried up from off the earth. Also, he sent forth a dove from him to see if the waters were abated from off the face of the ground: but the dove found no rest for the sole of her foot, and she returned unto him into the ark; for the waters were on the face of the whole earth. Then he put forth his hand, and took her and pulled her (caused her to come) in unto him into the ark. And he stayed yet other seven days, and again he sent forth the dove out of the ark: and the dove came in to him in the evening; and lo! in her mouth was an olive leaf, plucked off. So Noah knew that the waters were abated from off the earth. And he stayed yet other seven days, and sent forth the dove which returned not again unto him

any more."* This narrative, though simple in its style, is expressive and beautiful. There is an eloquent charm which, while it touches the chords of truth, makes the heart respond to the tale. The raven would find sufficient for its carnivorous appetite in the flotage of the animal remains, on the briny flood, and would return to roost on the ark; but it was far different with Noah's bird, so long as the waters prevailed, there could be no pause for her weary wing, and the messenger would return to the ark. So soon, however, as the subsidence of the waters had permitted the olive to emerge, a sprig was plucked off, and borne to the patriarch in triumph. Emphatic symbol of peace! Commemorated through ages, it is still the symbol of peace. Along with the fig tree and vine, it is associated as the emblem of man's inheritance, and in the geography of its locality, the patriarch would hail the plane on which it flourished, and from which it was borne, as the place of his former abode. The dove would return, though the olive had emerged, because no food had as yet been provided. How long this ambassador of peace was absent, we cannot tell: we are only informed that the dove returned in the evening. If the winged messenger was despatched early in the day, it is not improbable that the delightful trophy was obtained from Mount Olivet, where, according to the late Dr. Clarke, "the olive still vindicates its parental soil." In considering the question of the geographical distribution of plants, this would likely be the nearest olive plane from the mountains of Armenia. It may be remarked also, that the olive remarkably synchronizes with the habits of the dove; since, according to Dr. Chandler, in his Travels in Greece, as soon as the olive matures its berries, vast numbers of doves, among other birds, repair for food to the olive groves. It cannot be irrelevant to remind our readers of the habits of the columba tabellaria, or the carrier pigeon, so called from the office to which it has been applied, viz. that of carrying letters, in the Levant, &c. Those of Mesopotamia

^{*} Genesis viii. 6, &c.

are the most famous in the world, and the Babylonian carrier pigeon is employed even on ordinary occasions at Bagdad. The geographical locality, therefore, of the carrier pigeon, it is interesting to remember, is in the vicinity of those very mountains where the ark finally rested. With us, the carrier pigeon is an exotic, and is now acclimated, or naturalized. Carrier pigeons fly at the rate of fifty miles an hour.—"Napoleon," the name of one of the carrier pigeons which were despatched from London a short time ago, at four o'clock A. M., reached Liege, in France, about ten o'clock in the day. Mr. Audubon states his having shot the passenger pigeon (columba migratoria) in America, and found in its stomach, rice, which could not have been obtained with-

in a distance of eight hundred miles.

Of all the animals in the ark, none was so well adapted to the patriarchal life as the CAMEL, and none so qualified to traverse the desert, or bear the privations to which it is there exposed. We might naturally expect, therefore, that the patriarch would not part with its valuable servitude, and accordingly find that for the camel no jubilee trumpet ever announced the year of The dromedary, it is admitted by all naturalists, has never had its prototype in a savage and untamed state, in postdiluvian times. The camel, therefore, remains a living medallion of the truth of the floating of the ark, and its imprisonment there. The Bactrian camel, or two haunched camel, is found in a wild state, and has been so recognized from the earliest times, in Usbec Tartary, the ancient Bactria, in Tibet, and near the frontiers of China. The dromedary, (camelus dromedarius) or camel with one haunch, has ever remained the domestic servant, attached to the service of The Arabs call the camel, the ship of the desert. The dromedary, from δρομος, a courier, is used as a beast of burden in Syria and Babylonia, and the country along the boundary of Africa, from Abyssinia to the kingdom of Morocco. This interesting animal subsists on the thorny shrubs of the desert, where other animals would perish, and the privations to which it is occasionally subjected, are remarkable;—it chiefly lives on the camel's thorn, (hedysarum alhagi*) which bears crimson flowers.

From what has been already stated, it must have been remarked, that it seems to us very probable, that the density of the atmosphere was changed at the deluge, having been considerably attenuated, nor can this inference be regarded in the light of mere speculation; there seems sufficient evidence that it really must have been so. The rainbow appearing for the first time—the abbreviation of human life, and the diminished size of animal and vegetable forms, all seem to require this condition. Far be it from us to doubt the direct interposition of JEHOVAH in this catastrophe, but God sometimes employs secondary agents to effect his designs. "I do set." says the Almighty, "my bow in the cloud, and it shall be for a token of the covenant between me and the And it shall come to pass, when I bring a cloud over the earth, that the bow shall be seen in the cloud; and I will remember my covenant, which is between me and you, and every living creature of all flesh: and the waters shall no more become a flood to destroy all flesh."† It cannot be reasonably supposed, that the rainbow ever appeared before the deluge, nor from our previous remarks, is it at all necessary to suppose it. Had the patriarch seen this beautiful phenomenon in an antediluvian world, its recurrence after the deluge could not have been a symbol of security, since, though the spectacle had been already witnessed, the deluge had supervened; but it was a new phenomenon, the consequence of the altered condition of the atmosphere, and was perhaps the result of a superadded law. The design implies stipulations of a somewhat similar de-

^{*} The Arabs use this lowly shrub for an extraordinary purpose. In spring the stem is divided near the root, and the seed of the water melon is dropped into the cleft; the seed soon grows, and the parasite bears abundance of water melons.

[†] Genesis, ix. 13, &c.

scription, and even pagan testimony might be cited as concurring in this view of it.

Εν νεφει ετηρίξε τερας μεροπων ανθρωπων.*

"Jove's wondrous bow of three celestial dies, Plac'd, as a sign to man, amidst the skies."

As connected with this part of the question, it may be stated, that Sir W. Herchell found that the coloured rays of the prismatic spectrum possessed different degrees of calorific power. A delicate thermometer placed in the violet ray, rose 2° Farenheit. The average of the green amounted to 2°.25, and that of the red 4°.58+. Sir Henry Englefield and M. Berard have confirmed these results. The singular disposition of the colours in the tabernacle in the wilderness, as well as in the temple at Jerusalem, and the invariable order in which they are always represented in the Sacred Volume, seem to imply something more than a happy incident or remarkable coincidence,-"blue, purple, and scarlet;" the two limits of the spectrum blending centrally their colours This seems to symbolize the "bow in the into one. cloud," which appeared on the recession of the diluvial waters—emblem of the divine beneficence and forbear-The very covering of the sacred ornaments bears the same interesting relation: "Goats' skins dyed red and hyacinthine, or violet skins," as the Hebrew text implies, and which the Septuagint expresses. The badger was unknown to Palestine, and even the Greeks and Romans had not a name to express it by; moreover, the badger was an unclean animal, and being forbidden by the precepts of the Mosaic code of laws, could not, therefore, be deemed a proper covering for the sacred and costly ornaments of the tabernacle. There is, therefore, something extremely interesting and apposite in the disposition and arrangement of the colours. It is not too much to suppose, that these might involve both an isoteric and exoteric meaning; that is, have a popular

^{*} Il. xi. v. 28.

design while they involved a philosophic truth. The Hebrew prophet himself might be indeed ignorant of the full amount of its philosophy; but it must be ever kept in view, that the whole proceeded immediately from Jehovah, according to "the pattern showed in the mount." It was the interesting pledge that "cold and heat," and "summer and winter," should not henceforth cease; and are not the comparative temperatures of the blue and red, interesting and expressive symbols of the difference of temperature in summer and winter? In our conchological inquiries it has struck us as remarkable, that the colouring matter of the purpura, from which the Tyrian dye was obtained, passes through a series of changes on exposure to the sunbeam, almost similar to the order referred to, "blue, purple, and crimson," before it settles into a permanent colour. The quippoes, a series of knotted cords, and of "diverse colours," which seem to have adumbrated the ancient annals of Peru, might be adduced in illustration, but we are rather anxious to act with caution and circumspection, than engage in fruitless speculation. That all these things, however, had a specific meaning, and an admirable design, there can be no doubt whatever.

The gigantic size of some of the antediluvian animals, judging from their organic remains, involves a question, as we conceive, of remarkable interest. Of these, the most celebrated are the mammoth, mastodon, megatherium, and megalonyx. The bones of fossil elephants and mammoths are remarkably prevalent; and, perhaps, no organic remains are more profusely scattered throughout the diluvium of the earth. They are found on the banks of the Tiber, and in the Val' d' Arno; in the Cave of Kirkdale, and in those of Germany, and elsewhere :in fact, in all climes and regions of the globe. "In all Asiatic Russia," says Pallas, "from the Don or the Tanais to the extremity of the promontory of Tchutchis, there is not a single stream, a single river, (above all, of those which flow through the plains,) on the banks or in the beds of which there are not found some bones of elephants, or of other animals, strangers to the climate." It would appear, indeed, that the ivory, in a state of remarkable preservation, proceeding from this source, has long been a considerable article of commerce in The most extraordinary discovery of this kind was that of the entire body of an elephant, at the mouth of the Lena, at its junction with the Frozen Ocean. It seems to have been preserved under an enormous superstructure of ice, and the flesh, which still remained attached to the bones, served as food for the bears, wolves, and dogs of the natives. It was covered with long black hair, and a reddish sort of wool. About thirty pounds of this wool and hair were collected from the earth. The tusks were nine feet long, and the head, merely, weighed upwards of four hundred pounds. The entire skeleton now remains in the Academy of Sciences, at St. Petersburgh. An elephant, almost entire, was also discovered on the banks of the Alaseia, which runs into the Frozen Ocean beyond Indigirska. Fossil bones of elephants are extremely common in Siberia; and a large island, in the Icy Sea, opposite the embouchure of the Lena and Indigirska, has been described as entirely composed of the organic remains of the elephant, buffalo, and rhinoceros. Near to Behring's Straits, according to Kotzebue, there is a small island where ivory, obtained from the tusks of fossil elephants, is so common as to be used for the most ordinary purposes by the natives. The fossil elephant, which has been called mammoth by the Russians, seems to have been from fifteen to eighteen feet in altitude, and to have been clothed with a thick wool of about five inches long, of a fawn colour, and to have possessed a mane of long stiff hair. The tusks appear to have been large and arched, somewhat spirally, upwards. Its organization, though different from both the Asiatic and African elephant, approached more nearly to the former.

The elephant which was destroyed, some time ago, at Exeter Change, was perhaps the largest ever introduced into Europe. In the skeleton, which has been constructed from its bones and which is very perfect, the head is thirteen feet from the ground, being eight

inches higher than the skeleton in the Museum of Comparative Anatomy in the Jardin des Plantes. The bones weighed eight hundred and seventy six pounds, and the skin seventeen hundred weight. The mammoth or fossil elephant of the Lena, it will be thus perceived, is of gigantic dimensions compared with that of Exeter 'Change. It is worthy of particular notice, in this place, that the венемотн, of Scripture, whose natural history is so particularly described in the Book of Job, remarkably corresponds with the circumstances under which the mammoth has been found in this country: we have already described its being discovered in a lacustrine deposit in Yorkshire. The structure of its teeth prove the mammoth to be precisely what the Scriptures say of the behemoth: "He eateth straw like the ox:" "he lieth under the shady trees in the covert of the reed and fens; the shady trees cover him with their shadow; the willows of the brook compass him about." * If we suppose that this lacustrine deposit is that of a local catastrophe, the association is very remarkable, and illustrative of its natural habitat, which is precisely that of the Sacred Volume.

The MASTODON, though not higher than the mammoth is, otherwise, of still greater dimensions. Its fossil bones were first found on the banks of the Ohio. The mastodon, though different from the elephant, still possesses some features of resemblance; its peculiarity chiefly consists in the enormous size of the molar teeth, which, however, are fewer in number than those of the elephant. Other species have been found elsewhere, as in the Val' d' Arno; and in South America, in the Camp de Géants, near Santa Fe de Bagota, at an elevation of seven thousand eight hundred feet above the level of the sea. Humboldt also found them at the height of seven thousand two hundred feet, near the volcano of Imbaburra. An almost entire skeleton of the fossil mastodon has been discovered, in America, near Long Branch. It was found in a marsh, much nearer

^{*} Job, xl. 15.

the ocean than any of those previously discovered, and is, perhaps, among the most perfect of those hitherto exhumed. Fossil bones, together with shells and wood, have also been found on the banks of the Irawadi, in the East. Among the bones, two new species of the mastodon were discovered; one of them was equal in size to the mastodon of Ohio, and the other approached that of the Asiatic elephant. There are also four species of the fossil rhinoceros, all apparently differing from any living This new fruit of enterprise, which attended the British mission to Ava, is interesting, as having discovered another locality for the mastodon, which had been hitherto supposed exclusively confined to America. Turquoises are considered to be fragments of the teeth of the mastodon, the colouring matter being derived from the blue phosphate of iron on the principle already adverted to, in reference to the marl pit of Ballaugh.

In the MEGATHERIUM and MEGALONYX, which seem distinct species, we have extinct animals, whose habits appear to have allied them to the sloth; but of a gigantic size, being nearly that of the rhinoceros. limbs terminated in five toes, and some of these were provided with enormous claws: their thick ossified skin seems to have been imbricated: from the structure of their teeth, vegetables and roots appear to have been These animals have been hitherto found their food. only in America. Crocodiles have been discovered with fins, but without feet; and marine lizards as large as whales. Mr. Bullock mentions his having seen, near New Orleans, the organic remains of an enormous crocodile, which, by the measurement of the right side of the under jaw, he calculated to be one hundred and fifty feet long! It is supposed that this animal, when alive, must have been twenty-five feet in circumference round the body. The ribs measure nine feet along the curve, and are three inches thick; while the cranial bone weighs one thousand two hundred pounds, and exceeds twenty feet in its extreme length. We have already adverted to the iguanodon. One of these enormous marine lizards may have been the LEVIATHAN, described in such vivid characters in the Book of Job.* The luminous path described by his movement through the deep, refers distinctly to a marine animal. Still, however, it may have been indigenous to some gulf or delta, from its participating somewhat of an amphibious character.

These gigantic forms may be adduced as an evidence either of a vastly prolonged term of existence, or an altered density in the incumbent atmosphere, or of both Some animals, even now, increase in size with an increase of age. There is now being exhibited, in London, the skeleton of a whale, (balana mysticetus) which was found floating off the coast of Belgium, about twelve miles from Ostend, on the 3rd of Nov. 1827. Cuvier and others have estimated the age of this animal at about a thousand years. The fingers of the side fins are completely ossified. The following are its dimensions: the entire length of the skeleton is ninety-five feet; length of the head, twenty-two feet; length of the vertebral column, sixty-nine feet and a half; number of vertebræ, sixty-two. The entire weight of the animal, when found, was two hundred and fortynine tons: quantity of oil extracted from the blubber, four thousand gallons: weight of the skeleton, seventy thousand pounds. Such an occurrence in postdiluvian times is, however, rare; while, in antediluvian ages, the law seems to have been general, and the phenomenon common.

The several phenomena to which we have referred,—such as the breaking up of the fountains of the great deep, the tremendous deluge which descended from the heavens, the phenomena of the rainbow, the abbreviation of human life, together with the gigantic remains which we have just adverted to,—all tend to confirm the supposition of an altered density. The transition, in reference to the inmates of the ark, was comparatively gradual; and the animal system would conform itself to the change, as it is known to accommodate itself to

^{*} Job. xl. 1.

vast elevations, such as Mont Blanc, Chimboraço, and the Himālā; and though the summits of the latter have not been attained, Humboldt and Gerard have gained elevations at least from four to five thousand feet higher than Mont Blanc. The descent into deep mines, and

in the diving bell, proves the same fact.

Doubtless the impressions of geological botany are often tropical and sometimes gigantic: the tidal wave of the deluge swept from afar and brought with it the trophies of ruin; and the vegetation of other lands and distant climes supplied the materials that complete the picture of desolation. The curious fact, however, that a change in the density of the atmosphere would satisfactorily account for this gigantic feature presented in antediluvian botany, has been overlooked by geologists. A diminished pressure and an attenuated atmosphere would lessen the size. we leave a plant in the valley, and we meet its fac simile even in variety, on the summit of some alpine cliff, five thousand feet above the level of the sea: its botanical characters are the same, and its visage that of its fellow in the valley; but it is a dwarf-it is the very miniature of that we left so far below. Professor Dobreiner, of Jena, has made this the subject of direct experiment. Two glass vessels were employed, each of the capacity of three hundred and twenty cubic inches; and two portions of barley were sown in parts of the same earth, and moistened in the same degree: they were placed one in each vessel. The air was now exhausted in one, till reduced to the pressure of fourteen inches of mercury; and condensed in the other till the pressure equalled fifty-six inches. Germination took place in both nearly at the same time, and the leafets appeared of the same green tint; but, at the end of fifteen days the following differences existed: the shoots in the rarified air were six inches long, but from nine to ten inches in the condensed air. The former were expanded and soft; the latter rolled round the stem, and nearly solid: the former were wet on their surface, especially toward their extremities; the latter were nearly dry. The same fact applies to the clucidation

of gigantic animal forms.

Perhaps we may be charged with being too severe on geologists; let us, be therefore, clearly understood: we most gratefully receive from their hands, as a valuable boon, the interesting facts discovered by the practical geologist: but we cannot, and dare not surrender the charter of our hopes to reveries the most fantastical, and speculations the most wild and eccentric. Some there are who fancy they surrender little or nothing by conceding such important points to bold and unwarrantable demands. We think differently: we contend for the integrity of the truth with those who would dare to mutilate the Sacred Record. Truths are propounded in the Sacred Volume; we believe them to be the gift of divine communication; and while we rejoice to find that geological facts substantiate these truths to their full amount, we cannot consent to part with them for the unauthorized visions of those, who from the strata of the earth.-

> "Extract a register, by which "they" learn, That HE who made it, and revealed its date To Moses, was mistaken in its age."

Let us take Professor Sedgwick's admissions, and see whether we have not sufficient reason to withhold our amen to geological theories: "It might be supposed that the red sandstone and the conglomerate were formed during some short period of confusion, produced by the dislocation of older rocks; that after a time the sea again became tranquil; and the fossils of the lias were called into being, upon the ruins of an older world, by a new fiat of creative power! But in France and Germany, (in the region of the Vosges, and on the banks of the Neckar,) we meet with a solution of our difficulties: between the magnesian limestone and the lias, we have three great formations, each characterized by its suite of fossils! Between the deposition of the coal measures, and the lias of the West of England, there were completed at least five great geological periods, each distinguished by its own group of animals, and each, therefore, probably continued during a long succession of ages." We frankly confess our utter inability to reconcile these extraordinary opinions with the facts, literally propounded for our belief, in the cosmogony of Moses; and those who will cede the credibility of the Sacred Annals, corroborated by an overwhelming mass of testimony, to such visionary fancies, hold, we fear, the Sacred Volume with too loose a hand—we envy not their tenure.

"Non equidem invideo: miror magis:"

"Man," says the editor of a popular work, "in comparison of many other races of animated beings, the creature of yesterday, is not warranted in thinking that this globe was called into existence at the same hour when he began to hold dominion over it." The reasons assigned "for conscientiously assuming the great antiquity of the earth" are these: "the evidences are so strong, that our reason cannot withhold its assent; and secondly, because our conviction appears to conduct us onward to an enlarged idea of the wisdom and power of the great Author of the universe." To the same effect, as to the non-contemporaneous existence of man, are the words of Mr. Lyell: "It is never pretended that our race co-existed with the assemblage of animals and plants, of which all the species are extinct." We have only to observe, that we pity, sincerely pity, those who cannot perceive in these opinions a direct impeachment of the Truth of Revelation: but we choose rather to contend for the question as a physical truth, and on this broad basis insist, that, among the facts and phenomena of geology, there is not a solitary proof that can be brought forward to impugn the literality of the Sacred Records of the creation and the deluge. From a diligent and attentive examination of geological facts, and a personal investigation of many of the great phenomena of rocks, we can as conscientiously declare our conviction, to the contrary of that of the writers whose sentiments we have quoted. One would imagine, either that some

1

special revelation has been made to geologists, or that they have discovered some chronometer of the age of the world from which all the rest of mankind has been excluded. But unless they can not merely boast of these possessions, but shew to us that they possess them, we shall hold fast by what the volume of nature teaches, and not venture one step beyond what she expressly propounds and we are authorized to believe. The second reason assigned for the belief, is a very remarkable one: for if the high antiquity of the globe is proclaimed by nature as a physical truth, our consent is claimed and must be surrendered, whatever be the amount of our ulterior ideas, and whether the announced truth happens to chime with our imagined à priori sentiments, touching the Supreme Being, or not. On this principle, if the higher antiquity of the world synchronizes best with our conceptions of the Supreme Being, the more extended the date of its commencement the better: and would not a change, rung on its eternity, be to such a mind a loftier and more welcome note? The mere subsequent allusion to astronomy proves nothing. Unless the eternity of the world is advocated, there must have been a period when it began to revolve in the regions of space; and, this being granted, it amounts to the same thing, whether it began yesterday, or a million of years ago. "A thousand years are in the sight of GoD as one day;" and the converse of this is equally true: "one day is as a thousand years." Retrograding into the back ground of the lapse of time, and causing the first point of motion, in the revolution of the globe to recede, cannot enhance the sublimity of our conceptions. On such a supposition, every succeeding age, that rises in the vista of futurity, should ascend in the scale of grandeur, in reference to their ideas of the infinite CREATOR; for the farther removed from the point of creation, the more just and noble would become their conceptions of the "I AM, who inhabiteth Eternity." We do not profess to understand these novelties in the process of reasoning. In our astronomical pursuits and telescopic survey of the heavens, we are free to confess, that we have been often overpowered by their wondrous majesty; and, lost in the vastness of the spectacle, have worshipped "in the temple not made with hands:" but we cannot see what all this has to do with a simple geological question, which must be decided by fact, not fiction-by truth, not romance—which, though the novelty and wildness may make us wonder, may, after all, fail to convince. To conceive of a world in a wilderness for ages before man, "homo sapiens," the most elaborate prodigy of this world's wonders, was created, and for whose use every thing concurs to prove it was destined, is a proposition too monstrous to be believed. So beautiful a mansion so long untenanted by its lord! We are not now considering other worlds and other forms of existence, but simply the question of this "great globe and all that it inherit." To such an extent have some geologists gone, that they have even made it a question, seriatim, whether a fossil shell has ever yet been found having a living analogue in any existing species! Either fashionable geological theories, or Revelation must be abandoned as untenable. Geological facts and Revelation perfectly harmonize. If man did not exist along with extinct species of other animals found in diluvium, and admitted on all sides to correspond with the Mosaic deluge, then must the Volume which teaches the reverse statement, be false; and on the former view of it, man may have sprung from the waves of the deluge as Brahma did from Vishnu while he reposed in the flower of the Lotus which floated on the waters: or did man emerge from its mud;—like a phœnix, from the organic ruin of a world destroyed? We have considered it more honest and manly to meet the question fully. frankly confess our utter inability to reconcile geological reveries with the plain and simple facts propounded in Scripture. Let our readers make their election, and determine for themselves, which is most agreeable to the spirit of inductive science.

Had geology any pretensions to maturity, we should not wonder; but it is only a bantling of some quarter

of a century old. Let us pursue the concessions of the writer we have just quoted, and see whether there be in geology any ground for such crude assertions. "Twenty years are not yet passed away since M. M. Cuvier and Brongniart first published their researches on the geological structure of the Paris Basin. merable details exhibited in their various essays, the beautiful conclusions drawn from unexpected facts, the happy combination of mineralogical and zoological evidence; the proofs of successive revolutions, till then unheard of in the physical history of the earth; all these things combined, not merely threw new light on a subject before involved in compa ative darkness, but gave new powers and new names if induction to those who should, in after times, attempt any similar investigations," Again, "much remains to be done, before the structure of the various formations of the British Isles can safely be appealed to, as one of those complete middle terms of comparison, by help of which the disjointed fragments of a former world may, in imagination, be reunited. Respecting the perplexing phenomena of the crag-beds, on the coast of Suffolk, we are greatly deficient in information. The accounts of all our tertiary strata, however excellent at the time they were written, must be entirely remodelled. Even the history of the oolitic series, (the boast of English geology, and the type, to which foreign naturalists are attempting to conform some of their own secondary rocks,) is defective. The history of our coal formations is not yet perfect. The association of the coal and mountain limestone of Northumberland has not been well explained. The great corresponding deposits of Cumberland are undescribed." Can it be believed, that these are the sentiments of one of the very first of modern geologists? and, if such be his confession, is it too much to be cautious in accepting the propositions of "geological logic?" or can it be said, that our remarks are more severe than just? We by no means complain of the contributions made by modern geologists to science; they have been industrious and indefatigable; but we protest against their

bringing forward unsupported speculations, which directly contradict the records of Scripture. When geologists present for our belief their propositions, we had better put the simple question which one of the Scavans of the Royal Society at length bethought himself of, in reference to the witty monarch's problem of the weight of the tub and the fish: "Is it so?" This is a very reasonable demand; and a denial of the request would be suspicious. We are not, we believe, what is called a "Hutchinsonian," and scarcely know what the term Truth is alone the object of our diligent pursuit; and our opinion may be received with less suspicion, when it is remembered, that the result of our present inquiry forms no lecessary or essential part of our avocations, excepting so far as every one is deeply interested in this paramount of all possible questions.

The geologist requires us to surrender the first links of the chain of Revelation. "Be it known, however, that we are not careful to answer him in this matter;" "neither will we fall down nor worship the image which he hath set up." Surely it is not too much, that we first require from the geologist a test by which we may be able to discriminate between literal facts and metaphorical tropes, that we may be enabled to examine and estimate the pretensions of his dicta. Mr. Lyell talks about geologists "who desire to pursue the science according to the rules of inductive philosophy." an one we fear may indeed be accounted a rara avis. By some of our readers it may be supposed, that we have devoted too large a portion of our volume to the evidence derived from geology; but, alas! we know full well, that among geologists there is a sad preponderance of scepticism, which we can only account for by their having got entangled in the meshes of a net of their own device; and we, therefore, have felt anxious to place the simple facts of geology before our readers, as far as our limits permitted; which, after all, however, must necessarily be considered a mere outline.

CHAP. VI.

THE DISPERSION-THE TOWER OF BABEL.

SOON after the diluvial waters had subsided, the Sacred Narrative informs us, that Noah became a husbandman and planted a vineyard. Having indulged to excess, the patriarch, it is recorded, became insensible. We have alluded to this event because Sir Wm. Jones succeeded in discovering the fact here mentioned in the Padma-puran of Hindustan, of which he has given a translation: nor can the identity of Satyavarman and Noah be doubted. This circumstance, therefore, is thus singularly accredited by testimony as independent as it is unsuspicious, and the lapse of time was not so considerable as to render doubtful its being secured by tradition. It is as follows: "Satyavarman, being continually delighted with devout meditation, and seeing his sons fit for dominion, laid upon them the burden of government, whilst he remained honouring and satisfying the gods, and priests, and kine. One day, by the act of destiny, the king, having drunk mead, became senseless and lay asleep naked: then was he seen by C'harma, and by him were his two brothers called, to whom he said, what now has befallen? In what state is this our sire? By those two was he hidden with clothes, and called to his senses again. Having recovered his intellect, and perfectly knowing what had passed, he cursed C'harma, saying, Thou shalt be the servant of servants; and since thou wast a laughter in their presence, from laughter shalt thou acquire a name.

Then he gave to Sherma the wide domain, on the south of the snowy mountains, and to Jyapeti he gave all on the north of the snowy mountains; but he, by the power of religious contemplation, attained supreme bliss." The identity of this detail with that recorded in the ninth chapter of Genesis, cannot be doubted.

We are informed in a subsequent chapter, that "the whole earth was of one language and of one speech. And it came to pass, as they journeyed from the east (or eastward) that they found a plain in the land of Shinar; and they dwelt there-and they said one to another, Go to, let us make brick and burn them thoroughly. And they had brick for stone, and slime had they for mortar. And they said, Go to, let us build us a city, and a tower, whose top may reach unto heaven; and let us make us a name lest we be scattered abroad upon the face of the whole earth."* simplicity and perspicuity observable throughout the Sacred Records are two of the principal features of truth. It presents itself unveiled to the scrutiny of the world, while facts confirm its title to all acceptance. In process of time, the descendants of the patriarch "became vain in their imaginations and their foolish heart was darkened." That city, and that tower, in the ruins of Babylon and the Birs Nimroud, remain monuments of their folly and impiety. Their language which was one, was "confounded," and they were scattered over the face of the world: confusion is written in the very name, Babylon; and we find, in every country, memorials of a common offspring. "The LORD scattered them abroad from thence upon the face of all the earth; and they left off to build the city. Therefore is the name of it called Babel; because the LORD did there confound the language of all the earth; and from thence did the LORD scatter them abroad upon the face of all the earth." Without entirely consenting to the uncouth monosyllabic intonations, into which that distinguished orientalist, the late Dr.

^{*} Genesis xi. 1, &c.

Murray, considered all languages under heaven finally reducible, numerous circumstances concur to prove. that in one period of the earth's history, the nations were of "one language and of one speech." We cannot otherwise account for the universality of the tradition of This information must needs have been the deluge. acquired before the language of the earth was "confounded" and the "nations were scattered and peeled." However difficult we may find it to account for the distribution of mankind over the globe, the fact adverted to, determines, firm as the rock of truth, the dispersion from an original stock, and a language once common to all: while it decidedly negatives the extremely foolish and unphilosophical dogma once, at any rate, entertained, of distinct races of the human species having sprung from as many separate originals. God, in his providence. makes "the wrath of man to praise him;" and this remarkable event became the means of populating the renovated earth. Celebrated philologists seem to have considered the diversified languages of the globe as having sprung originally from one simple type. When we consider the simplicity of the structure of the letters, as well as the alphabet, in some languages, compared with the more complicated and confused letters and alphabets of other nations, we may reasonably infer, that there may have been, originally, a simple basis, when the nations of the earth and their language were one; and that the complexity observable in some cases, is an evidence that peculiar circumstances have produced This view of it is corroborated by the the confusion. remarkable fact, that some individuals seem to have acquired a common key to almost every language: such as Dr. Murray, Professor Lee, and others; not to mention that remarkable philological phenomenon. Roberts Jones, of Liverpool. Facts like these attest a common root, and that the diversified languages of the earth possess some simple key or cipher. The characters of Persepolis, Nineveh, and Babylon, are remarkably simple in their structure, and so are those called Virgular. The Hebrews possessed a simple character,

and their alphabet had a corresponding feature; on the other hand, the Chinese have an elaborate alphabet, and characters of the most complicated structure, which seem built up of those of Babylon or Persepolis. The Hebrew and Samaritan letters differ very inconsiderably, the characters in the former being square, and in the latter having a slight curve, as may be seen by referring to the letters on the Shekel. While other nations have almost entirely changed their language and the form of their letters, (of which our own country is a remarkable example) the written and expressed language of the Hebrews seem to have undergone little or no change. The awe and reverence with which they regarded the Sacred Writings contributed to this remarkable preservation; the whole being overruled by Divine Providence. By comparing the characters in which the Pentateuch has been written-for instance, the M.S. brought from India by Dr. Claudius Buchannan, and in all probability more than two thousand years old-with modern Hebrew, there seems to be no perceptible difference. This unchangeable peculiarity in the structure of the Hebrew characters from the earliest period of the world's history, has often forcibly impressed our mind as having no parallel, save in the unvarying aspect of that unchanged people whose records they are ;-they seem to wear the impress of their sacred and immutable original.

We are inclined to consider Druidical monuments as existing mementos of the event of the dispersion. Lithoi, or single pillars, mounds, cairns, cromlechs, laggan-stones, and Druidical circles, together with the sculptured obelisk, and the far-famed pyramid, all spring from a common source. These remarkable monuments are not confined to "one kindred or tongue." They are found on the plains of Hindūstan as well as on the plains of Egypt; in Mexico, and on the continent, as well as in the "islands of the sea." The surface of the British islands is studded with these legends of patriarchal times. In Ireland and England, Scotland and its isles, the islands of Anglesey and of Man, these lithoi or rude

stones abound; and in all these monuments may be inferred an identity of origin. The pillar that Jacob erected on his journey to Padan-aram, as a memorial to the Deity, as well as that which was reared between him and his father-in-law, in the Mount of Gilead, are instances of similar erections in patriarchal times. Of the same description was the sepulchral stone which Jacob raised over the grave of his beloved Rachel, on the road to Bethlehem. Such, too, was the stone which Samuel set up between Mizpeh and Shen. All these were to commemorate some remarkable event; some vow or some promise—a remembrancer or memorial of gratitude or of grief. Sometimes it recorded a solemn invocation to the Deity; at other times it served as the memorial of a compact between contracting parties, as was that in Mount Gilead. That which Samuel raised "under Bethcar," was to commemorate a signal victory over the hosts of the Philistines, in which Deity had visibly interposed for the armies of Israel. From these simple and rude pillars, up to the *trilithons* and circular arrangements of stones, at Aubery, and on Salisbury Plain, we may trace the same identity of belief which reared the Stonehenge on the plains of Gilgal, and the circular temple on Mount They were branches of a common root; ramifications of a common stream. This dispersion, of which the Druidical stones and circular temples in Great Britain seem to be existing monuments, must have taken place before the call of Abraham: the institution of the rite of circumcision seems to afford a palpable proof of this. This was entirely confined to the Hebrews, as the lineal descendants of the "father of the faithful:" and this institution is preserved inviolate until now. We consider the Druidical rites and ceremonies as decidedly proving a patriarchal origin, which, though corrupted and shaded by human errors and depravity, carry in them the type of patriarchal times, as described in the Volume of Inspiration. The religion of the Druids has suffered an eclipse; and it is only from the monuments they have left behind them, and a few obscure circumstances gleaned here and there, that we are enabled to form even a faint outline of their history. The British Druids are mentioned in the Annals of Tacitus, and in the Commentaries of Cæsar; but nowhere do we find the slightest allusion to the rite of circumcision having been practised among them. This distinction preserved the Hebrew line of ancestry. In this they were "diverse from all other nations." And, as in the days of our Saviour, they boasted that "Abraham was their father," so they now continue to assert their lineage by sustaining and perpetuating the

same painful rite.

The great emporium of the Druidical religion seems to have been Britain; and the temples of AUBERY and STONEHENGE proclaim that it must once have been, indeed, a powerful sway. Stonehenge, in Wiltshire, is a monument of British antiquity altogether unique: it is splendid in its ruin and magnificent in its decay. This Druidical temple, now a mass of dilapidated grandeur, is composed of two circular and two elliptical ranges of upright stones, with horizontal ones capping the outer circle; the whole being encompassed by a circumvallation of earth. The diameter of the area within the vallum, is nearly three hundred feet. The total number of stones appears to have been one hundred and nine. Thirty of these stones formed the exterior circle; forty composed the inner circle; fifteen were employed in the first, and nineteen in the second ellipsis. There is also a massive stone in the centre, called the altar stone, and is fifteen feet long. "The grandest part of Stonehenge is the outermost ellipse, consisting of five separate pairs of trilithons, or two large upright stones, with a third on the top as an impost. These stones are more regular in their shapes, and more carefully formed, than those of the outer circle. The interior oval consisted of nineteen upright stones without imposts." "By its vast extent, its peculiar character, quite distinct from the temples of upright stones found in various parts of the British islands and other countries of Europe, and even on the Asiatic coast of the

Black Sea, it is justly entitled to be considered as one of the wonders of antiquity." * "The altar," says Cooke, "is a blue, coarse, and firm marble, and designed to resist fire; it is placed a little above the focus of the upper end of the ellipsis." According to Dr. Stukeley, the ancient name of Stonehenge, namely, Choir Gaur, might be rendered, grand choir, or great church. As a Hebraism, it would signify the circular high place for the convocation or assembly of the people; and thus correspond with that of Gilgal, on the east of the Jordan, where Samuel went yearly, and where Saul was crowned king of the Hebrews. The temple of Aubery seems remarkable as well on account of the etymon of the name, Abiri, signifying the MIGHTY ONES, as its singular form, which allies it with some Egyptian hieroglyphic figures, conjoining the serpent and the circle. According to Dr. Stukeley, the figure of the temple at Aubery is that of a winged serpent. The outer part of the grand circle is a vast vallum or mound, with a very deep ditch in the inside. It is forty-five cubits (about eighty feet) broad: its diameter is seven hundred and fifty cubits: its circumference two thousand two hundred and fifty cubits; and the enclosed area comprises twenty-two acres. Within this was formed another circle of one hundred enormous stones, set upright, fifteen to seventeen feet high, and nearly as much broad; within this great circle were two minor ones, each composed of two concentric circles,—each circle further included several upright stones, &c. Immense avenues of upright stones conducted to the head of the serpent, and in an opposite direction terminated in the supposed tail;—the via sacra, which led to the two concentric circles, forming the head, of rude stones, extended more than a mile, and was formed of similar upright stones. An avenue composed of two rows of upright stones also represented the tail. The entire number of stones originally employed in this stupendous work has been computed at six hundred and fifty-two; and each rude

^{*} Turner's England and Wales: No. 7.

mass of rock was truly colossal in its dimensions. Dr. Stukeley mentions one of these stones, which when broken to pieces, "supplied twenty good loads." That these were Druidical temples there does not seem the least reason to doubt. On opening some of the neighbouring burrows, celts have been found wherewith the Archdruid cut down the mistletoe of the oak. The association of the oak with the mysteries of Druidical religion is very remarkable. The Supreme Being appeared to the patriarch Abraham by the oak of Moreh; Jacob buried Rebecca's nurse beneath an oak; and Joshua raised a stone pillar under an oak that was by the sanctuary. From hence the oak entered into heathen mysteries, and was consecrated to Jupiter: Homer celebrates the oaks of Dodona. Thus, too, grove worship had a place in patriarchal times: "Abraham planted a grove in Beersheba, and called there on the LORD, THE EVERLASTING GOD." In consecrated groves, and open temples, did the patriarchs worship the SUPREME Being, whom "the heaven of heavens cannot contain." In the deep solemnities of adoration, under such circumstances, there is something awful and sublime-with no roof save the vault of heaven, "a building not made with hands"—the mind would be deeply impressed; and, perhaps, king Solomon had an allusion to this worship, in the sublime prayer he offered up at the dedication of the temple. Amid the deep recesses of the grove, the soul would feel, as it were, overshadowed by the more immediate presence of the Deity, and be led to exclaim with the patriarch at Bethel: "How dreadful is this place! This is none other than the house of God, and this is the gate of heaven."* Grove worship, and that "on high places," there is sufficient evidence to prove, was practised by the Druids: Lucan in reference to them, expressly says,

"—— Nemora alta remotis Incolitis lucis."——

Though imperfectly acquainted with the worship of the

^{*} Genesis, xxviii. 17.

Druids, we can trace many circumstances connected with it, which refer distinctly to patriarchal timesno doubt mingled with heathen superstitions and idol-It seems to have been so peculiar that Cæsar,

in his Commentaries, particularly stigmatizes it on this

very account.

The Druids, according to Cæsar, presided in matters of religion, had the care of public and private sacrifices, and interpreted the will of the gods. They had the direction and education of the youth, by whom they were held in great honour; and being supreme judges, their decision was final in all controversies. He also states, that they were all under the control of an Arch-druid, never took up arms, were exempt from taxes, and military service; and enjoyed all manner of immunities. "It is one of their principal maxims, that the soul never dies; but after death passes from one body to another; which, they think, contributes greatly to exalt men's courage, by disarming death of its terrors. They teach many things relating to the stars and their motions, the magnitude of the world and our earth, the nature of things, and the power and prerogatives of the immortal gods." Casar expressly states that they immolated human victims; and that when criminals were wanting, the innocent were sacrificed. The most interesting remark in the Commentaries of Cæsar, includes a belief, attributed to the Druids, that nothing can atone for the life of man but the life of man. "Pro vita hominis nisi vita hominis reddatur, non posse aliter Deorum immortalium numen placari, arbitrantur." Cæsar also observes, "they compute the time by nights, not by days; and in the observance of birth-days, new moons, and the beginning of the year, always commence the celebration from the preceding night." Thus, according to Cæsar, the Druids exercised supreme jurisdiction in all matters, both civil and ecclesiastical. The computation of time from evening to evening is the order of creation, ("and the evening and the morning"): and it is thus that the modern Jew calculates his new moons and his sabbaths-from sunset

to sunset. The sixth of the Noachida expressly enjoins the administration of justice. Tacitus, in his "Annals," says, in reference to the Druids, on the invasion of Britain by the Romans, "a garrison was thereafter established over the vanquished, and the groves cut down by them, dedicated to sanguinary and detestable superstitions: for there they sacrificed captives, and upon their altars, as an oblation, spilled human blood. There, in order to discover the will of the gods, they consulted the entrails of men: practices of cruelty accounted holy by them." With the authorities of Cæsar and Tacitus we cannot rescue these aborigines of Britain from the charge of offering up human sacrifices, though some have endeavoured to exculpate them. In this respect there is, we fear, too close a resemblance to similar horrid practices in Ancient Mexico. We shudder at the terrific idols of the Aztecks, the gods of Montezuma: well, indeed, might a moloch, that required such holocausts of human victims, be called Tetzahuitl, or the terrific. The Budhist demon that haunted the tombs, and lived upon the dead, seems the very zero of ferocity compared with this personification of horror. Compared, indeed, with the ferocity of the ancient priests of Mexico, that of the tiger and the condor seems gentle and merciful. Grove worship is, as we have stated, attributed to the Druids by Lucan; and Tacitus tells us that the groves were cut down. We examined a place of this kind, near Penrith; and the gigantic pillars in its enclosure clearly determined, in our opinion, the use to which it had once been appropriated. Successive ages had witnessed the repeated fall of the hamadryads of the forest; but their scions had perpetuated their woodland ancestry. Whether Druidical worship was connected with pyrolatry, we have no datum to determine: that it embraced Tsabaism, or the worship of the host of heaven, seems clear from Cæsar: and in the Volume of Truth we find how prone men were "to depart from the living God," to worship the Tsebaoth, instead of HIM who made them,—The Jehovah Tsebaoth,—"The Lord of Hosts." This

idolatry is described in a way sufficiently clear in the vision of one of the prophets: "Between the porch and the altar were about five and twenty men, with their backs toward the temple of the LORD, and their faces toward the east; and they worshipped the sun toward the east."* Taking the Commentaries of Cæsar as our guide in this investigation, the Druids seem to have believed in the doctrine of the metempsychosis. and the form of the temple at Aubery, seem to connect them with Egyptian mythology; but from the absence of hieroglyphic symbols, and covered temples, it seems sufficiently evident that priority must be conceded to the Druidical religion. We have already adverted to the sick Singalese and his adoration of the Baali, or host of heaven. The following injunction seems to involve this as being an early idolatrous practice: "Thou shalt call ME no more Baali." The mythology of the east, and that of the Druids, it is evident, sprung from one source. It is not improbable that sacrifices were offered up, or fires kindled on eminences at stated times, as on new moons or other high festivals; and the cairns scattered here and there may attest the chosen spot. Numerous have been the opinions advanced on the subject of vitrified forts: their antiquity, however, is lost in the darkness of ages; but our opinion inclines very much to the supposition, that they were connected with the mythology of the Druids. We have particularly investigated one of these at Craig Phadrick, near Inverness. Intense, indeed, seems to have been the heat to which these vitrified masses were once subjected. Perhaps on these spots, holocausts of human victims were offered up to the moloch of the Druids, as was the case in the seven times heated furnace, on the plain of Dura, in the province of Babylon. In both cases, vitrified masses still attest the horrid sacrifice. Without entering further into the question of Druidical worship, we think that it bears sufficient evidence of a patriarchal origin, in which its elements may be recog-

^{*} Ezek, viii, 16. † Hosea ii. 16.

nised, though obscured and disfigured by the miserable defection and depravity of the human race. The German kirche, and the Scotch kirk, seem analogous to a Saxon word of similar import, and all apparently of Celtic origin, kir-roch signifying a circle. Thus we may trace the circular, roofless Pantheon of Rome, and the Abiri and Choir Gaur of Britain, to the "altar and twelve pillars" which Moses erected near Sinai, and the Stonehenge which Joshua constructed on the plains of Gilgal, after the passage of the Jordan. One of the most interesting circumstances connected with the worship of the Druids was their veneration for the mistletoe. We shall again advert to this circumstance, and merely add a few remarks on this parasitic plant, as it may serve to illustrate what we shall have to advance in the sequel.

Of this extraordinary parasite, viscum album, mistletoe, or as it was formerly called, misseldine, Dr. Borlase, speaking of the Druids, says, that they deified it, and were not to approach it but in the most devout and reverential manner. Toward the end of the year they went in solemn procession to gather it from the oak, (where, however, it is seldom found,) to present it to Jupiter, with an invitation to all the world to assist at the ceremony. The Druids had it in the most sacred veneration, called it the universal remedy, and held their sacrifices and religious feasts under the oak whereon it grew, leading two white bulls, never yoked; when the priest, clothed in white, ascending, cut it with a golden hook, while a white garment was spread beneath to receive it; of this they made a potion considered an antidote to poisons, &c. This plant, being of a bright yellow, Virgil compares to the celebrated golden bough of the sibyl. He places the mistletoe on an evergreen. is most frequently met with on the apple; and in orchards becomes, when frequent, in all probability It is also found on the hawthorn, pear, a serious evil. mountain-ash, and rarely on the oak. It has been found, too, on the ash, hazel, and maple. This singular plant is supposed to be the passport of Æneas. While the true mistletoe, l'oranthus europeus, flourishes on the oaks on the mountains of Arcadia, our mistletoe, viscum album, in classic Greece, takes up its abode in the silver fir. All our parasites, except this, are without leaves, and in their fullest vigour in summer. But, when the denuded apple-tree has not a leaf, symbol of life, and stands exposed, a naked trunk, the nursling of the storm, the mistletoe flourishes and flowers.

That the scite of ancient Babylon, on the banks of the Euphrates, is that determined by Major Rennell. M. M. Rich, Keppel, Mignan, Buckingham, Sir Robert Ker Porter, and other eminent travellers, there can be no doubt. The only difference of opinion seems to be in reference to the Temple of Belus, and the ancient Tower of Babel. Captain Mignan, considers the "El Mujellibah," or the overturned, as the Temple of Belus; and in this belief he is supported by the late Major Rennell. The sides of this vast ruin face the four cardinal points: the following are Captain Mignan's measurements: north side, two hundred and seventyfour yards; south, two hundred and fifty-six yards; east, two hundred and twenty-six yards; and west, two hundred and forty yards. This pile seems to have been constructed of kiln-burnt, and sun-burnt bricks, rising irregularly to the altitude of one hundred and thirty-nine feet at the S. W., and sloping toward the N. E., where the altitude of the ruin is one hundred and ten feet. Our author describes the top as strewed over with broken and unbroken bricks, which are thirteen inches square by three inches thick; many of these exhibited the arrow-headed character. Pottery, bitumen, vitrified bricks, shells, and glass, he describes as equally abundant.* The Honourable George Keppel says, in reference to the Mujelibe: "We stepped on pieces of alabaster, and on vitreous substances. numbers of entire kiln-burnt bricks, which were all fourteen inches square and three inches thick, were inscribed with these unknown arrow-headed characters, appearing to have been recently stamped rather than

^{*} Travels in Chaldea, London, 8vo. 1829, p. 165.

having undergone the action of four thousand years. The great buildings of Babylon appear to have been built with sun-burnt bricks, and coated with bricks burnt in the furnace."* We cannot, however, help thinking, that, notwithstanding there may be some difficulty in determining the question at issue, we must look to the Birs Nimroud, rather than to the Mujelibè, as the ruins of the Temple of Belus and Tower of Babel. The interesting researches of that estimable individual, the late Claudius James Rich, Esq., the E. I. Co.'s Resident, at the Court of the Pacha of Bagdad, seem to carry conviction with them. His first "Memoir on the Ruins of Babylon" appeared in the Mines d' Orient. Mr. Buckingham, subsequently determined the question more fully, by causing an excavation to be made, by which a more accurate idea of the structure was obtained. Mr. Buckingham observes, (vol. II. p. 380,) "The Tower of Belus was a pyramid, composed of eight separate stages, successively rising above and retiring within each other. these features the Birs perfectly correspond." "The form of its ascent is pyramidal; and four of the eight stages of which its whole height was composed, are to be distinctly traced on the N. and E. sides, projecting through the general rubbish of its face." These investigations seem fully to corroborate Mr. Rich's view of it, which is more completely substantiated in his "Second Memoir on the Ruins of Babylon." In Mr. Rich's excavations, at the Mujelibè, there was found "a wooden coffin, containing a skeleton in a state of high preservation. Under the head of the coffin was a round pebble; attached to the coffin on the outside a brass bird, and inside an ornament of the same material, which had apparently been suspended to some part of the skeleton. These, could any doubt remain, place the antiquity of the skeleton beyond all dispute."

^{*} Personal Narrative, London, 8vo. Second Edition, 2 vols., 1827, vol. I, p. 179.

[†] Memoir, &c. London, 8vo. Second Edition. 1816, p. 33.

Among the rubbish the skeleton of a child was also These facts seem to militate against our accepting the Mujelibè as the Temple of Belus. From Herodotus we learn that the Temple of Belus was the same as the Tower of Babel. According to Strabo, the Sepulchre of Belus was a pyramid of one stadium in height. The Tower of Babel, assuming five hundred feet for a stadium, would have a circumference of two thousand feet; that is, five hundred feet square. total circumference of the Birs Nimroud, is found to be two thousand two hundred and eighty-six feet; and that of the Mujelibè, two thousand one hundred and eleven feet. It is evident, from so near a correspondence, the question must be determined by other data than the measurement of the base of these mounds. We have, (in Plate III. fig. 25,) represented the appearance of the Birs Nimroud, as given by Mr. Rich, in his very interesting Memoir in the Mines d' Orient; though the artist has, inadvertently, given the summit a finished appearance which it does not possess. It is a massive ruin, cleft from the top. Mr. Rich thus describes its first appearance: "It burst at once upon our sight in the midst of rolling masses of thick black clouds, partially obscured by that kind of haze, whose indistinctness is one great cause of sublimity; while a few strong catches of stormy light, thrown upon the desert in the back ground, served to give some idea of the immense extent and dreary solitude of the waste in which this venerable ruin stands."* Mr. Rich's reasons appear, to us, altogether conclusive in the decision of this question, notwithstanding the distinguished authority of Major Rennell. Mr. Rich describes this wonderful ruin as consisting of a mound of an oblong figure, the total circumference of which is seven hundred and sixty-two yards. On the eastern side, it is cloven by a deep furrow, and is not more than fifty or sixty feet high. "On the western side," says Mr. Rich, "it rises in a conical figure to the elevation of one hundred and ninety-eight feet;

^{*} Memoir, 1816, p. 35.

and on the summit is a solid pile of brick, thirty-seven feet high by twenty-eight broad, diminishing in thickness to the top, which is broken and irregular, and rent by a large fissure extending through a third of its height. It is perforated by small square holes disposed in rhom-The fire-burnt bricks, of which it is built, have inscriptions on them; and so admirable is the cement, which appears to be lime mortar, that, though the layers are close together, it is difficult to discern what substance is between them: it is nearly impossible to extract one of the bricks whole. The other parts of the summit of this hill are occupied by immense fragments of brick-work, of no determinate figure, tumbled together and converted into solid vitrified masses, as if they had undergone the action of the fiercest fire, or been blown up with gunpowder, the layers of brick being perfectly discernible; a curious fact, and one for which I am utterly incapable of accounting." * To the same remarkable phenomena, Mr Buckingham bears testimony: "The appearance of these masses," (Birs Nimroud,) says this traveller, "and the fissure in the partition of the wall which still remains erect, furnish reasons to believe, that fire was used as an agent of destruction in this edifice,—not a fire-temple, as supposed; as, in that case, the vitrified appearance would have been seen as well in the standing part of the wall as in that which is fallen, and in both only in the interior surface of the enclosure which the fire might be supposed to have occupied; and what natural fire could be made to bear on such a fabric?" t which for strength, seems like one solid block. There does not seem any other method of accounting for the present condition of these remarkable ruins, but that they were destroyed by fire from heaven. It will, perhaps, be remembered by our readers, that soon after the erection of Nelson's Monument on the banks of the Clyde, that pyramid was struck by light-

^{*} Memoir, 1816, p. 36.

[†] Travels in Mesopotamia, &c. 2 vols. 8vo. London, 1827, vol. II. p. 373.

ning, and rent, for a considerable extent, downward from its summit: the fissure and ruin still remain. This remark is made in corroboration of the belief, that lightning, in all probability was, in the hands of the Supreme Being, the instrument employed for the destruction of this sublime and magnificent ruin. There is quite sufficient proof, in the molten masses of ruin scattered on the plains, of furnaces having been used, similar to that described in Daniel, as a "burning fiery furnace," into which the three Hebrew youths were cast by the savage orders of Nebuchadnezzar, when it was heated "seven times more than it was wont to be heated." Sir Robert Ker Porter found, in the vicinity of the Birs, lumps of black vitrified matter; and concludes that these may have belonged to furnaces. He also instances a tradition among the natives respecting the great triangular mound to the east of the Birs; namely, that, by order of Nimrod, Abraham was here cast into a furnace. furnaces used," says Sir R. K. Porter, "for the making fire-burnt brick, might have been very opportune to execute the mad judgments of Nimrod or Nebuchadnezzar."* We cannot, therefore, taking all the evidence with which ancient and modern travellers have supplied us, form any other opinion than that expressed by Mr. Rich, that the Birs Nimroud was, in all probability, the "Tower" which the descendants of Noah erected on the plains of Shinar. "Let us build us a city and a tower, whose top may reach to heaven, and let us make us a name, lest we be scattered abroad upon the face of the whole earth"-a structure that might "lift its top to the skies"-an elevated monument of the pride and prowess of man—the wonder of ages. Mr. Rich thinks that an extraordinary interference by miraculous agency might make them persist in adhering to this spot for the erection of a monument to their leader Belus; nor is it unnatural to suppose, when their consternation had ceased, that this might have been the case.

^{*} Travels in Georgia, Persia, &c. 2 vols. 4to. London, 1822, vol. II. p. 329.

CHAP. VII.

THE CALL OF ABRAHAM—BIRTH OF MOSES—EXODE AND PILGRIMAGE.

ABRAHAM, a native of the city of Ur, in Chaldea, now called Orfah, was selected, by the Almighty, from an idolatrous nation, to preserve on the earth the knowledge, and perpetuate the worship of the true Gop.— For this purpose it was, that the father of the faithful was summoned forth from among the ignicolists of Ur, that this heavenly spark might be kept alive, and that he might offer a purer sacrifice to the God of Truth, whom those around him knew not, and of whom the flame that ascended from the altar of these fire worshippers was but a faint symbol. It is delightful to trace this new star, in the patriarchal hemisphere, through its luminous track, and the bright promises of which it was the harbinger. Illuminating the darkness of that idolatry through which it moved, it at length set, rejoicing in the heavenly vision of a Messiah to come. Mahomedans hold the name of Abraham in reverence and respect; and the Emperor Severus was anxious to enshrine him among his gods. Among the legends which respect Abraham, the following, whether true or fictitious, is as interesting as it is beautiful: "As Abraham was walking by night from the grotto, where he was born, to the city of Babylon, he gazed on the stars of heaven, and among them on the beautiful planet Venus. 'Behold,' said he within himself, 'the God of the universe!' but the star set and disappeared, and Abraham felt the Lord of the universe could not thus be liable to change. Shortly after, he beheld the moon at the full: 'Lo!' he cried, 'the Divine Creator! the manifest Deity!' but the moon sank below the horizon, and Abraham made the same reflection as at the setting of the evening star. All the rest of the night he passed in profound rumination; at sunrise he stood before the gates of Babylon, and saw the whole people prostrate in adoration. 'Wondrous orb,' he exclaimed, 'thou surely art the Creator and Ruler of all nature! but thou, too, hastest like the rest to thy setting! neither then art thou my

Creator, my Lord, or my God!""

One of the most remarkable circumstances connected with the life of this distinguished character, is the destruction of the "cities of the plain," for their dreadful criminality; and the DEAD SEA wears such palpable evidence of the visitation of heaven, that even the wild Arab avoids the spot as he would the pestilence, and shudders on his approach to its brink. We cannot do better than cite the words of a recent traveller, with whose description, indeed, every one who has visited the scene, entirely concurs: "Whoever has seen the Dead Sea will ever after have its aspect impressed on his memory: it is, in truth, a gloomy and fearful spectacle. The precipices in general descend abruptly into the lake; and, on account of their height, it is seldom agitated by the wind. Its shores are not visited by any footstep, save that of the wild Arab, and he holds it in superstitious dread."-" The precipices around Sinai are savage and shelterless; but not like these, which look as if the finger of an avenging God had passed over their blasted fronts and recesses, and the deep at their feet, and caused them to remain for ever as when they first covered the guilty cities."

Every line in the patriarch's life is a history of interest; but we must leave "the father of the faithful," and now simply glance at two facts connected with Joseph, one of twelve sons—the lineage of Jacob, surnamed Israel, a prince of God. Israel was a stranger in Canaan, the country where he sojourned. Joseph, by

the mysterious providence of heaven, and whose history is detailed with inimitable pathos by the sacred writer, became, at length, governor of Egypt, and rode in Pharaoh's second chariot. Joseph acknowledged to his brethren, that the good hand of his God had been with him, and that all had been overruled for good. Ahought," said Joseph to them, "evil against me; but God meant it unto good, to bring to pass as it is this day, to save much people alive."—"A famine" is represented as being "sore in the land" of Canaan, and that "the people fainted by reason of the famine." It is also stated, "And the famine was over all the face of the earth."—"And all countries came into Egypt to Joseph for to buy corn, because that the famine was so sore in all lands."* Now, it is of importance to remark that there is a passage in ancient Chinese history which refers to a dreadful famine prevailing in that country; and it is quite evident that this distinctly alludes to the very famine which is represented in Sacred History, as "sore in all lands." As connected with this, and Pharaoh's dream interpreted by Joseph, wherein "seven good ears of corn" were representative of "the seven years of great plenty, throughout all the land of Egypt," we give a fac simile of an ancient Egyptian coin, remarkable for the reaper's putting forth his sickle, and the seven ears of corn he is about to reap. Whether this had a reference to the event of abundance—when there was "corn in Egypt," though famine in other lands-cannot be determined; it is, however, by no means void of interest, since it appears not improbable that this fact may have been intended to be commemorated by it. It is further worthy of remark, that when Joseph's father and his brethren came into Egypt, and were about to be presented to the king, they were instructed to say, that they were "shepherds;" which secured to

them the fertile land of Goshen, where they afterwards

[&]quot;had possessions, and grew and multiplied exceedingly."

* Gen. xli. 56, &c.

1

The reason assigned for this statement is a remarkable one: "every shepherd is an abomination to the Egyptians." This singular fact seems to have been corroborated by M. Champollion, in his researches into the ancient monuments of Egypt; and he is of opinion that it is not difficult to recognize the hyksos, or 'shepherd kings,' who had made predatory excursions into the territories of the Egyptians, and conquered the land, but from which they were afterwards expelled: they are depicted on these monuments, as prostrate under the footstools of the Pharaohs, as in Joshua, x. 24: "Come near, and put your feet upon the necks of these kings. And they came near, and put their feet upon the necks of them." So far was this bitter enmity carried against these hyksos, that the lowest of the people had their figures wrought into the soles of their sandals; that, at least, their effigies might be trampled under foot: this enmity they even carried to the tomb, and they are thus represented on the bandages of mum-These royal shepherds are represented as possessed of red hair, blue eyes, and covered only with an undressed hide wrapped loosely about them; -in all probability they were of Scythian extraction.

The Book of Exodus receives its name from the exode of the children of Israel from the land of Egypt: there having arisen a king in that country, who, it is stated, "knew not Joseph," nor remembered his services. The Israelites were subjected to the most grievous servitude. They were slaves, painfully oppressed by the task-masters of Egypt; so that, this country was emphatically called "The house of bondage." In the person of Moses, God raised up, a valiant champion of their cause; and when his advocacy, before Pharaoh, accompanied "by signs and miracles," failed to procure a rescue, he led them, triumphantly, forth from the midst of their enemies. This Moses was a Hebrew. The king

^{*} There is now a mummy at Paris which singularly illustrates this fact: a shepherd, bound with cords, is painted beneath the buskins of the mummy.

had issued a mandate, that all the Hebrew male children should be cast into the Nile. The daughter of Levi, however, happily succeeded in concealing her infant son for three months; -at the expiration of this period, when "she could no longer hide him," we are informed, that she "took for him an ark of bulrushes, and daubed it with slime and with pitch, and put the child therein: and she laid it in the flags by the river's brink." Here the ark, or little boat, formed of bulrushes, was discovered by Pharaoh's daughter and her maidens, when they repaired (as seems to have been the custom,) to the brink of the Nile. This protégé of the king's daughter was thus rescued from peril, and called, at her instance, Moses, i. e. drawn out. The child, thus saved, was immediately recognized as belonging to the Hebrews, and committed, it appears, to his own mother-the nursling of Providence. In Plate III. fig. 21, we have given a representation, copied from Belzoni's sketches from the tombs of the kings. The hawk-headed infant seems quite characteristic of the infant Moses. The hawk's head was indicative, among Egyptian hieroglyphics, of discernment, acute penetration and judgment: the little ark, or boat, in which he is confined, is of the precise description of those employed for navigating the Nile, in ancient times; and is now used in navigating the Tigris and the Euphrates, and even the rivers of Abyssinia. we read, in the prophetic Records, of "vessels of bulrushes on the waters." An Abyssinian traveller has informed us, that these boats of bulrushes are constructed by attaching bundles of a species of papyrus, (cyperus niloticus,) to a keel of acacia-wood, and uniting them at top, in the way represented in the figure; when the vessel is afterwards pitched within and without with bitumen. Moses formed too prominent a figure in the annals of Egypt to be omitted in its hieroglyphic history: indeed, we can collect as much from the authorities of Diodorus Siculus, Strabo, Tacitus, and others. We have only further to add here, as an interesting corroboration respecting the structure of

some names mentioned in Sacred History, in connexion with Egypt, that the researches already made, in Egyptian literature, amply confirm them. M. Champollion and others have shewn that the proper names of both sexes, in ancient Egypt, are often compounded of the names of Egyptian deities. In the hieratic text, ré, or shré, signifies the sun: thus, Joseph's father-in-law, Potipherah, was priest or prince of On, or Heliopolis, Petephré, in hieroglyphic literature, (city of the sun). signifies that which belongs to the sun, or ré. serves to shew, from what unexpected sources we may receive, as it were accidental, illustrations of the truths propounded in the Scriptures. Unexplored treasures of evidence may yet open on the world; gradually, it may be, as seem to be the designs of Providence; yet, at length, fully: and it appears to us very remarkable, that the evidence unfolded in proof of the truth and authority of Revelation, in the times in which we now live, is precisely of that description which fully meets the temper and tone of the philosophy and literature of the age ;-that scepticism and infidelity are met in the spirit of a progressive philosophy, and on the vantage ground of inductive science. If we reject Revelation, it is not for want of evidence; we remain without excuse, and are fully chargeable with the consequences which that rejection entails.

It forms no part of our present plan to discuss the remarkable adaptation of the wonders which Moses, in obedience to the commands of God, and gifted from on high with preternatural powers, to prove his divine embassage, wrought in the presence of the court of Pharaoh. On these exhibitions of divine power, well might "the heathen be cast down in their own eyes," when the utter helplessness of the deities they adored, was thus so conspicuously displayed. "Bel boweth down, Nebo stoopeth," before the Lord God of the captive Hebrews. "No other god can deliver after this sort."*

In like manner, we should think it no difficult task

^{*} Dan. iii. 29.

to prove, how wise and well adapted were all the institutions of the Divine appointment, promulgated to the Israelites through the medium of the priest of their profession, the leader of their armies, their counsellor and their judge, in obedience to, and under the guidance and direction of the theocracy of heaven. It must suffice for the present, that we simply advert to some incidents that occurred on their pilgrimage to the promised land, as supplying proofs in conformity with the design of our little volume. Heathen writers and local tradition perpetuate the events recorded in the Sacred Narrative, and we can even trace this perpetuity in the names of places in the districts where these events occurred. So that this very etymology becomes a per-

manent register of the facts.

Having passed the Red Sea, the Israelites wandered three days in the wilderness of Shur, but found no wa-They came at length to Marah, "but they could not drink of the waters of Marah, for they were bitter, therefore the name of it was called Marah."* Burckhardt describes a well called Howara-"the water of which is so bitter that men cannot drink it; and even camels, if not very thirsty, refuse to taste it." No doubt this is the Marah of Moses: what the plant was which Moses was directed to cast into these waters we cannot tell: but "the waters were made sweet" in consequence of Forskal mentions a plant which he states possesses the property in question. Be this as it may, the knowledge of this peculiar virtue was pointed out to Moses by a special communication. We confess we were much surprised at reading, in Mr. Milman's History of the Jews, a note connected with this event, from which we learn, that a medical friend of his had subjected to analysis some water brought to this country from a fountain called Marah, ("but probably not that of Burckhardt's Howara"). This specimen is described as possessing "a slightly astringent and bitterish taste." It is stated, that chemical examination shows these qualities

^{*} Exodus xv. 23.

to be derived from the selenite or sulphate of lime it holds in solution; "if, therefore," it is added, "any vegetable substance, containing oxalic acid, were thrown into it. the lime would speedily be precipitated, and the beverage rendered agreeable and wholesome!" Now, we have merely to remark on this extraordinary solution, that it is the first time we have heard that an astringent and bitterish taste can by possibility be imparted to water by an impregnation of sulphate of lime, though that character would be acquired by the presence of sulphate of magnesia, &c. It is certainly true that oxalic acid would decompose sulphate of lime; and it is equally true that some plants contain it; such, for instance, as the oxalis acetosella; though we are not aware that this plant is indigenous to Palestine. This plant, however, is not a tree, as stated in Scripture, nor a shrub bearing a berry, as suggested by Burckhardt, even though the analysis of Mr. Milman's medical friend had been entitled to the least attention. We are sorry to have to say, that we perceive much in this "History of the Jews" which subjects the author to considerable censure;—we mean, an awkward attempt to impute to natural causes what cannot be solved, but by the direct interposition of a Divine hand. The entire phenomena connected with that remarkable people imply all this, and cannot by possibility be solved without such a supposition.

The Israelites thereafter pitched their tents in an oasis, distinguished by the beautiful association of "twelve wells of water, and threescore and ten palm trees."* By the united testimony of travellers, Elim, where these wells and palm-trees were found, is still recognized by similar interesting features. No less than nine of these wells still remain to attest the spot, and the seventy palm-trees have become thousands.

The following chapter is occupied with an account of a singular phenomenon:—the fall of Manna. This remarkable and providential supply is thus described:

^{*} Exodus xv. 27.

"When the dew that lay was gone up, behold upon the face of the wilderness there lay a small round thing, as small as the hoar-frost, on the ground." We are further told, that "when the sun waxed hot it melted;" and when preserved until the following day it became corrupt, and "bred worms." To preserve the extra measure which they collected on the sixth day, Moses directed that on that day of the week they were "to bake and seethe" what should be required on the morrow, as on the sabbath none should fall. It is further added.—"And the house of Israel called the name thereof manna: and it was like coriander-seed, white; and the taste of it was like wafers made with honey."* Such are the curious and interesting particulars supplied by the Sacred Text. It is well known that a substance is used in medicine under this name, chiefly obtained from the Calabrias, and is collected from the leaves of the ornus rotundifolia, (fraxinus ornus, of Linnæus,) and a somewhat similar substance obtains in the onion; but from its purgative qualities, it is sufficiently obvious that the manna of the Scriptures is altogether different. According to Seetzen, Wortley Montague, Burckhardt, and other travellers, a natural production exudes from the spines of a species of tamarix, in the peninsula of Sinai. It condenses before sunrise, but dissolves in the sunbeam. "Its taste," it is added, "is agreeable, somewhat aromatic, and as sweet as honey. It may be kept for a year, and is only found after a wet season." The Arabs collect it and use it with their bread. In the vicinity of Mount Sinai, where it is most plentiful, the quantity collected in the most favourable season does not exceed six hundred weight. The author of the "History of the Jews" has a note to the following effect: "The author, by the kindness of a traveller, recently returned from Egypt, has received a small quantity of manna; it was, however, though still palatable, in a liquid state, from the heat of the sun. He has obtained the additional curious fact, that manna, if not boiled or baked, will not keep

^{*} Exodus xvi. 14. and 31.

more than a day, but becomes putrid and breeds maggots. It is described as a small round substance, and is brought in by the Arabs in small quantities mixed with sand."* It would appear from these very interesting facts, that this exudation, which transpires from the thorns or leaves of the tamarix, is altogether different from the manna of the manna-ash. We cannot doubt, from the entire coincidence in every respect, that the manna found in the wilderness of Sinai by the Arabs now, is identical with that of the Scriptures. That the minute particulars recorded should be every whit verified by modern research and discovery, is worthy of great attention. As Moses directed Aaron to "take a pot and put an omer full of manna therein, and lay it up before the LORD, (in the ark,) to be kept for the generations of Israel," as a memorial; so the remarkable phenomenon remains in evidence of the truth of the narrative. The *miracle*, however, remains precisely as it was. There is sufficient to appeal to, as an existing and perpetual memorial to all generations. The MIRACLE, from which there can be no appeal, and which allows of no equivocation, consisted in its ample abundance, in its continued supply, and its complete intermission on the sacred day of rest. Nutritious substances have fallen from the atmosphere in some countries; such, for example, was that which fell a few years ago in Persia, and was examined by Thenard. It proved to be a nutritious substance referable to a vegetable origin. We have before us, at the moment of writing these pages, a small work, printed at Naples in 1793, the author of which is Gaetano Maria La Pira; it is entitled, "Memoria sulla pioggia della Manna," &c.: and describes a shower of manna which fell in Sicily, in the month of September, 1792. The author, a Professor of Chemistry, at Naples, gives an interesting account of the circumstances under which it was found, together with a variety of interesting particulars, some of which we shall select, and we do so to prove that a similar sub-

^{*} History of the Jews, vol. I. p. 92.

stance may have an aerial origin, though carried up in the first instance, it may be, by the process of evaporation; -this would considerably modify the product. On the 26th September, 1792, a fall of manna took place at a district in Sicily, called Fiume grande; this singular shower lasted, it is stated, for about an hour and a half. It commenced at twenty-two o'clock, according to Italian time, or about five o'clock in the afternoon: the space covered with this manna seems to have been considerable. A second shower covered a space of thirtyeight paces in length, by fourteen in breadth. second shower of manna, which took place on the following day, was not confined to the Fiume grande, but seems to have fallen in still greater abundance in another place, called Santa Barbara, at a considerable distance: it covered a space of two hundred and fifty paces in length, by fourteen paces in breadth. An individual, named Giuseppe Giarrusso, informed Sig. G. M. La Pira, that about half-past eight o'clock, A. M., he witnessed this shower of manna, and described it as composed of extremely minute drops, which, as soon as they fell, congealed into a white concrete substance; and the quantity was such, that the whole surface of the ground was covered, and presented the appearance of snow: the depth, in all cases, seems to have been inconsider-This aerial manna was somewhat purgative, when administered internally; and the chemical analysis of it seemed to prove, that its constituents, though somewhat different from that obtained from the ornus rotundifolia,* did not materially differ from the latter in its constituents. We give Sig. La Pira's description of its appearance: being of a white colour, and somewhat granular or spherical, it seems to have had some resemblance, externally, to that of the Scriptures; but it is not stated

^{*} Also the oah, ilex, chesnut, &c., though less abundant and more rare than on the leaves of the manna-ash. The ordinary manna collected in Sicily, comes from districts in the Val Demone and the Val di Mazzara, at some distance from the localities where this aerial manna fell.

that it became corrupt on being preserved: "Questa sostanza zuccherina nella massima parte è caduta in forma di minutissima arena bianca: Osservata colla lente non vi si ravvisa alcuna forma regolare, ma vi si scorge una figura il più delle volte sferoidale, e talora anche perfettamente sferica: I grani maggiori non eccedono di linea di diametro: Posti sul vetro ed osservati colla lente si veggono semi-trasparenti: Non hanno alcun aspetto grasso o umido, ma bensì un'apparenza del tuto secca, ed alquanto polverosa; da ciò nasce quel panno, che si forma sulla superficie interna delle bottiglie di cristallo

nelle quali ci conservano,"*

At the rock, in Horeb, called Meribah, Moses miraculously supplied the people with water. He smote the rock, and an abundant stream immediately issued: this extraordinary source of supply is now dried up, but there is still left sufficient evidence to confirm the fact. It will suffice for our purpose that we quote, in corroboration, the description of an eye-witness and recent traveller: "We came to the celebrated rock of Meribah. It still bears striking evidence of the miracle about it; and it is quite isolated in the midst of a narrow valley, which is here about two hundred yards broad. There are four or five fissures, one above the other, on the face of the rock, each of them about a foot and a half long, and a few inches deep. What is remarkable, they run along the breadth of the rock, and are not rent downwards; they are more than a foot asunder, and there is a channel worn between them by the gushing of the water. The Arabs still reverence this rock."† Dr. Clarke only spoke the truth when he asserted that the BIBLE was the best itinerary that the traveller in Palestine could possess.

^{* &}quot;Memoria," &c. In Napoli, 1793, p. 23.

[†] Letters from the East, 2 vols. Lond. Second Edit. 1826, vol. I. p. 226.



CHAP. VIII.

TABLES OF STONE—ELEVATION OF THE BRAZEN SERPENT—THE SAMARITANS,

AFTER the promulgation of the law from Sinai, in order that it should be stamped by Divine authority, and have all the sanction of a signet from heaven, we are informed, at the close of the thirty-first chapter of Exodus, that Gop "gave unto Moses, when he had made an end of communing with him upon mount Sinai, two tables of testimony, tables of stone, written with the finger of God." In a subsequent part of the narrative, we are supplied with a more circumstantial detail: "the tables were written on both their sides, on the one side and on the other were they written. And the tables were the work of God, and the writing was the writing of God, graven upon the tables."* It becomes us not to speculate on this sublime transaction, nor to pry, with too curious an eye, into the more immediate intercourse of Deity with his creature; but it cannot be out of place, to endeavour to obtain a more just and accurate conception of this autograph of heaven than may be generally entertained, provided it be in harmony with the Sacred Text. We are possessed of a small fragment of Hebrew granite, brought to this country by the late Burckhardt from Sinai; and if we are correctly informed, it obtains in that celebrated mountain. To this singular and beautiful species of granite we have already alluded.

^{*} Exodus xxxii. 15, &c.

We are told, that not only were the tables the work of God, but the writing was the writing of God. If a conjecture may be hazarded on a subject so sacred, we may suppose, that these tables were composed of Hebrew granite, the "werk of God," in the sublime fiat of The linear arrangement of the crystals of quartz, and their beautiful parallelism, are very striking features; and, as we are told that "the tables were written on both their sides," it may perhaps tend to elevate our views above common place ideas, to suppose that these crystals, which have a striking resemblance to Persepolitan or Babylonian characters, under the Almighty fiat became expressive of his law in the arrangement of the decalogue. Granite is a primitive rock-one of the original rocks of creation or foundation stones of the globe. These heavenly characters being constituent parts of the granite, would thus appear on both sides of the tables of stone, and could not be obliterated but with the destruction of the stone itself. Granite is a durable and adamantine rock, and thus the whole became a symbol of the permanence and. stability of the sacred characters of the law of Gop. That "not one jot nor one tittle should pass away" until "the mountains be removed and there be no place found for them." In reference to the awful manifestations of the DIVINE BEING on mount Sinai, Mr. Milman observes: "The mountain seems to have shewn every appearance of a volcanic eruption: blazing fires, huge columns of smoke, convulsions of the earth." This author has wisely added, "yet a most philosophical observer has decided, from the geological formation of the mountain, that it has never been subject to the agency of internal fire." We may further state, that a granitic mountain is not that description of rock in which we may reasonably expect to find volcanic agency.

Passing over much that is of sublime interest in the ornaments of the tabernacle, which were moulded and arranged agreeable to the "pattern shewed in the mount," together with the rites and ceremonies enjoined by the Levitical laws and ordinances, and the ministra-

tions of the sacrifices and orders of priesthood, we shall consider a remarkable event in the pilgrimage of the Hebrews, inflicted as a punishment for their distrust of that Providence who had so frequently and so signally interposed on their behalf-who had "not left himself without a witness," and "led them by a way they knew not." "Fiery serpents" visited the Hebrews, "and they bit the people, and much people of Israel died." On the repentance of this stubborn race, Moses, their leader, was directed to "make a fiery serpent and set it upon a pole: and it shall come to pass, that every one that is bitten, when he looketh upon it, shall live." "And Moses made a serpent of brass, and put it upon a pole; and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived."* This remarkable circumstance was an expressive symbol of that eventful scene which should, in the fulness of time, be unfolded on the summit of Calvary. On this point we are not left in suspence, since the Sacred Text is clear and explicit: "As Moses lifted up the serpent in the wilderness, even so must the Son of Man be lifted up; that whosoever believeth in him should not perish, but have everlasting life." We need not, therefore, appeal to the authority of commentators, such as L. Capellus, Grotius, Bochart, and others. Amid the various systems of mythology, which have engrossed the heathen world, the serpent seems to have borne a conspicuous part. There are three remarkable incidents in the Sacred Volume, which involve the adjunct of the serpent:—the fall of man, the transmutation of the rod of Moses into a serpent, and the remarkable fact before us. Mr. Deane, in an interesting work, entitled, "The Worship of the Serpent traced throughout the World, and its Tradition referred to the Events in Paradise." &c., concludes, that "in most, if not in all the civilized countries where the serpent was worshipped, some fable or tradition, which involved his history, directly or indirectly, alluded to the fall of man in Paradise, in

^{*} Numbers xxi. 6, &c.

which the serpent was concerned." That the principle of evil, with whose temptation this catastrophe is connected, should have ever become an object of adoration by man, is an extraordinary circumstance; yet it is, nevertheless, a fact, that the tempter is even now worshipped by a tribe, near Merdan, &c., called the Yezedees. The Yezedees, from Singar, will not even name the tempter, and hold his name in the utmost reverence. We are inclined to believe, that, though serpent-worship may be connected with Paradise in some cases, it refers, in others, to the circumstance to which we have alluded, namely, the elevation of the brazen serpent. Spanheim gives a medal of Antoninus Pius, on which are represented two serpents in deadly feud, one being evidently the victor: whether this may indirectly refer to the rod of Moses and those of the magicians of Egypt, cannot be determined; but the serpent is com-

monly associated with Esculapius. We give a fac simile of a medal of Antoninus Pius, copied by M. Spon in his work, entitled, "Recherches Curieuses d'Antiquité."* In this medal Esculapius is represented under the form of a serpent, about to leave the prow of a vessel and take up his abode on an



island in the Tiber. The river deity approaches to welcome his advent. This legend is connected with the ravages of the plague at Rome. The recovery of health being thus ascribed to Esculapius. It has occurred to us as being remarkable for its association of the serpent with a branch. We have already adverted to the mistletoe, as used by the Druids, and its supposititious virtues as a catholicon, or universal

^{*} Page 531,

remedy. The "tree of life" is mentioned in reference to the transaction in the Garden of Eden. The great naturalist of Holy Writ also names the tree of life. We have the branch introduced to us in the vista of prophecy; and in the visions of the Apocalypse, there is an allusion to "the tree of life," where it is added, "the leaves of the tree were for the healing of the nations." "Lo!" says the prophet, "they put the branch to their nose."* We do not consider that we are at all fanciful in referring this association of the serpent, especially when connected with the staff of Esculapius or the wand of Hermes, to the event in the wilderness; or when, in the symbol of the serpent, connected with the deified Esculapius, we perceive a distinct connexion with and reference to the elevation of the brazen serpent. Living serpents were preserved in some of the temples dedicated to Esculapius. Even in the Acropolis of Athens a live serpent was kept. On Greco-Egyptian coins serpents are often introduced; and on coins of the Lower Empire they are equally frequent. Sometimes these snakes or serpents are crowned with a human head, apparently that of Serapis, &c. On a coin of Gordianus, in our possession, the reverse presents a serpent on an altar, to which a human figure is presenting a basin: and such symbols are by no means infrequent. In Plate III, fig. 19, to which we have already referred, the serpent, in an upright form, represents Thoth, the Egyptian Hermes or Mercury. The caduceus of Hermes, symbolical of Canaan, besides the globe and wings which surmounted it and the triple leaf which encircled its stem, was occupied by two serpents which embraced the rod in their folds. In one of the coins of Augustus, which we shall give in the sequel, the caduceus of Mercury is elevated by a figure recumbent at an altar. From time immemorial the serpent has embraced the staff of Esculapius—the emblem of healing; and we remember to have noticed this ensign, in fresco, on one of the houses of Pompei,

^{*} Ezek. viii. 17.

precisely such as it is now sometimes adopted as the symbol of medicine or of pharmacy; and to the same source must be referred symbolic representations, perpetuated to our times by similar associations, down to the restorative virtues still ascribed to the flesh of the viper, and the elixir excellencies of the acqua di vipere which we found still in high repute in the pharmacopæia of Naples. It is melancholy to find, that the Hebrews, when they reverted to idolatry, to which they seem to have ever been too prone, worshipped the serpent as well as changed "the glory of the incorruptible Gop" into "the similitude of a calf that eateth hay." Thus we are told, that Hezekiah, king of Judah. "removed the high places, and brake the images (statues,) and cut down the groves, and brake in pieces the brazen serpent that Moses had made; for unto those days, the children of Israel did burn incense to it, and he called it Nehushtan," (a piece of brass or copper.)

On the other hand, we readily admit that ophiolatry, in the majority of cases, may be traced still farther back. and referred to the fall of our prototype. We have already given a representation of a Tyrian coin, which may be considered of the era of Alexander the Great. In this medal we have the serpent associated with the tree,—as it were the tree of life encircled by the folds of the principle of evil; and on each side of the tree. are the petræ ambrosiæ. According to Dr. Stukeley, in his remarks on Stonehenge, the Tyrian Hercules (Melcarthus) ordered Tyre to be built where the petræ ambrosiæ stood. These are represented as two moveable rocks standing by an olive tree. It appears that these stones were consecrated by pouring oil on them as in patriarchal times. Such moveable stones were called, by the Greeks, living stones; and, in all probability, they somewhat resembled the laggan-stones of the Druids. The oil of roses, the ancient ambrosia, was employed, by the heathen, for this libation. Jacob, at Bethel, "took the stone that he had put for his pillow, and set it up for a pillar, and poured oil upon the top of it." All these, therefore, it is obvious, sprung from one and the same channel.

We have already adverted to the urei or deified basilisks of Egyptian mythology, and the nagas of Budhism. The hierogram, which united the winged serpent and circle; and a variety of combined symbols, in which the serpent formed a part, are more difficult to decipher; but the worship of the serpent, in combination with trees, seems to have been very prevalent; and even in the seventh century, in Italy, some natives of Lombardy were found to worship a tree and a golden viper. singular that dracontic figures are represented on the base of the golden candlestick on the Arch of Titus, at Rome, having very much the same appearance as the figures on ancient Chinese porcelain-valued by the virtuoso, if we mistake not, as an undeniable proof of considerable antiquity. The serpent cuts no inconspicuous figure among gnostic emblems. In sculptures and on coins the serpent is often observed entwined round a pole, and sometimes with the legend, $\Sigma\Omega THP$. a saviour, preserver, or deliverer. We cannot help associating this with the brazen serpent-which so forcibly reminds us of Messias,-The Branch, who was "to deliver his people from their sins"-and his own invocation, "Look unto ME, and be ye saved." All these, therefore, seem to point to that happy period. when,

"Occidet et serpens, et fallax herba veneni, Occidet." *

A sect of the gnostics, from their worship of the serpent, were called ophites. This reptile was a constituent of the gnostic abrasax, and formed a frequent symbol in gnostic amulets. From being the type or symbol, that might direct the eye of faith to "the glory that was to be revealed," it became, itself, the object of worship, and was so interwoven with the fooleries of the gnostics, that those heathens who were incapable of judging between the pure and hallowed principles of the "New Religion," and its abuse by a vicious and

degraded superstition, taunted the early Christians with this as being an object of their worship; just as scoffers at heavenly truth, now, combine Christianity with its false friends and mal-appropriation; as if the abuse of the principle were legitimately chargeable on the principle itself; and, forgetting that the principle is by no means accountable for its perversion by a distempered imagination, or being employed by a bad man to cunning artifice or deep design. That Pagans should not be able to reason better we need not wonder; but that we, in these times, should find men that dare to charge, on what is itself "altogether lovely," the hideous deformities of evil, does no credit to their understanding; and they are in this case, not one whit better than the heathens of old.

When Joshua had passed the Jordan, he directed that twelve stones, taken from the bed of the river, should be set up on the plains of Gilgal—these were according to the number of the tribes of Israel. The reason assigned for this procedure, is mentioned in a subsequent verse of the same chapter: "That this may be a sign among you, that when your children ask their fathers in time to come, saying, What mean ye by these stones? Then shall ve answer them, That the waters of Jordan were cut off before the ark of the covenant of the Lord: when it passed over Jordan, the waters of Jordan were cut off: and these stones shall be for a memorial unto the children of Israel for ever."* It may be of importance to remark, that the Cutheans are stated, in the Itinerary of Benjamin of Tudela, to offer sacrifice on Mount Gerizim, on an altar constructed with the stones brought from the bed of the Jordan by the Israelites, at the command of Joshua. Captains Irby and Mangles discovered ruins on Mount Gerizim, which might have been those of the ancient Samaritan synagogue. On Mount Ebal, Dr. Richardson observed an old ruined fort, but did not ascend. Ebal and Gerizim, among the mountains of Israel, on the plains of Jericho, it will

^{*} Joshua iv. 6, 7.

be remembered, were the mountains from which the "blessings" and the "cursings" were to be pronounced. In the twenty-seventh chapter of Deuteronomy we have these facts related. The blessings were promulgated from Gerizim, and the cursings from Ebal, similar to the manner in which the Manx laws are now proclaimed, sub die, from the Tinwald Mount, in the Isle of Man; -a practice of extreme antiquity. It will also be remembered that Joshua built an altar in Mount Ebal, after the passage of the Jordan.* There can be no doubt that Ebal here should be Gerizim, and that the Jewish Pentateuch, in this respect, must yield to the authority of the Samaritan copy. Instead of Ebal the Samaritan text has Gerizim; and it has been clearly ascertained by Dr. Kennicott, that it should be so. The Samaritans contend that the Jews, from enmity to them, and because they worshipped there, put Ebal the mountain of cursing, instead of, what it should be, Gerizim the mountain of blessing. The text and antiquity clearly assign the palm to the Samaritans. The Mount Gerizim was that where the blessings were pronounced; and it is certainly much more probable that the altar constructed by Joshua should be reared on that spot, than on the mountain of cursing. It is worthy of remark, that this altar was to be composed "of whole stones, over which no man hath lifted up any iron."† These, therefore, perfectly correspond with the structures of Stonehenge and Aubery. The heathen temples and altars were constructed of henn stones; and these being unhewn, would distinguish the altars of the true God from those of idolatrous nations.

It cannot be impertinent to state, that the Samaritans are descended from an intermixture of the ten tribes with Gentile nations. This, of course, rendered them obnoxious to the Jews, who were so zealous to maintain an uncorrupted lineage. This was very natural; for, irrespective of the direct command of God, it afforded the means for tracing the lineal descent of the ex-

^{*} Joshua viii. 30.

pected MESSIAH. These people were not, therefore, permitted by the untainted Jews, to aid them in the erection of the second temple, on their return from the Babylonish captivity; because those who had thus intermarried and mingled with the Gentiles around them, "could not shew their father's house, nor their seed, (pedigree) whether they were of Israel."* In consequence of this rejection, and other causes of animosity, the Samaritans (so called from the city of Samaria, the ancient capital of Israel,) erected a temple on Gerizim, and there offered up their sacrifices on "the mountain of blessing," as prescribed by the Mosaic law. The district of Samaria was originally occupied by the two tribes of Ephraim and Manasseh. This was the cause of that rooted animosity and bitter enmity which prevailed eighteen centuries ago, between the Jews and Samaritans: a hostility which remains in full force; for the SAMARITANS STILL EXIST, as well as the Jews, and are separated by as broad lines of demarcation now, as they were at the commencement of the Christian era. The Samaritans recognize only the Pentateuch, since this schism had taken place before the Sacred Writings were collected into one volume. It is of importance to observe, that the Samaritan Pentateuch has a remarkable correspondence with the copy of the Pentateuch preserved by the Jews; indeed, in all important particulars these independent copies agree. This very feud and hostility have, therefore, been the guarantee of its integrity. No less than seventeen MSS, of the Samaritan text are known to exist: six of these are in the Bodleian Library, at Oxford, and one in the Cottonian Library, in the British Museum.

The copies of the Pentateuch, which the Samaritans still preserve, are in the ancient Hebrew characters. The modern Samaritans inhabit a district in Palestine, called Naplouse, the ancient Neapolis or Sichem, between Mount Ebal and Mount Gerizim. They are now few in number, and do not consist, altogether, of more

^{*} Neh. vii. 61.

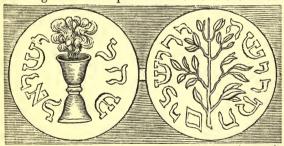
than thirty families, or two hundred souls. Preserving, with singular fidelity, their ancient worship, they still remain attached to the Mosaic ritual, and only intermarry among each other. Their Pentateuch and alphabet still remain unchanged, and both exhibit marks of their original antiquity. At this moment, these Samaritans are a faithful and true witness, and a living monument of that ancient Samaritan temple, which was contemporaneous with our Saviour's abode on earth,-the rival of that at Jerusalem, This interesting race has been frequently visited since the sixteenth century, and recently by M. Sylvestre de Sacy. In the fourth chapter of John, we have a remarkable and interesting interview between a female of Samaria and our Saviour. event took place near Sychar, a city of Samaria, at a well, called "Jacob's well," where the women of the city were wont to repair to draw water. "How is it," said the woman, "that thou, being a Jew, askest drink of me, which am a woman of Samaria? for the Jews have no dealings with the Samaritans."* This singular observation proves the extent to which the animosity was carried. The rival Temples of Gerizim and Jerusalem are next adverted to: "Our fathers worshipped in this mountain; and ye say that in Jerusalem is the place where men ought to worship." † We have already mentioned, that according to Joshua's command, the rude stones, brought from the bed of the river, were pitched in Gilgal, in the east border of Jericho; and to this temple, the foundation of that raised in Gerizim, Samuel went yearly to assist at the great annual convocation. The woman of Samaria, therefore, was right in her observation, that their fathers had been accustomed to worship in the neighbouring mountain of Gerizim. The Samaritans, as well as the Jews, notwithstanding the defection of the former, had about this period, it is evident from the sequel, been anxiously expecting the Messian; and it is remarkable, that the Samaritans appear to have had more just and

^{*} John iv. 9. † John iv. 20.

settled notions on this important question, than the pharisaical Jews of that period, notwithstanding the proud boast of their untainted descent from Abraham. The Samaritans of Sychar admitted without scruple, the claims of the MESSIAH, and tendered him that courteous reception, which appears to have been accepted: "We have heard him ourselves," said they, "and know that this is, indeed, the CHRIST, the Saviour of the world."* Though they could not appeal to the prophets, or even to the Psalms which so minutely describe the circumstances under which he should appear, yet an idea of a prince that was to wield the scentre and wear the crown of temporal dominion, seems not to have been entertained by them. It was sufficient for them that he was "sent to the lost house of Israel." Their hopes and expectations were, no doubt, based on the prophetic declaration of the dying patriarch, + which was so perspicuous and explicit. In this there was nothing to warrant temporal sovereignty: on the contrary, something different from temporal dominion is plainly implied, and to which the "Sceptre of Judah" should give place. They seemed eager to hail a period when the unhappy schism which prevailed should be healed, -a rallying point for the "gathering of the people." From what has been observed, the Samaritans, having lost their line of ancestry, had nothing to guide their inquiries in the question of lineal descent; the observation of the female of Samaria was, therefore, very apposite and natural: "I know that Messias cometh, which is called CHRIST; when he is come, he will tell us all things." Dur Saviour's credentials seem to have been every way satisfactory to the inhabitants of Sychar—these "outcasts of Israel;" and they appear, in some degree, to have received him into "honest hearts." The passage to which we have adverted, in reference to "the Star of Jacob," which should arise in after-times, is quite conclusive against the infidelity of modern Jews. It is not doubted, and cannot be denied,

^{*} John iv. 42. † Genesis xlix. 10. † John iv. 25.

that the tribes are confounded, and that their lineage is lost: the kingdom is departed from them, and ICHABOD written on the walls of their synagogue. have pressed this prophetic announcement on modern Jews, they have answered-"THAT IS THE STRONG-HOLD OF THE CHRISTIAN." The best informed among them begin now to doubt; and some have taken refuge in scepticism. Their rabbies try, by a contemptible sophistry, to evade the conclusion of this irresistible argument; but we have never received any thing in the shape of a rational reply. This passage is chronicled in the Pentateuch, a volume which, above all others, the Jew, in every age, has preserved and regarded with intense veneration. Some, contriving to overlook the notorious fact connected with this prediction, that the sceptre is departed from Judah, still cling to a Messiah to come: and we were not a little surprised, when we pressed the question-by what means this expected Prince was to be recognized as "the very Christ?"-to receive an answer similar to that of the woman of Samaria, and nearly couched in the same words: "When he is come he will tell us all things." We have adverted to the ancient Hebrew or Samaritan character, as differing from the square Chaldee or modern Hebrew. In Plate II., fig. 13, is a fac simile of a half-shekel: we now give a correct portrait of a silver shekel in our



possession; of the genuineness of which there is not the slightest doubt. Around the censer (or thuribulum) with incense, are the words Schekel Israel—The

Shekel of Israel; and on the reverse is a Branch with the words Jerouschalaim Hakedoscha-Jerusalem, the Holy. It is interesting to compare this censer with that on the golden table in the bas relief of the Arch of Titus at Rome, represented in Plate II., fig. 11; the resemblance is certainly very striking. Whether the foliage is to be considered as representing the opobalsamum; or the rod of Aaron which blossomed, and was deposited, as well as the golden vessel which contained a specimen of the manna which fell in the wilderness, in the ark or sacred depository of the tables of the law; must be left to conjecture. Our opinion is, that it refers to the Branch announced in prophecy, whose leaves where for the healing of the nations. The shekel, in the days of Josephus, was somewhat larger than the ancient shekel. Those with Samaritan inscriptions are assigned to a period some centuries before the Christian era. The Jews do not appear to have ever coined gold; hence the double shekels, shekels, halfshekels. &c., are in silver. The legends are similar in all of them, but the symbols are somewhat varied. On some Jewish coins, about the time of Agrippa, and whose name appears on a few of them, there are branches, grapes, ears of corn, a canopy, &c., all having a reference to the ceremonies prescribed in the ritual of their religion. The letters appear extremely uncouth and barbarous. On no genuine Jewish coin do we ever meet with any figures of men or animals. This was in strict conformity with the prescription of the Decalogue. We are not, by any means, inclined to consider this shekel as being issued by the Samaritans of Sichem. As the ancient Samaritan character places its date at some centuries before the Christian era, (and we are well acquainted with the characters employed by the Jews in the first century,) it is not likely that the Samaritans would inscribe their shekel, "Jerusalem, the holy," since that was the very bone of contention between them and the Jews. It is worthy of remark, that the Arabic name of Jerusalem, is El Khops—"the Holy."

Our readers will remember the beautiful parable of

the good Samaritan, and his kindness and compassion for the wounded stranger, "who fell among thieves," on his journey from Jerusalem to Jericho. Sichem or Sychar, the district of the Samaritans, and which they now inhabit, is about forty miles from Jerusalem. Jericho is about nineteen miles from the capital of Judea; and, as it was in the first century, so the intervening country still remains infested by banditti. Sir Frederick Henniker, as late as 1820, on his journey from Jerusalem to Jericho, was way-laid, attacked by a band of predatory Arabs, and plundered. He was stripped naked, and left severely wounded; and in this state was carried to Jericho.

CHAP. IX.

SHIBBOLETH—SAMSON—BROOK ELAH—CAPTIVITY OF THE TEN TRIBES BY SHALMANESER—THE INVASION BY SHISHAK, KING OF EGYPT—DANIEL.

THE quarrel which took place between "the men of Ephraim" and those of Gilead, recorded in the twelfth chapter of the Book of Judges, is alluded to in this place, as affording a curious instance of a peculiarity in pronunciation being propounded as a test of discrimination between the men of Ephraim and the men of Gilead, who, it would seem, spoke the same language, but could not pronounce a particular word alike. If the individual denied his being an Ephraimite, he was desired to repeat the word Shibboleth, and if he did not pronounce it aright, he stood condemned: "Then said they unto him, Say now Shibboleth; and he said Sibboleth: for he could not frame to pronounce it right. Then they took him, and slew him at the passages of Jordan."* It is a singular fact that a district of Polish Jews cannot, at this day, pronounce the word Shibboleth, but always say, Sibboleth. One of these Polish Jews is, at the present moment, a reader in a synagogue, at Bristol, where we have heard him.

The remarkable history and adventures of Samson occur in the chapters immediately succeeding; and it may not be irrelevant to mention, that Mr. Seely seems to have been struck with a representation, among the temples of Elora, in which he almost recognized a distinct

^{*} Judges xii. 6.

allusion to the circumstances attending the death of this chieftain. It refers to an avatar, wherein Nursing seems issuing from a pillar. "It strongly," says Mr. Seeley, "reminded me of Samson; great muscular power, shoulders and breast broad, pressing against the pillar and grasping it with his large hands, his countenance wild and threatening."* If we compare this with Judges xvi. 29, 30, the similarity seems to be remarkable; and the events in Biblical History, issuing through channels barbarous and polluted, might be supposed, in many cases, to have supplied, traditionally, heathen mythology with materials for its deities and demigods, and the extravagant fables which shroud them. The following is another specimen of this kind: "Vira Budra is seen holding in his uplifted hand, Raj Duz, while a sword is held with the other to slay him. It is a striking resem-

blance of the judgment of Solomon."+

David's encounter with Goliath, the champion of the Philistines, is mentioned in 1 Samuel xvii.: and in the 40th verse is described the simple armour with which the shepherd boy, Jesse's son, repaired to the contest. Many a thirsty pilgrim, as he passes through the valley of Elah, on the road from Bethlehem to Jaffa, (Joppa,) has drunk of "the brook in the way"—that very brook from whence the minstrel youth "chose him five smooth stones." "Its present appearance," says a recent traveller, "answers exactly to the description given in Scripture; the two hills on which the armies stood, entirely confining it on the right and left. The valley is not above half a mile broad. Tradition was not required to identify this spot. Nature has stamped it with everlasting features of truth. The brook still flows through it in a winding course, from which David took the smooth stones."

We have before us a pamphlet descriptive of an antique Hebrew medal, in the possession of Mr. Lyon; ti is to be regretted that the plate which illustrated it

^{*} Wonders of Elora, p. 181.—† Ibid, p. 185. † Explanation, &c. London, 1810.

is lost, and we are, therefore, unable to judge of its merits, as far as a fac simile representation of the medal would authorise an opinion, as to its claims to a high antiquity. It appears to have been found in the year 1809, by a peasant, when digging in a ruin near Huntingdon, and to have, at length, fallen into the hands of a Hebrew scholar, who has published this account of it. The legend on one side is, "The Lord is the Keeper of Israel, the mighty King in Jerusalem." In the centre there is said to be a cup representing that which contained the omer of manna. On the right side is the mitre, (cether, a crown,) and on the left, the horn. (shophar, a horn,) both denoted by their initial letters. On the reverse of this medal is the legend, "The Shekel of David, left in the Treasury of Zion, in the Temple." In the centre is a representation of Aaron's rod; on the right is the king's crown; and on the left the vessel containing the ancinting oil: both distinguished by initial letters. Whether this shekel was deposited by the royal minstrel, whose name it bears. in the sanctuary, as a memorial, must be a question. sub umbra: it seemed, to us, however, sufficiently interesting to merit the tribute of a passing notice.

It is recorded in 2 Kings, xvii. 6, and xviii. 10, that Shalmaneser, the king of Assyria, carried Israel away captive during the reign of Hoshea, the son of Elah. who was then king in Samaria: "The king of Assyria took Samaria, and carried Israel away into Assyria, and placed them in Halah and in Habor, by the river of Gozan, and in the cities of the Medes." This captivity of the ten tribes is confirmed by the discoveries of recent travellers, from sculptures, in the live rock, on the mountains of Be-sitoon, on the borders of Ancient Assyria. In Plate III, fig. 18, we have given a correct representation of this curious and interesting sculpture, copied from Sir Robert Ker Porter's very valuable work. We have omitted the aerial figure to whom the captives seem to be presented by Shalmaneser; and which figure may be supposed either to represent his father, Tiglath Pileser; or the "god of the clouds." In

the Hon. George Keppell's Personal Narrative these sculptures are alluded to.* According to this author, it seems to have some allusion to queen Esther pleading before Ahasuerus; but, as Mr. Keppell saw these figures at too great a distance to form any distinct idea of them, we must give up this unsupported idea to the opinion supplied by Sir R. Ker Porter, who has given a complete and accurate representation, copied with sufficient care, on the spot, and at imminent personal The Babylonian characters attest their high and venerable antiquity; and the toute ensemble gives no countenance whatever to Mr. Keppell's extraordinary inference. Sir R. Ker Porter informs us, that he encountered great difficulty in making even this copy; and that to have copied accurately all the Babylonian or arrow-headed inscriptions would have occupied him more than a month. We still hope, however, that this may be done; and sincerely wish, with Sir R. Ker Porter, "that the indefatigable scholars now engaged in the study of these, apparently the oldest letters in the world, may at last succeed in bringing them to an intelligible language. In that case, what a treasurehouse of historical knowledge would be unfolded here, (Be-sitoon,) and in the vale of Merdasht!" This investigation, we have stated, is partially begun, and with some promise of success; still, however, it cannot, as yet, be otherwise regarded than as "a sealed book." These sculptures, Sir R. K. P. states, are chiselled in a mountain called Be-sitoon: "At the foot of Be-sitoon, we see a rocky platform, cut out of the foot of the mountain, evidently intended to support a temple; but, at a point something higher up than the rough gigantic forms just described, in a very precipitous cleft," appeared the sculpture, which our author has so carefully copied, notwithstanding the danger he ran in obtaining even an insecure footing. The first figure in the chain wears the Median habit, like the leaders of the guards at Persepolis. The second figure is distinguished by a

^{*} Vol. II. p. 82. † Ib. pp. 154, 155.

bent bow. The third, larger and taller, may be designed, according to Sir R. K. Porter, to represent the king of Assyria. The costume is that of regal dignity as exhibited in the bas reliefs of Persepolis, &c. The suppliant figure, and the first in the other chain on the right, are much injured by time. The third of the chain, or the fourth figure of the group of captives, has the skirt of the garment covered with arrow-headed characters. The last of the series wears a more flowing beard and a high pointed cap, somewhat like a mitreperhaps to represent the house of Levi. Above the head of each are specific compartments, in the arrowheaded character; perhaps descriptive of each captive -the heads of the ten tribes of Israel: and below them, are two lines in the same arrow-headed character, running the whole extent of the group. After this description which we have given, almost in the words of the author, there cannot be a doubt of his conclusion, that this sculpture refers to the total conquest of Israel. and the captivity of the ten tribes, by Shalmaneser, king of Assyria, and the Medes. The first attack upon the dominions of Israel was by Arbaces, or Tiglath Pileser, the father of Shalmaneser; who, instigated by Ahaz, king of Judah, conducted the expedition into Samaria, the country of the ten tribes. In the royal figure, among those in the sculpture, we discern a representation of Shalmaneser, followed by the two leaders of his armies, of the dominions of Assyria and Media. The double bonds of the captives may denote the double crime of which they had been supposed guilty. Tiglath Pileser had spared them before; and this new revolt might have been considered to conjoin an act of ingratitude.

In reference to the willow and the streams of Babylon, where the Hebrews remembered Zion so mournfully, Sir Robert Ker Porter states, that "the banks of the Euphrates were hoary with reeds, and the grey osier willows were yet there on which the captives of Israel hung their harps," and wept in the land of the stranger. The salix babylonica, or the weeping

willow, in its geographical range, sweeps through the plains of Judea, and by the ruins of Babylon, from the verge of the Mediterranean to the frontiers of Japana lovely line of beauty—the Niobe of vegetation! Sad memorial of the mournful march of the captive Hebrews. It is, we think, a very striking circumstance, that these countries should even now retain such unchanged lineaments of their ancient history. Time seems to linger, or move slowly on; as if the wheels of nature stood still, and paused at the mournful sight of departed grandeur and buried magnificence—BABYLON in ruins! "MENE! -God hath numbered thy kingdom, and finished it."! Mr. Rich has given us a sketch of a spade copied from a Babylonian brick found near El Kasr, and detached from a mass of ruin, in all probability, on the very scite of Nebuchadnezzar's pensile gardens; and he remarks, that it is almost a fac simile of the spade used at this very day in Chaldea.

In 2 Chron. chap. xxxv. and xxxvi., we find that Necho, or Pharaoh-Necho, made war on the Jews and Babylonians; and that Josiah, who then reigned in Jerusalem, went forth to meet him. In the unequal conflict this pious prince was mortally wounded by the archers; and was buried in the sepulchres of his fathers Apart from the verification of this war at Jerusalem. by Herodotus, it seems confirmed by the researches of the late Mr. Belzoni in the valley of Beban el Malook, near Thebes. Whether the tomb discovered by Belzoni be that of the Pharaoh-Necho of Scripture or not, there appears a procession of captives of different nations; and among these figures the captive Jew may be easily distinguished, by his garb and physiognomy. We have copied, from Mr. Belzoni's Plate, the figure in question. See Plate II. fig. 6.

In further elucidation of the important evidence which has been derived from hieroglyphic literature, we may now advert to the siege of Jerusalem, during the reign of Rehoboam, the son and successor of Soloman, by Shishak, the king of Egypt. "So Shishak, king of Egypt, came up against Jerusalem, and took

away the treasures of the house of the Lord, and the treasures of the king's house; he took all." * Champollion, whose interesting researches in Egyptian literature cannot be too highly estimated, has, in his recent visit to Upper Egypt, discovered a sculpture at Karnac, of considerable importance in Biblical History. Shechousis, or Shishak, is discovered dragging the chiefs of thirty nations before his deities. His name is inscribed, over the figure, in hieroglyphics. Among the captives is Rehoboam, with the Jewish expression of countenance and form; and the inscription is JOUDAHA MELEK-King of the Jews. The names of ZERAH, the Ethiopian; TIRHAKA; So; and others, mentioned in the annals of the Jews, have been also deciphered. In truth, the accumulated and still accumulating proofs of evidence have been as remarkable, as they have been unexpected; and, in the annals of wonder, there does not exist a more extraordinary phenomenon, at this moment, than the INFIDEL.

Daniel was one of the Hebrew captives, carried to Babylon, in the year 606, A. c. and in the fourth year of the reign of Jehoiachin, king of Judah. Daniel was eminently pious, and unflinchingly devoted to the service of the true God, (in which noble attachment nothing could daunt his soul-nothing terrify him into a dereliction of his duties); and this honourable testimony was borne even by his wicked adversaries: "We shall not find any occasion against this Daniel, except we find it against him concerning the law of his Gop." They had already tried this, and the reluctant testimony had been wrung: "They could find none occasion nor fault; forasmuch as he was faithful, neither was there any error or fault found in him." † Daniel was as wise as he was good, and cast the wisdom of the magi of Chaldea into complete eclipse. Though he outlived the Babylonish captivity, this distinguished character, in all probability, died at Shushan, in the province of Elam, in Babylonia, and in the palace which he occupied, as

^{*2} Chron. xii. 9 † Dan. vi. 4, 5.

governor of the provinces. Among the most remarkable circumstances in the life of Daniel, was that of being cast into the lion's den, because he would not relax in his wonted supplications to his Goo. Though the writing was signed, and the decree had passed and received the royal signet, and Daniel knew the circumstance, yet he also knew, that "greater was HE who was for him, than all they who were against him."-"He went into his house; and, his windows being open in his chamber toward Jerusalem, he kneeled upon his knees three times a-day, and prayed, and gave thanks before his Gop, as he did aforetime." Nor did he disguise his solemn duties: his enemies assembled, and "found Daniel praying and making supplication before his Gop."* The punishment prescribed was severe, and Daniel was cast into the DEN OF LIONS, where he was preserved unhurt by the Gop he adored. This wonderful event we consider fully substantiated by the combined testimony of Sir Robert Ker Porter, Captain Mignan, Mr. Keppell, and others, in the curious evidence supplied by their discoveries. Daniel, it will be remembered, occupied the third chariot of Babylon. Plate II. fig. 10, is a colossal statue of a lion, standing over a pedestal, and underneath appears to be a prostrate human figure. Mr. Rich describes it as composed of "a kind of grey granite, and of rude workmanship; in the mouth was a circular aperture, into which a man might introduce his fist." This statue, now much mutilated, appears to have been seen by Beauchamp: Mr. Keppell has called this colossal mass, black marble. As it was found near the ruins of the Kasr, or Western Palace, it perhaps once stood over one of the gates. Daniel was governor of Babylon, as well as of Susa or Shushan. Plate II. fig. 5 and 7, are fac similes of silver coins, copied by Sir R. K. Porter, from the originals, discovered along with other coins, in an earthen vessel, which was fished up from the Euphrates, The castellated strucclose to the ruins of the palace. tures, exhibited on the reverse, seem to refer to the same

^{*} Dan. vi. 10, 11.

building; and it is remarkable that both appear to be constructed over dens of wild beasts. The combat with a lion on the obverse of fig. 5, and the charioteer in that of fig. 7, appear to us to refer to the history of Daniel. The judgment of the reader must determine whether our views are warranted or not. Fig. 8, in Plate II. is copied from Captain Mignan's interesting work, of which it forms the frontispiece. It is that of an engraved gem, dug from the ruins of Babylon by Captain Mignan himself. It represents a human figure standing on two sphinxes, and combating two fierce animals. tures are those of a Jew; and a comparison may be made with fig. 6 of the same Plate, already described, as copied from the tombs of the Egyptian kings, as a captive Jew—the cap, &c. as well as the contour of the countenance, are remarkably similar. In Plate III. fig. 20, is a representation of a relic from Susa or Shushan, which is of white marble, said to have been discovered near the tomb of the prophet Daniel. Sir Robert Ker Porter gives the following account of it: "It does not exceed ten inches in width and depth, measures twenty in length, and is hollow within as if to receive some de-Three of its sides are cut in bas relief, two of them with similar representations of a man apparently naked excepting a sash round his waist, and a sort of cap on his head: his hands are bound behind him. The corner of the stone forms the neck of the figure, so that its head forms one of its ends. Two lions in sitting postures appear on either side at the top, each having a paw on the head of the man."* There can be no doubt that the Book of Daniel is the work of that prophet; part of which was written in the Chaldee letter; and if we mistake not, this portion is still retained in Chaldee characters among the MSS. of the synagogue.

The sentence of the Almighty, emblazoned on the walls of the palace of Babylon, which registered the fate of Belshazzar, was deciphered by the skill of Daniel. Part of this sentence is thus interpreted: "Tekel;

^{*} Travels, &c. Vol. II. p. 416.

Thou art weighed in the balances, and art found wanting."* We may refer to Plate III. fig. 19, for an interesting illustration of the allusion. Here, it will be perceived, is the balance in which the actions of the individual have been weighed; and we have only further to remark, that the former Mogul kings were, on their ascending the throne, literally weighed. Thevenot gives an account of this curious affair in his time. The balance wherein this seems to have been performed, is described as being rich. The chains of suspension were of gold, and the two scales, studded with precious stones, also of gold, as well as the beam, &c. The king, richly attired and shining with jewels, goes into one of the scales of the balance, and sits on his heels. Into the other are put little bales, said to be full of gold, silver, and jewels, or of other costly materials. These little bales are described to be often changed.

^{*} Daniel v. 27.

CHAP. X.

REMARKS ON MIRACLES—THE SPIRIT OF PROPHECY.

—MODERN JUDAISM—THE SACRED CODE OF THE

JEWS—RETROSPECT—THE EVE OF CHRISTIANITY.

THOUGH we have passed over the question of MIRA-CLES, as not coming within the legitimate design of our remarks, it may be pardoned if we cast a transient glance on a subject, at which infidels have often discharged their missiles. We consider that as their sophistry is not sound, neither are their inferences warrantable. Their flimsy cobwebs resemble kindred gossamer floating in the air, which must fall to the ground, because their buoyancy is without support. Hume's "Essay on Miracles," is founded on assumptions which are a direct violation of inductive truth: the premises on which his sophistry is reared, are altogether false; and reason and science must reject them as untenable. An argument, therefore, which has nothing wherewith to support itself, must fall to pieces. There is, no doubt, cunning in it; but truth would despise such unworthy means—conduct more honourable is her line of pursuit. This infidel defines a miracle to be "a transgression of the laws of nature;" and, in consequence of this petitio principii, founds the following conclusion: "Belief is founded upon and regulated by experience. Now, we often experience testimony to be false, but never witness a departure from the order of nature. That men may deceive us when they testify to miracles, is, therefore, more accordant with experience, than that nature should be irregular; and hence there is a ba-

lance of proof against miracles; a presumption so strong, as to outweigh the strongest testimony." The whole of this contemptible sophistry amounts to this: miracles are contrary to the laws of nature; therefore, the strongest testimony goes for nothing. And is this philosophy? Is it, in fact, right reason or common Our senses, in some cases, have not judged accurately, or have been mistaken; therefore, their testimony is good for nothing in all cases whatevertheir evidence is delusive in every case: and our senses can afford us no correct information-with them it is all deception and delusion. And this is the philosophy of a man, who has been the very idol of infidelity. idolatry is at a loss for statues to fill her shrines, when this image is set up for the homage of the mind. It is of importance to inquire, whether this definition of a miracle be well founded. As we are altogether ignorant of the illimitable resources which are at the disposal and under the supreme direction of JEHOVAH, we consider the usual assumptions on this question to be They are, however, these :- a scarcely warranted. miracle is contrary to the established order of things. It is a deviation from the laws which constitute that system of being, called nature, and which are essential to the order, harmony, and uniformity so conspicuously displayed in the manifestations of creation. ver be forgotten, however, that the treasures of the power, wisdom, and goodness of God, are replenished with ample means to fulfil all his purposes: infinite in extent, and boundless in variety, are the agencies which await his summons and are ready to obey his will. we are not possessed of all knowledge, there may be innumerable powers of which we can form no supposa-Let us not forget, that, as in providence, so in creation, there are "wheels within wheels." It is not presumed, for a moment, that Deity may not, for purposes of infinite wisdom, sometimes suspend, modify, or control those laws which he has impressed on creation; and we may be perfectly aware, that, should it be done, it would be in perfect accord with goodness

1

and mercy-our guarantees for good; or, for the vindication of that justice which is essentially connected with his holiness. Nor does it at all follow, that those laws, which were established at the beginning, were to possess an inflexibility which no circumstance nor event. in the futurity of time, should ever change. Gop, who saw the end from the beginning, doubtless formed his plan for the government of creation on a sublime basis, and of incomprehensible extension. Deity, in the vista of his prescience, would provide ample means for the changes that should follow, subservient to particular and important ends. But we may be permitted to state, that, for aught we know to the contrary, a miracle may neither be a suspension of the laws of nature, nor contrary to them; but, rather, something superadded to the primitive laws with which creation was originally invested, issuing from the unlimited resources and at the command of God. A miracle may be altogether independent of the laws of nature, or those which we call so, and with the operation of which we are more familiar: -or, a miracle may be an extension or modification of a previous law. We do not proclaim this view of the matter as with the voice of an oracle. We may be in error; but, as, for aught we know, this may have been the case, in some instances, at least, if not in all, we have no right to propound it as an axiom, that a miracle is, indeed, a suspension of any of the laws of nature, or contrary to the established order of things. We cannot see the extent or measure of the laws of God, nor take cognizance of their infinite variety; and, shall we bound the power, wisdom and goodness of the Deity by what we see and know? Surely not. This would be presumption in the extreme. This would be to impose the finite measuring-reed of human comprehension on the infinitude of the LORD GOD ALMIGHTY. We think that it requires no great penetration to discern, that objections to miracles are couched in that very spirit which would dethrone Deity altogether, and reduce Him to a level with ourselves ;-it is one of the wheels of pagan machinery-one of the secret springs

of idolatry; and we cannot wonder that it should finally

conduct some sceptical minds to atheism.

In order to illustrate our views on this subject, we may refer to a few of the miracles recorded in the Old Testament, without at all impugning the better counsel of those who may believe, that miracles may be a counteraction of the laws of nature in all cases: our views have to deal with infidels; and it is to contest the question on their assumptions, that we take up our position. As we defy them to prove, that a miracle does, in its very nature, imply a contradiction of the laws of nature, or something contrary to them, and cannot imply any thing else; we have ventured an opinion, that a miracle does not necessarily and essentially imply this. For aught they can tell, the original laws of creation may remain precisely as they were and now are; and a miracle may be altogether independent of those laws, and involve the question of a new law superadded to the natural course of events, and provided in the councils of heaven for the contingencies of time. That God, who "made a decree for the rain, and prepared a way for the lightning of the thunder," (which laws were, in all probability, imposed after the deluge,) has many other laws in store, of which we know nothing.

The meteoric stones which fell from heaven, and destroyed the enemies of Israel, in the way "going down to Beth-horon,"* is perfectly consistent with the established course of events. We can, indeed, remember the time when the fall of meteoric stones was accounted altogether fabulous, and unworthy of being considered a subject within the range of legitimate science. Such a topic was ridiculed as spurious, or regarded as a phantom—a tale only meet for the legends of the East, or the fables of Greece or Rome. There is now, however, nothing better established in the circle of science, or more certain among the range of physical truths, though it forms a problem more difficult in its solution, than

^{*} Joshua x. 11.

almost any other, with our limited notion of the laws of physics. Still the fact is indisputable. The miracle, therefore, did not consist in the fall of these aërolites, but the time and place, when and where it happened. The meteoric stones fell not on the camp of Joshua, but on the enemies of that celebrated leader; and it caused their discomfiture at a period which manifested that the Gop of the armies of Israel was their "shield and buckler." The same process of reasoning may be applied to the extraordinary phenomenon which occurred subsequent to this event, when Joshua said, in the sight of Israel, "Sun! stand thou still upon Gibeon; and thou, Moon, in the valley of Ajalon."* It does not at all follow from this, we think, that the earth ceased to revolve on its axis. We are informed simply that "The sun stood still, and hasted not to go down about a whole day." We know that by the laws of refraction, the image of the sun appears above the horizon in the morning, before the sun has yet scaled its plane; and in the evening, the sun has really set, when it seems still to linger above the horizon. It is merely necessary to suppose, the intervention of a dense refracting medium, and the miracle would be produced, irrespective of the earth's diurnal motion. Indeed, we prefer this view of it, because the miracle is then more local and more special. The same process of reasoning applies to the miracle in the case of Hezekiah, and the phenomenon which appeared on the dial of Ahaz: "He brought the shadow ten degrees backward, by which it had gone down in the dial of Ahaz." † A superadded refraction, the consequence of the intervention of an appointed denser medium, would solve this. There is, therefore, no necessity to suppose a recoil in the earth's orbit, and the miracle remains in the same bold relief as before. We may extend this to the case of Elijah, when providentially supplied with food by the ravens, "evening and morning, at the brook Cherith." That the raven should be the messenger of such food, morning and evening, is

^{*} Jos. x. 12 † 2 Kings xx. 11. ‡ 1 Kings xvii. 6.

a fact quite compatible with the known habits of this carnivorous bird, but the miracle consisted in this being deposited at the prophet's feet. Just so it was with the blossoming of Aaron's rod. This was certainly a remarkable phenomenon; but it might, nevertheless, have been one compatible with the laws of nature. The leaves of bryophylum calycinum, after they are detached from the shrub, will, at each indentation yield a plant; and this curious vegetation we have preserved for twelve months subsequent to the removal of these leaves from the parent stem. The epidendrum flos aëris, and a great variety of analogous phenomena, might be cited in addition. There was, therefore, no violation of the laws of vegetable physiology, in this case; but the miracle consisted in a transference of the phenomenon to the individual case of the almond rod. in which the event has never been observed.

Apart from these considerations, a very natural inquiry may arise: Are we fully acquainted with these lans, so as to be able to sit in judgment on them, and define them accurately? We hold it to be an axiom, that there is no such thing as an anomaly in the sight of God, however convenient the term may be to us, who use it, to conceal an ignorance we are unwilling to confess. We may consider the laws of nature such, as might be represented by a continuous succession of events, where the chain of being is perpetuated, uniformly, without any dislocation in its concatenation. Suppose, however, we carry our minds back to some period before the discovery of the planet Uranus, by Sir Wm. Herschell; it would, then, have been concluded, from "experience," that all the planetary orbs moved in one specific direction; and it would, then, also have been inferred, that any deviation from this order of nature, would have been a violation of those laws by which their movements were regulated. In process of time, however, it was discovered, that we had not reached the boundary of the solar system. The planet Uranus was discovered; and, subsequently, several moons, as attendant satellites, were descried by the telescope; but

what was extraordinary, two of these moons, the first discovered, were found to move in a direction contrary to that of all the other heavenly bodies in the solar system. whether primary or secondary. We could single out. from almost every department of nature, CONTRARIE-TIES, or "anomalies," of a similar description: thus, the ornithorynchus paradoxus has no mammæ; or, at least. none have hitherto been discovered. Vegetation, again, is full of singularities or ellipticities, which may be called deviations from the laws of vegetable physiology. We do not, indeed, know a department of nature that is entirely free from exceptions to those general laws which we have pre-supposed essential to the conservation of that beautiful system of which they form a part. Thus, in conchology, shells, generally, are the habitations of testaceæ; but, this is, by no means, always the case: for the reverse of this happens in some instances. In the latter, instead of the animal inhabiting the shell, the shell inhabits the animal: thus, the dolabella of Lamarck, and the bulla aperta, and helix haliotoida of Linneus, afford examples, wherein the shell is embedded in the animal, and the animal is wrapped, like a mantle round it. Sometimes the shell is a mere plate or escutcheon, as in the limax or slug; and in the beautiful argonauta vitrea, it is a case or pouch which contains some of the organs. Again, in almost every case, we find the spires of shells in one determinate direction. their mouths opening to the left hand; but, though extremely rare, there are remarkable exceptions to this rule: in these contrarieties, the whirls are reversed, and the involutions are to the right:-for example, the We also find instances of this murex perversus Lin. kind among the Linnean genera of helix, strombus, and When the chank shell, turbinella of Lamarck. is found to possess this very curious character, it is highly prized by the natives of India. A chank shell, with an opening to the right, is, indeed, rarely obtained; but, when found, always sells for its weight in gold. The Singalese are very desirous to gain possession of the chank shell, with the right twist or whirl; because,

they fancy that it is the symbol of the toes of Budha's footstep. From these incidental remarks it will be perceived, that our notion of the invariability, which we have presumed to ascribe to the laws of nature, is not so de-

finite as to include these, so-called, anomalies.

Mr. Keith's excellent work on Prophecy has anticipated what we might have urged on that interesting question, and entirely superseded the necessity of our saying a word on the subject. We had been long engaged in collecting, from enlightened travellers and from every source accessible to us, evidence confirmatory of the wonderful completion of prophecy. All this, however, we gladly wave in favour of a work which merits our commendation; and which, we think, will also satisfy the inquirer after truth. The spirit of prophecy must have of necessity, flown from a source altogether superhuman. This conclusion is irresistible. The force of truth, in these events, must put infidelity to the blush. Atheism cannot stand before this blaze of radiance from heaven-it is consumed. We would not be suspected "to build on another man's foundation;" and the hiatus in this part of our evidence, must, therefore, be attributed to the proper cause: we leave it in able hands; and, if our humble meed of approbation is of any value, it is awarded, with pleasure to the little work in question: jealousy has no place in our mind: we hail its excellent author as making common cause with us in a warfare which is sterling and noble. We have already stated, that we are not friendly to the general tone and temper of writers on prophecy. Our opinion is precisely that of Sir Isaac Newton's, which we cannot do better than quote: "The folly of interpreters," says this distinguished individual, "hath been to foretel times and things by this prophecy, as if God designed to make them prophets. By this rashness they have not only exposed themselves but brought the prophecy also into contempt. The design of God was much otherwise. He gave this (the apocalypse) and the prophecies of the Old Testament, not to gratify men's curiosities, by enabling them to foreknow things; but,

that, after they were fulfilled, they might be inter-

preted by the event."

The Jews are at this moment a living monument, and miracle in attestation of the truth of Revelation. A simple volume serves instead of country and of king. It is their code of laws and their directory for heaven. A pilgrim people, "strangers and sojourners on the earth" -weary wanderers, dispersed over the face of the globe, -sighing for their beloved Jerusalem, with "their faces thitherward;" and, breathing the fond wish, that the valley of Jehoshaphat may be their last abode. M. Massias has an interesting remark connected with this subject. "As long as a remnant of Jews shall exist, the Jewish people will exist: each of them is a living exemplar. The Jew is neither European, nor Asiatic, nor African; he is neither a republican nor yet monarchical; in all places, he is ever the Jew and nothing but a Jew."* This remarkable people has remained the same in all ages; and are, now, as distinct and peculiar, even in their physiognomy, as when Moses was their leader, and Aaron their priest:

"Even in their ashes live their wonted fires."

Jerusalem, "the city of their fathers' sepulchres, lieth waste," and "the adversary hath laid his hand upon all her pleasant things." The bittern, by long proscription, symbol of desolation, stalks lonely amid the silent wastes of Judea; and the breeze whistles mournfully among her ruined cities. "Their beautiful house, where their fathers worshipped, is burnt up with fire, and all their pleasant places are laid waste." The sacred fire is extinguished on their altar, and the daily sacrifice is taken away. "The sceptre is departed from Judah." Numerous memorials of their wonderful history, however, still remain, like the pillars of Palmyra, amid the desert of their desolations. On the Tigris, between Bagdad and Bussora, is the Sepulchre of Ezra, the sephor, or scribe of the law of

^{*} Massias "Rapport de la nature, de l' homme," &c. Tome III. p. 171.

GoD; and to the south-west of Hellah, is the tomb of the prophet Ezekiel. Ecbatana, one of the cities in which the Jews were placed in their captivity, is still inhabited by a rabbi and Jews, to the number of four hundred houses. Amid all the misery that oppresses them, in the regions of Chaldea, the tombs of Mordecai and of Esther are still cherished with fond and affectionate care. Though the register of their defection, and credentials of their disgrace, the Jews, nevertheless, preserve this memorable volume with pious care, and regard it with reverential awe. This isolated race, the exiles of Judea, in despite of time or distance, still worship "the God of their fathers;" and still conform strictly to the severe prescriptions of the law of Moses. We would summon the infidel to behold the modern Jew, and wonder at miracles no more, for this is, surely, experience! The Jews and Samaritans have each their own copies of the Pentateuch; and, though in hostility, the integrity of the Sacred Text remains unimpaired. To what an extent this hostility had arrived, in the first century, we may collect from an expression made use of by the Jews to our Saviour: "we know that thou art a Samaritan, and hast a devil."*

Towards the close of the last century, there was discovered the remnant of a Jewish colony in China, which is stated to have sprung from seven hundred families of the tribes of Judah, Benjamin, and Levi; having escaped thither after the destruction of Jerusalem, by Titus Vespasian. They now amount to about six hundred souls, and are located at Cai-song-fu, about one hundred and fifty miles from Pekin. These emigrants from Jerusalem carried with them the Old Testament, which was preserved for eleven centuries. About this period, however, a fire broke out, which destroyed their synagogue and its manuscripts. These MSS. were substituted by a copy of the Pentateuch possessed by a Jew, who died at Canton. Not

only the synagogue, but individuals also were supplied with transcripts from this copy. Independent of this Pentateuch, these Jews had, fortunately, preserved copies of the greater part of the remainder of the Old Testament, from the conflagration of the twelfth century; and from an inundation of the river Hoango, in 1446. Among these fragments are portions of the Chronicles, Nehemiah, Esther, Isaiah, Jeremiah, Daniel, and of seven of the minor prophets. Some of these are nearly complete, while others are more limited fragments. The Books of Joshua, Judges, 1 and 2 Samuel, 1 and 2 Kings, and the Psalms, are entire.

By far the most interesting researches in that quarter of the world, are those of the late Dr. Claudius Buchanan, who found in Hindustan, in the year 1808, a society of Syriac Christians, among the superstitions of Hindu idolatry. Their copies of the Scriptures, were all in manuscript; but the most interesting fact, in reference to our present question, was the discovery of a colony of Jews in the vicinity of Cochin. These were divided into black and white Jews, who reported that their fathers had fled thither after the destruction of Jerusalem. Dr. Buchanan concluded, that the black Jews in Malabar, who could not, from their complexion, be distinguished from Hindus, were of much higher antiquity; and in all probability, had found their way thither after the period of the first dispersion by Nebuchadnezzar, king of Babylon. From these black Jews, Dr. Buchanan obtained an entire copy of the Pentateuch, which was found in an old record chest, belonging to the synagogue. That interesting document is now in the University Library, at Cambridge, where we have seen it. This manuscript, which contains the entire Pentateuch, composes a roll forty-eight feet long, and appears, to us, to be written on goats' skins dyed red. It is, perhaps, two thousand years old; and we may observe, is little, if at all, different from the genuine received text, -a further proof of the authenticity of that Record of which it is a copy. The testimony, that the Pentateuch was written by Moses is altogether of the most conclusive kind. Its style, its careful transmission from age to age, the numerous independent authorities which corroborate this, such as the Samaritans, the Jews of the eastern hemisphere, and those of the western hemisphere—ancient and modern—separated by barriers that have remained impassible for many centuries—Pagan evidence—all proclaim the authenticity of the Sacred Code of the Jews, beyond doubt or appeal. There is in the British Museum, among the Harleian MSS., a beautiful copy of the Hebrew Pentateuch; it is care-

fully transcribed on forty brown African skins.

The extraordinary care which the Jews observe in the transcription of their sacred books, especially of the Pentateuch, is not the least remarkable feature in that wonderful people. The MS. rolls, in their synagogues, of which we have seen some beautiful specimens, are preserved with uncommon care in an ark or coffer; and when the roll containing the law is exposed and held up to the gaze of the congregation, it forms a spectacle of unusual solemnity. There are no less than EIGHTY-EIGHT RULES in the rabbinical laws, for the transcription of the Pentateuch. These copies are made by sacred scribes, called sephorim, set apart for this especial purpose. The skins on which the Pentateuch is transcribed, are those of a clean animal (agreeably to the law of These skins are carefully prepared, by particular individuals appointed for this end. The ink must also be prepared after a particular manner; and the pen must be made from a quill taken from the wing of a clean bird. A certain number of letters and words must fill the individual line; and each column must also consist of a certain number of lines. Even an imperfectly formed letter, much more a superfluous one, would entirely vitiate the copy; and the reader in the synagogue, on such a discovery, would not hesitate to cast it away from him. The tetragrammaton, or sacred name of God, is written with the deepest awe and solemnity, with a new pen devoted to this exclusive purpose. The letters

1

of that glorious name * are also of a larger size than the rest of the MS. In transcribing the "Oracles of Gop," the sephor or scribe must commence his task in the full enjoyment of health, and must rise from it before lassitude supervenes. For these interesting particulars we are indebted to an intelligent Hebrew. It is also worthy of notice that no fragments of the MS. sacred Records, are suffered to be improperly used or scattered about; they are carefully collected, and like Jeremiah's roll, cut to pieces, and consumed. This is also the practice in the east: "And it came to pass, that when Jehudi had read three or four leaves, he cut it with the penknife, and cast it into the fire that was on the hearth, until all the roll was consumed in the fire that was on the hearth."

In Plate II. fig. 16, is a representation of a mazuza, in our cabinet, presented to us by a Hebrew, with a strict injunction, that it should on no account be used, but with the greatest care, nor on any occasion that might compromise a proper and religious use of it. The MS. is exquisitely written on vellum, by a sephor, under all the conditions prescribed for the transcription of the Pentateuch, of which it forms a part. It is really a manuscript gem; and as such was highly prized. The mazuza is so called from mazuzoth, the door-post, to which it is affixed, in literal obedience to the injunction,

^{*} By the third commandment, the Hebrews were strictly enjoined not to use that mysterious name, which denotes the eternity of God, familiarly. It is, consequently, never found in any Hebrew writings, except in HOLY WRIT. The four letters which compose the word, which we translate Jehovah, are made to signify, He was—He is—He will be. We have already stated that this name is never pronounced by the reader in the synagogue, much less in familiar conversation: Adonal, Lord, is always substituted. It is interesting to remark, in connexion with this, that a Brahmin will not pronounce the name of the Almighty, without drawing down his sleeve, and placing it on his mouth with fear and trembling.

"And thou shalt write them upon the door-posts of thine house, and upon thy gates."* Our mazuza is enclosed in a neat tin case; a square opening discovers the Hebrew word, TSADDAI, all-bountiful, which is written on the back of the mazuza. A slip of transparent horn, serving as a miniature window, discovers this word only; a moveable piece of tin, which serves as a kind of blind, conceals the opening. This is nailed to the door-post, where it remains a fixture; the pious Jew, morning and evening; and in his "going out and coming in," puts his finger on it, and repeats a short prayer. This is especially the case before he sets out on a journey, and on his return. The MS. in our mazuza, is from Deuteronomy vi. 4. "Hear, O Israel; The LORD our God is one LORD. And thou shalt love the LORD thy God with all thine heart, and with all thy soul, and with all thy might." The facts we have enumerated, are proofs of additional guarantees for the integrity of the Sacred Volume of the Jews-the "Old Testament" of the CHRISTIAN.

The Jews are the librarians of the Christian; and the latter appeals to the Book of the Jews, in proof that to JESUS CHRIST "gave all the prophets witness;" and that, in this MIGHTY PRINCE, all things are fulfilled. The Canon of Scripture is now closed. The Jewish Scriptures terminate with the last of all the prophets. The "New Testament" proclaims, with silver trump, "A GREATER THAN A PROPHET IS HERE." In looking back on the remarkable events with which the Old Testament is fraught, we perceive one great object steadily kept in view: a legacy from heaven, preserved amidst the fluctuations of time, and the storms of contending nations-and even that highly favoured people, to whom this sacred deposit was entrusted, often themselves plunged into idolatry. A little ark-"it is a little one!"-guided safely, by the Governor of the universe, through a whirlpool! with a Scylla on the right hand, and a Charybdis on the left. All the rays

^{*} Deut. xi. 20.

of the Old Testament point to some great event, as their focus and centre. The whole of the Mosaic ritual, with all its ceremonies, adumbrated "greater things than these." The sacred minstrels struck a note that had never been heard before; and the prophets saw, afar off, a wondrous sight, and proclaimed a jubilee of "peace and good will to man." Patriarchs shouted for joy, to see, from the Pisgah of Revelation, the goodly vision; and their note of exultation was echoed by a noble host of prophets, priests, and kings, until it merged in that Glorious Being who embodied, in himself, the united names of Prophet, Priest, and King. Clouds and darkness were dissipated; the shadows which obscured the landscape, were rolled up like a scroll; AND ALL WAS LIGHT.

Augustus assumed the purple twenty-seven years before the Christian era. In his reign, the event-ful period, looked and longed for, at length arrived. Throughout the range of the civilized world, the voice of war was mute. The gates of Janus, in the imperial city, were closed. Cæsar Augustus, wreathed with the laurels of victory, at length enjoyed the repose of peace. The world was in anxious, earnest expectation of some wonderful event; the oracles and sybils became instinct with prophetic mutterings of a new dawn in human affairs; and Virgil, in his Pollio, could awaken the echoes of the heathen world by seraphic notes, stolen from the

sacred bard of the Hebrews:

"Jam nova progenies cœlo demittitur alto."
—— "nec magnos metuent armenta leones.

Ipsa tibi blandos fundent cunabula flores."

We present two fac similes of medals, struck in the reign of Augustus. One commemorates that universal peace which prevailed at this auspicious period—happy presage of the advent of the Prince of Peace. The other seems more than belongs to Paganism. "Peace over all the world," and "the salvation of the human race." The latter is interesting, as connected with a

statement, that Augustus actually reared an altar with this remarkable inscription:

" Ara primogeniti Dei."

The spot is still pointed out, at Ara Cali, in Rome. This circumstance receives some countenance from the legend of one of these medals; nor is this inscription confined to one medal, since it is seen on several of those of Augustus.





CHAP. XI.

THE ADVENT OF THE MESSIAH—THE DIVINITY OF JESUS CHRIST—THE CRUCIFIXION.

THE Old Dispensation having completed its purpose, a new era arose; -that era, which "prophets and kings desired to see, but were not able." The advent of the Messiah was announced to the world by John the Baptist's preaching repentance, in the wilderness of Judea. There had not arisen a greater prophet than John. He came "in the spirit and power of Elias;" with all the austerity of an anchorite; for "his raiment was of camel's hair; and a leathern girdle about his loins; and his meat was locusts and wild honey." His incessant cry was, "Then went out to him, Jerusalem REPENTANCE. and all Judea, and all the region about Jordan, and were baptized of him in Jordan, confessing their sins."* Such was the messenger which the last of the prophets of the Old Testament had announced; and such was the morning star, that ushered in the dawn of the Sun OF RIGHTEOUSNESS. John's career was, however, short. He pointed to Jesus of Nazareth, while he told his followers, "HE must increase, but I must decrease." Soon after John had lifted up his voice, and said, "Behold the Lamb of God, that taketh away the sins of the world," this illustrious harbinger of the Messiah, was seized by Herod, who then occupied the throne of Judea, and beheaded in prison. It was not meet that JESUS CHRIST should sustain any rivalry. The lesser light suffered an eclipse, and the Greater Light reigned LORD of the "new heavens."

It seems probable, from several considerations, that the Gospel of Matthew was originally written in the Syro-Chaldaic tongue; -- a language, which, it is not improbable, our SAVIOUR spoke. We draw our conclusions from the words, $F \varphi \varphi \alpha \theta \hat{\alpha}$ —("be thou opened,") Ταλιθά κουμι—("maiden, arise!") and others. We preface this, by way of remark, connected with an event mentioned by Matthew, as announcing, in a distant region, the birth of JESUS CHRIST. A new star took its place in the sky, and became the celestial sign and telegraph to eastern MAGI, who hailed it as the symbol of that event, which the world anxiously expected. We are aware this beautiful phenomenon has been usually and generally ascribed to some meteor in the regions of the atmosphere. We cannot, however, subscribe to such an opinion. In the Sacred Text, it is denominated a star, and not a meteor. It seems, in our view of the matter, little short of the ridiculous, to suppose that these wise men, who were, doubtless, astronomers, should have been the sport of an ignis fatuus, or Will o'the wisp; or leave their country, which was, perhaps, Parthia, in pursuit of a meteoric bubble. The narrative is simple and concise, but sufficiently explicit: "Behold, there came wise men from the east to Jerusalem, saying, Where is he that is born King of the Jews? for we have seen his star in the east, and are come to worship him."* Let it be remembered, in the first place, that it was of a permanent character; and from the vast distance at which it was visible to these eastern magi, it is utterly impossible that it could have been a meteor, floating in the lower regions of the atmosphere; considered altogether apart from the incredible magnitude that this supposes. We believe the greatest extent of distance at which bolides have ever been seen, does not exceed fifty or sixty miles; at which distance, it would appear, Humboldt perceived fire-balls in South America. It is

equally incredible to suppose it to have been of the nature of an aurora. We cannot ascribe ignorance of astronomy to these wise men; they came from the very regions of astronomical science; and we may well believe them to have been conversant with the phenomena of the heavens. To mistake a star, in the celestial hemisphere, for a meteor, is, therefore, out of the question. To those, indeed, whose views are at issue with our own, as to the DIVINE DIGNITY of the illustrious person, whose birth it announced from afar, it must be a matter of indifference, whether it was a new star which took its station in the heavens for the first time, or a blaze of meteoric light: but the question with us, at any rate, is not a matter of indifference. On this auspicious night, were not the heavens opened over the shepherds, on the plains of Bethlehem? and did not a celestial messenger from the high court of heaven, surrounded by "a multitude of the heavenly host," announce "the good tidings of great joy:"-" Unto you is born this day, in the city of David, a Saviour, which is CHRIST THE LORD?" Why this ado, if the event was unworthy of being signalized all over the southern hemisphere, by a new creation; or another world, from causes occult to us, being brought into view? It appears that this star is recorded by Chalcidius. The truth then seems to be this. These distinguished individuals perceived, for the first time, a new star in the west; and supplying a place in the heavens unoccupied before. The Assyrian magi might have been in possession of the Book of Daniel; nor is it at all improbable that they may have heard of Balaam's remarkable prediction, uttered in the presence of Balak king of Moab: "There shall come a star out of Jacob, and a sceptre shall rise out of Israel."* Obedient to the heavenly vision, they pursued their pilgrimage westward, having ascertained that the zenith of this beautiful star was in the direction of Jerusalem. When the magi arrived at the capital of Judea, the anxious interrogation was put,-"Where is he that is born King of the Jews,

^{*} Numbers xxiv, 17.

for we have seen his star in the east, and are come to worship him?" They could have easily ascertained that the zenith of this new star was at or near Jerusalem, but it became a more difficult problem to determine its precise zenith point in the heavens. On this extraordihary inquiry, we are told that Herod "was troubled, and all Jerusalem with him." Herod having convoked the chief priests and scribes, asked them "where Christ should be born." On consulting the records of prophecy, they found it thus written in the Book of Micah, "Thou, Bethlehem Ephratah, though thou be little among the thousands of Judah, yet out of thee shall he come forth unto me that is to be ruler in Israel; whose goings forth have been from of old, from everlasting."* This announcement was distinct and definite, and on receiving the intelligence, they departed from the capital ;- "and, lo! the star which they saw in the east, went before them, till it came and stood over where the young child was. When they saw the star, they rejoiced with exceeding great joy." After they had left the city, they recognized the same star, and were glad to find its zenith was still before them, and had not been passed. Thus the phenomenon and the prophetic announcement had perfectly corresponded; for they finally discovered that the precise zenith point was over the place, where the young child was. We are informed that this was at an inn, and as the caravansaries of the east are generally insulated, and apart from towns or cities, this would enable the eastern magi to determine the spot with more precision. When they discovered the remarkable object they were in quest of, confident from all that they had seen and heard, that there was something more than met the eye, "they fell down and worshipped him; and, when they had opened their treasures, they presented unto him gifts; gold, and frankincense, and myrrh."+ This event is not mentioned by the other evangelists. The fact that the Gospel of Matthew was written in the Syro-Chaldaic tongue, is a curious circumstance in this

^{*} Micah v. 2. † Matt. ii. 11.

question, and may be connected with the episode of the adoration of the magi. These wise men may have come from the mountains of Iran, in search of a prince in the royal line of Judah. When we consider that the fame of Solomon was spread abroad throughout all lands, and combine with this circumstance the long captivity of the Jews in the Medo-Persian empire, we need not wonder that the Pagan nations around should have caught a spark of the celestial fire. The captive Hebrews could shew that their captivity had not been untold by their prophets; and that the same voice which had foretold things that had already come to pass, had also announced that a star should arise in the kingdom of Israel.

We know that new stars have made their appearance in the heavens from time to time; and, having glowed in the firmament for awhile, have, from causes unknown to us, at length disappeared. A brilliant star, described by Tycho Brahe, made its appearance in the constellation of Cassiopeia. Its lustre increased for some time, then faded away, and is not now to be seen. How long this beautiful vision of the western star adorned the firmament, we cannot tell;—perhaps it continued to illuminate the heavens during our Saviour's abode on earth, and became invisible on the night of the crucifixion—and would thus serve as a celestial telegraph, to announce to these magi, if yet alive, or to those who succeeded them, that the "Star of Jacob" had already set on the world.*

* We have felt considerable pleasure in discovering, in an old work, by Piscatore, that a similar view of the phenomenon had been taken by that author, who distinctly adverts to a new star which had made its appearance in his time. "Ille nuper natus. $\delta \tau \varepsilon \chi \theta \varepsilon i s$. Adverbium supplevimus ad sententiæ perfectionem. Ejus stellam. ἀυτου τὸν ἀστέρα. Hoc est, stellam qua nativitas ejus nobis est à Deo patefacta. Hanc stellam fuisse novam, et in hoc ipsum à Deo conditam, judicari potest è singulari ejus motu, qui indicatur infrà vers. 9. Talis nova stella conspecta fuit nostro tempore, anno Domini 1572. In Oriente. ἐν τῆ ἀνατολῆ. Adverbium, in ortu scilicet solis. Id est, in regione Orientali. Metonymia ad-

The character of the Prince of Peace is unique, and is altogether superhuman. We are perfectly acquainted with the state of the world when this illustrious being appeared on the earth. We can weigh the amount of the wisdom of the heathen world. We know the beau ideal of their most gifted minds; and can fully estimate the intellectual attainments of their greatest and best philosophers; but Jesus of Nazareth as infinitely transcended all of them, as the palm-tree does the recumbent shrubs; or the sun the lesser twinklings of the night:-the one is of the earth, and attests its origin; the other is "the LORD from heaven." Our Saviour had no counterpart in the age in which he lived, and partook not of the impress of the times. His character and conduct were insulated and unrivalled. It was a beautiful though a short lived vision of heaven on earth. The religion he promulgated had never been imagined in the most sublime dreams of human perfection among the sophists of the world. Plato had, indeed, concluded, that if men were to be guided to celestial bliss, it must be by a visit from heaven. Our Saviour is as exalted above the tone and temper of the era he adorned, as if he had altogether belonged to another world, and another state of being. religion was at complete antipodes with the mythologies of the world. He promulgated "a new commandment," of which that world had never heard, and of which it never could have thought: "Love your enemies; do good to them that hate you; and pray for them that despitefully use you and persecute you." Well might the heathen rejoin, "this is a hard saying." But Jesus CHRIST conspicuously illustrated this sublime precept in his own bright example; and left that splendid exemplar for his followers to copy. The theme, however, is interminable, and our design is limited: but we cannot dismiss the question without recording our humble suffrage to the Supreme Divinity of Jesus

juncti."——Analysis Logica Evangelii Secundum Matthæum : Herbornæ 1594.

CHRIST. We cannot otherwise reconcile the attestations of the Sacred Volume. In our view, they are altogether complete and decisive on the question; and, as far as our opinion extends, from some degree of careful reading, much reflection, and a sincere and ardent love of and attachment to TRUTH, irrespective of the systems and sentiments of any man on earth, we rest on the Supreme Divinity of the SAVIOUR of the world as elucidating every thing, and reconciling all into one beautiful, consistent, and harmonious focus. It is the meridian line of the chart of the CHRISTIAN, toward which all the other lines converge: it is the sun of the system of Christianity, which casts a flood of light and radiance over all its provinces; and by which every thing is illuminated: it is "the golden hinge by which earth revolves on heaven." If we separate this essential feature, we can see in the Old Testament nothing but a strange and confused assemblage of wheels and movements, utterly inexplicable, and altogether without design or end; but when the Supreme Divinity of our Saviour is admitted, this otherwise unaccountable machinery wears the impress of design, and seems working for good. It, then, appears to be the great machine of Providence, put in motion by an arm that is almighty, and fraught with displays of omnipotent wisdom. We think the question reduces itself into a very limited compass. Biblical criticism has, in our opinion, been altogether triumphant in this question; and we may safely leave it to enjoy its laurels. Except in the views we sustain, we cannot perceive the use of the Old Testament as a directory; for, if it be metaphorical, or, in other words deceptive, (and assuredly if our Saviour is not Supremely Divine, more effectual means for deception could not have been devised,) of what service is it as a standard of appeal, in a question which, of all others, concerns us most? and which we are expressly told, is what we are to consider a safe guide in this matter. "To him gave all the prophets witness;" while the Psalms shadow forth "the great mystery of godliness-God manifested in the flesh." Indeed, the question propounded by our SAviour to the Jews, seems to have been an argument to which they never pretended to reply: "If David call him LORD, how is he then his son?" We, of course, dismiss the incomprehensible and mysterious views propounded for our belief by what are called Arians, as not only above, but contrary to REASON-a created creator, "by whom all things were made that are made," must be given up as absurd and preposterous. It is a dogma which cannot be entertained now, and we are only surprised that such a notion could ever have floated, in times that are past, through the dreams of imagina-All the attributes of GoD are assigned, without reserve to Jesus Christ. The very tetragrammaton is directly applied: "JESUS CHRIST--the same yesterday, to-day, and for ever." He declared himself to be the I AM. The Jews expressly understood this claim to be set up, and took up stones to stone him for blasphemy, (agreeably to the command of Moses) "because thou being a man," observed they, "makest thyself Gop." This very fact has been one of the stumbling blocks to Jews in all ages, against the claims of MESSIAH; and in this respect, they have the same unchangeable fixidity, now, that they had at the period referred to. The celebrated Jewish philosopher, Moses Mendelsohn, in his correspondence with Lavater, expressed the highest veneration for the Author of the Christian Religion. That it was a perfect character, and unobjectionable-"IF he had not accepted of the homage due to the MOST HIGH only."!* JESUS CHRIST "knew what was in man," and "needed not that any should testify" this to him; and we may be well assured, that the key which can unlock the human heart, hangs alone at the girdle of OMNISCIENCE. The whole of the Sacred Volume testifies that Jesus Christ, as he is our Creator, our Shepherd and Preserver, so he is to be our Judge. These Scriptures, also, attest his underived existence—His

^{* &}quot;Wenn er nicht die Ehre der Aubethung, die dem einigen Jehovah gebuehrt, nicht angemaszt haette!"

1

Omnipotence, Omnipresence, and Omniscience—these, and his Holiness, Justice, Goodness, Mercy, and Truth, seem, to us, so palpably proclaimed, that "all who run may read." These characters seem to emblazon the Sacred Page, and appear to be infused into every line. They are, indeed, to our apprehension, the very soul which animates the mass, and gives it life and motion. If the attributes we have enumerated be not those of Deity, we know not where they are to be found. Our SAVIOUR wrought his miracles, which were altogether PECULIAR, in his own name, and in the person of an underived authority-"I will." The case, however, was far otherwise with his apostles: In the name of Je-SUS OF NAZARETH, was the charm of their invocation. Celsus, the Epicurean philosopher, in the second century, admits that the apostles performed miracles, but ascribes it to the use of certain names. Origin sets him right on this question—that name being Jesus of Na-ZARETH. That these honest and faithful men repudiated the belief of an inherent power in themselves, and acknowledged that it was in the all-prevailing name of JESUS CHRIST they were enabled to accomplish such stupendous effects, we may be fully persuaded by re-ferring to the scenes at the "beautiful" gate of the temple at Jerusalem; and at Lystra, in Asia Minor. That Peter wrought miracles, Julian is forced to confess. To deny the Supreme Divinity of JESUS CHRIST, appears, to us, to run counter to the whole genius of Christianity: nor is there any legitimate middle path between the cardinal doctrine of the Divinity of Christ and the absolute rejection of Revelation. The grand doctrine of the atonement, like a golden thread, seems so interwoven in its tissue, that if it be withdrawn the whole fabric falls into shreds. Viewed in relation to that question, the Divinity of our Saviour seems to be, in the eye of reason, essentially pre-requisite. No man can save himself, much less "give a ransom for his brother:" and we profess not to comprehend the novel doctrine that would rear an altar to the mercy of God on the ruins of his justice; which, springing, as an

inevitable sequence, from his truth and holiness, cannot be insulated from them. It has been rightly said, that the objections which have been raised to this doctrine, are "cavils, which derive all their force not from the superior wisdom of their authors, but solely from the inadequacy of human reason to the full comprehension of heavenly mysteries. But still there is a simple grandeur in the fact, that Gop has set forth his Son to be a propitiation, sufficient to silence the impotent calumnies of sophistry."* As far as the Scriptures are suffered to speak out, there is no ambiguity, in our mind, whatever; and we should esteem it, altogether, a work of supererogation to make citations in proof: we appeal, at once, to the fountain of truth; to the Sacred Text, in its integrity, as a perfect whole. We cannot doubt the result, if the individual sits down to the task, as he ought to do, in the docile spirit of a disciple of inductive science, with his mind unprepossessed with fantastic notions, with which that mind may have been preoccupied.. It is impossible, (common sense and right reason alike determine this,) that we can form any à priori opinion, either on the nature of a Revelation from God, or his modus existendi. in such a case, if reason can solve the problem for us, we cannot see the use of Revelation at all. It is not a reasonable act that we should make up our minds beforehand on the kind of revelation we are "entitled to expect." We MUST SIT WHERE MARY SAT. verbal subtilty is very suspicious. It was the weapon of Hume's sophistry. The evangelist, John, in the most clear and unequivocal language, ascribes Supreme Divinity to Jesus Christ, as the Word. The apostate Julian admits this ascription of the evangelist, as a fact which was altogether incontrovertible; unlike those in our own times, who deny this vital principle. Julian, it is true, imagined it very extraordinary, and considered John to have been very simple for propounding such a doctrine; it never, however, occurred to him,

^{*} Robert Hall.

that John meant any other thing but what he had said, and asserted: that part of the question is quite a modern discovery. The Mahometans call our Saviour Ourah Allah—"the word of Goo"—and admit that he went alive to heaven. The adoration of the magi has been mentioned; even the Mantuan Bard, in his Pollio, seems to express something more than humanity:

" Nec Deus hunc mensa ----"

The testimony of Josephus, the Jewish historian, is equally conclusive:-" Now there was, about this time, Jesus, a wise man, if it be lawful to call him a man; for he was a doer of wonderful works, a teacher of such men as receive the truth with pleasure. He drew over to him both many of the Jews, and many of the Gentiles. He was [the] Christ. And when Pilate, at the suggestion of the principal men among us, had condemned him to the cross, those that loved him at the first did not forsake him; for he appeared to them alive again the third day; as the divine prophets had foretold these and ten thousand other wonderful things concerning him. And the tribe of Christians, so named from him, are not extinct at this day."* This is a very short, but a very important evidence. The genuineness of this passage has been, indeed, questioned; but it is established in the most clear and satisfactory manner. In the Ambrosian Library, at Milan, there is a very ancient MS. of Josephus, on vellum, wherein this passage forms part of the text. Thus, also, Pliny, in his celebrated letter to the emperor, Trajan, written only eleven years after John had, in the "Apocalypse," closed the canon of Scripture, observes, "they (the Christians,) were wont, on a stated day, to meet together before it was light, and to sing an hymn to Christ as to a god." The recognition of the Divinity of Christ is here attested by this profane writer in the most clear and unequivocal terms; and the evidence, on all sides, appears, to us, incontrovertible and conclusive. We

^{*} Josephus, Book XVIII. chap. iii. sec. 3.

cannot imagine on what principles those, who have determined to reject the capital doctrine of the Divinity of JESUS CHRIST, can do away with the interjection of Thomas, whose scepticism seems to have been sufficiently inflexible, until convinced by irresistible evi-To convert this exclamation into a parenthetic subauditur, is one of the most extraordinary sophisms we have ever met with in the whole course of our reading; and we think that contemptible evasion, with many others, is very well exposed by a writer* brought up in their own schools, and long their zealous advocate; but, at length, convinced that the truth lay in the opposite direction, he has, in his "Second Thoughts," confessed his error, and made this exposé, which does credit to his honesty and integrity. The protomartyr, Stephen, knew better than these new illuminati, in whom he believed, and that JESUS CHRIST was able to keep "that which was committed to him:"-"LORD JESUS," said the expiring martyr, "receive my spirit." -" The spirit shall return to God who gave it." John, in the Apocalypse, had announced that Jesus Christ was the "Alpha and the Omega," "the first and the last." As the stream is purest the nearer we approach its fountain; so we find, that the early Christians, who fell martyrs to the cause, in the persecutions of pagan Rome, under the emperors in the first and second centuries; or those who died in "the faith once delivered to the saints," rejoiced to echo their confidence in the notes of the exile of Patmos. A recognition of this belief we find often inscribed, by their surviving friends, on their tombs, which thus remain legends as witnesses to the truth. The following is an epitaph of this kind, where we perceive two palm branches, the simple emblems of martyrdom, in evident allusion to Rev. vii. 9: They "stood

before the throne, and before the Lamb, clothed with white robes, and palms in their hands." This epitaph

^{*} Charles Elton, Esq. of Bristol.

contains the name, Petronia. Among the coins of Dr. King, in the "Nummi Familiar. Roman." there is one with this name in the legend, representing a female figure with one knee bent to the ground: it belongs to the first century. The central monogram combines the two first letters of the Greek name, $XPI\Sigma TO\Sigma$: as X, (chi,) and P, (rho,) with A, (alpha,) on one side; and ω , (omega,) on the other;—an evident acknowledgment of the Divinity of our Saviour. We find the same recognition on the coins of Constantius, Magnentius, DECENTIUS, JOVIAN, and others; whereon the sacred monogram occupies the entire field on the reverse of the coin; and the A and \omega are arranged as in our wood cut, on each side. We are aware that Gibbon has stated, that the emperor, Constantius, did not recognize this belief: but this assertion is like many of his other assertions, when the subject of Christianity is the theme, void of truth; for we have, in the coin of Constantius,* a flat contradiction to Gibbon's state-

From a calm and dispassionate survey of the evidence on every hand, we have come to this conclusion, that if there be one truth in the Scriptures more clearly revealed than another, it is the Supreme Divinity of Jesus CHRIST. The fact is decisive, whether we reject it or not. Surely if Deity has revealed his modus existendi to man, we may reasonably presume, that we should find it to be something above the grasp of a finite understanding; that à priori, we might expect something extraordinary and wonderful, and what reason could not be expected to penetrate. We talk about human knowledge, and the conquests of the understanding; but, alas! how helpless are these, when concentrated on that wonderful, one word-Jehovah. The difference between Socinus and his followers, and those who assert the Divinity of Christ, is merely this: they think that it is not a difficult matter to define DEITY;

^{*} Plate II. fig. 12, is this reverse, on a coin dug up at Malton, in Yorkshire.

we, on the contrary, consider that his name is, what he announced it to be, SECRET; and are fully confident, that Paul was right and knew much better than they, when he said, "Great is the mystery of godliness, God manifested in the flesh." It is true they have charged upon us a creed of their own fabrication; but we do not acknowledge it. This fiction of theirs is, that three are one, and one is three: and it may suit the purpose of such as are accustomed to receive assertions as proof, or possess a spirit similar to those whom the Scriptures describe as, "believing a lie;" and who "receive not the truth in the love of it." All that we say is simply this: we believe that God exists, in the modus which he has announced in the Scriptures; and, that he may be THREE in a sense altogether different from that in which he is one. Now this is the extent of our belief on this all important question; and, we further maintain, that this is not contrary to reason; and, moreover, contend that there is all the difference in the world between what transcends the limited powers of reason, and what is at complete antipodes with it-or in other words, contrary to it. We have already stated, that reason is neither infinite nor yet possessed of all knowledge; and, if this is granted, and granted it must be on the soundest axioms of inductive science; then, we deny that it has a right to assume the prerogative of Deity, and impugn the doctrine, that God cannot exist under that form in which he has certainly declared, in our opinion, he does exist, in that very Volume which they, too, affect to receive as a Revelation from God. Truly this inconsistency far surpasses our limited comprehension. It is also true, that they monopolize the name Unitarian—a mere "ruse de guerre"—as if we disbelieved the UNITY of the DIVINE BEING: but this is most disingenuous, to say the least of it. fact is simply this-they worship reason; we despise the deification; and, confessing our inability to comprehend the modus of the Divine existence, we credit the testimony of his Revelation, while our reason kneels in humble adoration of the God of the Scriptures of

Truth. Among the numerous extraordinary phenomena of Socinianism, two circumstances are worthy of a passing notice. We had supposed that the great distinguishing characteristic of the Scriptures, was their IMMUTABILITY; that they did not change with the seasons, or with changing man; nay, in our simplicity, we had concluded that this feature was essential to the character of TRUTH. It appears, however, that THEIR IMPROVED VERSION of the "New Testament." in the several editions it has passed through, has actually changed its hues like the chameleon. Let the first and last "editions" be compared. This variability belongs not to truth, the standard of which, in its very nature, is WITHOUT CHANGE. The other remarkable feature in this modern religion, is the incessant acclamation that follows when it can number among its neophytes individuals a little elevated above the common walks of intellect. Even a Joanna Baillie, comes in for a share of their hosannas! Now, looking first at the genius of Christianity, and then on such a line of conduct, we must say, the contrast is very striking; and would raise in our minds strong suspicions and distrust, that, by whatever name it might be called, it cannot be the religion of Jesus Christ; because, the poor were especially remembered, formed its chief excellence, and were the loveliest gem in its coronet-a feature which was, "to the Jews, a stumbling block, and to the Greeks, foolishness." This conduct wears, in our estimation, the same livery of pride, which, when the REDEEMER was at the feast of Tabernacles, eagerly asked "HAVE ANY OF THE RULERS OR THE PHARISEES BELIEVED ON HIM?" The opinions and sentiments of Paul, who gloried in the "atonement," and that divine righteousness which made it the pearl of great price, were as opposed to the new discoveries, which Socinianism has made in these latter times, as light is to darkness. No marvel, then, that her votaries should have done the utmost to depreciate the talents and discrimination of the "great apostle of the Gentiles." That fine genius had always been celebrated, both as a

rhetorician and logician; and been cited and appealed to in all ages, as affording splendid examples of both: the remarkable discovery was made, however, a few years ago, that they and we had been altogether mistaken; and that Paul was neither the one nor the other. This astounding discovery is an emanation from the schools of Socinianism. These extraordinary announcements, they may be well assured, are startling; and perplexing to the disciple in his search after TRUTH.

Were we to put the question, as a proposition in science, there seems quite sufficient in the modus existendi, of the very lowest tribes of animation, to baffle the comprehension and confound the boasted wit and knowledge of this deified reason, even at the very threshold of zoology. It is not long ago since a physician discovered a remarkable circulation in the eel; its systole and diastole being altogether independent of the contraction and dilatation of the heart! The siren lacertina is truly amphibious: it has both lungs and branchiæ, or gills; it can live either wholly out of the water, when the lungs play and the branchiæ are quiescent; or in the water, when the lungs are in a state of repose, and the branchiæ are put in motion: these are duplex existences in one and the self-same system of being. How wonderful, again, is that remarkable animal, the polype, (hydra viridis Lin.,) generally found attached to the lemna or duckweed, in ditches; and by no means rare. We may turn it inside out, as we would a glove-it makes no difference; the one serves as well for a stomach, to receive its food, as the other did. If we decapitate the animal, a new head grows on the trunk, and the head pushes forth a new trunk: if we cut it transversely or longitudinally, each divided part becomes a whole, and assumes an independent existence. Here, the division of a system of existence does not destroy that existence-alter et Discovery is incessantly at work, and constantly introducing new and extraordinary phenomena; and the higher our advances, and the more refined our science, the more wonderful are the conquests of the mind in these respects. We may merely single out one more illustration, as it is among the latest of these discoveries in zoology: we allude to the case of the planaria torva, as detailed in the experiments of Dr. James Rawlins Johnson. He cut off the head of a full sized planaria below the eyes; a new head was reproduced in a few days. He cut off this second head; a new one was again regenerated; a third, fourth, fifth, and sixth experiment met with the same success. Among a vast number of experiments, equally extraordinary, he divided many other planariæ into six, and even eight parts: each portion retained its vitality, and set about reproducing as much of a new body as was required to restore it to the form of the perfect animal of which it had once formed a component part. author then dissected wedge-shaped pieces out of the heads of other planariæ, which were speedily reproduced; and, according to the depth and breadth of these pieces, a new eye would be produced, making three eyes; or two new eyes, making in all four eyes; and if the incision was very deep, in that case the parts would branch off and form two perfect heads. These are very wonderful; and, if our understanding is perplexed, and our reason puzzled at these things, what shall we say to their arrogance, when they presume to pass judgment on the modus existendi of God. The lesson which the volume of nature teaches, is humility; and the lesson which Revelation teaches, is, in like manner, humility. Pride is not taught in the school of CHRIST: the docility of a little child is best calculated for the attainment of "that wisdom which is from above." The modus existendi of the CREATOR can find no analogy in the works of creation: when the problem of these wonders of creation is solved, it will be soon enough to speculate on "that which is UNSEEN, and ETERNAL." We should not have adverted to this great question, at all, had we not conscientiously believed, that, it seems a matter of little moment whether we believe Revelation or not

without it: for if REASON has settled the question, independent of Revelation, the latter would be useless; or, is Revelation only a mere *codicil* added to reason which is divine?

As to the personal appearance of the Son of God, in his humanity, there has been some contention; and tradition has not been idle. We think it by no means improbable, that some of the early Jewish converts might be desirous to possess a memorial of their LORD, in a medal which might bear an impress of his "visage;" and, that such medals did exist, though both Celsus and Origen might be ignorant of them. In these remote periods, even in the paintings and sculptures of Thebes, much more in those of Greece and Rome, their statues and pictures were correct likenesses, and were multiplied without reserve. Besides, there was another source which might supply such a medal, altogether irrespective of the early Christians. Scarcely an event occurred, of great moment, that was not commemorated on a coin or medal. So remarkable a history of events as those which occurred in Judea, would not pass by, we may be perfectly sure, without some such commem-It is highly probable, that the governor of Judea would send to Tiberius, and the Roman senate, a representation of the illustrious individual who was the author of that "new religion," which, according to their own account, had "turned the world upside down." A series of such medals, from which we might be able to draw some definite conclusion, on a subject certainly curious, would be interesting. In Plate III. fig. 27, is a correct representation, from a cast in our possession, taken by a friend from a bronze medal in the Ashmole Library, at Oxford. On the obverse, on the collar, is the word Messias; and on the reverse, the words may, perhaps, be rendered, "Nought can be ascribed to thee, O! ELOHIM, of the flery indignation which covered him." In Plate I. fig. 1, is a fac simile from a silver medal, in the same Library, from a cast also in our possession, and obtained

at the same time with the other: it may be compared with that of Plate III. fig. 26, and our wood-cut-the absence of the nimbus, or halo, which encircled the heads of saints in the seventh century, affords some presumption of its priority to that period. Fig. 26, Plate III., is a faithful copy of an antique brass medal found near Cork, in 1812, on the site of an ancient monastery, contemporaneous with the introduction of Christianity into Ireland: on the obverse, the first letter of the Hebrew alphabet is interesting. Some have considered, that aleph, here, is to be considered a numeral, and may denote that it was struck in the first year after the resurrection; and the letters on the other side, to be the Hebrew name for Jesus. A friend of ours, however, objects to this partition of the letters, and observes, that it is the very word by which, according to ancient prophecy, God was to be known in Gospel-times; namely, Ishi. This solution seems at once interesting and satisfactory. Different translations have been published in Mr. England's ingenious pamphlet, descriptive of the Cork medal. We submitted this, as well as our own cast, to our friend, who is better conversant in Hebrew than we pretend to be: the first part of the legend on the field of the reverse, he reads, "Messiah, (or Christ,) the King, came in peace;" and this seems to be the concurrent reading of the numerous scholars to whom the medal has been submitted. In our cast, the latter half, on the reverse, our friend translates, "And man, man was made life:" thus corresponding with Hottinger's silver medal: it would appear, however, that some copies read, "And Gon man was made life;" which is, perhaps, the original reading: some copies have, "And light from man was made life." The latter part of the Cork medal, our ingenious correspondent thinks, may be translated, "And the mighty man was made life." The following is a fac simile from a bronze medal, in the valuable collection of C. Rawson, Esq. Halifax; to whose courtesy and kindness we are indebted for it. It is interesting to compare these with one another: obtained from sources altogether independent of each other, they still appear to have been derived from one original.



Dr. Walsh gives us, in his Essay on Early Coins and Medals, a representation of a similar medal, obtained from a Polish Jew, at Rostoc, in Germany. Rowland, in his "Mona Antiqua," 1702, has described a similar medal, and given a sketch of it. This medal was found at the ancient Druidical circle of Brin-gwin. There are, however, no letters on the obverse; and the legend on the reverse, is considerably different. The celebrated medal, we have thus imperfectly described, has been the subject of curious research among antiquarians for three hundred years. It was seen by Theseus Ambrosius, at Rome, in the pontificate of Julius II, the predecessor of Leo X. It was even then considered an object of interest and curiosity. It is interesting to consider this medal in connexion with the celebrated letter of Lentulus to Tiberius and the Roman senate, with which description it seems remarkably to correspond. In rejecting documents such as these, we may be guilty of an unwarrantable scepticism. We do not see why this should not have been taken; but we see many reasons to believe that such a representation of the Saviour might have been copied. Mr. Bagster, to whose valuable Biblical publications the world is so much indebted, has published a beautiful print, on steel, from a piece of ancient tapestry, in his possession, being a profile of our SAVIOUR, said to have been taken from an emerald, once in the treasury of Constantinople, and given as a ransom for the emperor's brother, taken captive by the Christians. Mr. Martin has copied this, on a very reduced scale, for our title page, from Mr. Bagster's print. There are other medals with the SAVIOUR'S portrait; such as that of Basilius and Constantinus, and some subsequent to these; but, those which have obtained our more especial notice, we presume, may justly claim a much higher antiquity. The correspondence, &c., with Abgarus, the king of Edessa, are of a more doubtful character.

In Plate III. fig. 28, we give a fac simile of the reverse of a very rare and valuable medal of Tiberius, for which we are indebted to the friendly courtesy of H. H. Williamson, Esq., of Greenway Bank, (Newcastle, Staffordshire,) in whose interesting collection of coins and medals it is. This medal, all antiquarians agree, was struck by Tiberius upon the event of the destruction of the thirteen cities of Asia, by the earthquake which took place at the time of our Saviour's crucifixion. On the obverse, is the head of Drusus, without laurel, and the legend, "NERO CLAUDIUS DRUSUS GERMANICUS IMP." On the reverse, Nero Claudius Drusus, is seen sitting robed in a curule chair, with various spoils disposed around him; holding in his right hand a branch, and in his left a scroll of parchment. The legend on the reverse, is "TI. CLAUDIUS CÆSAR AUG. P. M. T. R. P. IMP. P. P." This medal is so extremely rare, that Matthew Dean, Esq., Dr. Mead, Snelling, and others, valued it at twenty pounds; or, at the option of the possessor.

Some suppose that the earthquake, which took place at the Saviour's crucifixion, was felt over all the world—a supposition extremely probable: others confine it to the land of Judea. Dreadful must have been the convulsion which rent the veil of the temple from top to bottom—a fact mentioned by Josephus. St. Cyril, of Jerusalem, says, that the rocks of Mount Calvary, which were rent by this earthquake, were still evident

and pointed out in his time. Orosius considers this earthquake to have been the very same which overturned the twelve cities of Sardis, Magnesia, Masthene, Æge, Hierocæsaria, Philadelphia, Temolus, Cyma, Myrinia, Apollonia, and Hyrcania; to which Eusebius adds Ephesus. Pliny and Strabo describe this earthquake to have been the most dreadful ever felt. Tiberius began to reign, A. D. 14, and died A. D. 37, or four years subsequent to the resurrection of Christ. At the period of this earthquake he must have been 73 years old; and the appearance of the head, on the obverse of the medal, (the reverse of which we have given,) is that of age. It may be also stated, that there were other medals struck, in acknowledgment of the care which Tiberius took in rebuilding the cities of Asia, destroyed by this earthquake. On the obverse, the emperor is represented sitting in a curule chair, as in the one given, with the legend Civitatibus Asiæ Restitutis; and, on the reverse, the legend merely—Tiberius Cæsar Divi Aug. FILIUS AUGUSTUS. PONT. MAX. TRIB. POT. XXI. The event of a dreadful earthquake is thus attested; and this is the only period to which we can reasonably refer this earthquake. Tiberius died four years subsequent to the crucifixion of our SAVIOUR; and we nowhere read of the destruction of the cities of Asia prior to this dreadful tragedy. From combined testimony-Christian, Jewish, and Pagan—a terrible earthquake occurred at the crucifixion: the rocks were convulsed and torn; the veil of the temple of Jerusalem was rent in twain; and thirteen of the finest cities of Asia, overturned. We also collect, from Pagan authorities, that the loss of life was great, because the earthquake occurred when it was dark. If the preternatural darkness extended over the eastern hemisphere—and it is likely it would extend as far as the effects of the earthquake were felt in Asia, at any rate—there is a curious circumstantial corroboration of the event. It was at the ninth hour, or three o'clock in the afternoon, when our Saviour said, "It is finished;" and, "cried with a loud voice, and gave up the ghost:" at this moment

the earth shuddered, and nature heaved in agony. In Matthew xxviii. 2, it is stated, that there had been a GREAT earthquake. That there was darkness over all the land, and a great earthquake, is also recorded by Phlegon, the Tralian, freeman to Adrian. Tralium was not far from Palestine: and when one of the oracles was consulted on the subject of this darkness, it is recorded to have replied-" Either the God of nature is suffering, or he sympathizes with one who does." Why did the sun put on such deep mourning-an eclipse which the heavens had never witnessed before? Why did the temple tremble and an invisible hand rend the veil which concealed the "Holy of holies?" Why did the earth rock so dreadfully? Let the centurion, and they who were with him, give their evidence: "Truly this was the Son of God."

The doctrines of Christianity do not come within the pale of our present design. Their motto is expressed in that which was inscribed on the mitre of the high priest. In the mirror of Christianity we at once see what manner of persons we are, and what manner of persons we ought to be. The celestial sign, which we read on heaven's escutcheon, is, God is love. Its influence is divine: it realizes the prophetic scene in the valley of vision; and, like a fibre placed under the prismatic spectrum, glows in a vesture of the beautiful tint which falls upon it. In a Persian proverb, a piece of scented clay is made to say—"I was a despicable piece of clay; but I was, sometime, in the company of the Rose." Just so is it with human nature, under the influence of Christianity.

As our little volume will close with a few attestations to the value of the Scriptures, on the part of its friends, it may not be amiss to finish this chapter with evidence from some of its bitterest and most malignant ENEMIES,

extorted from them by the force of TRUTH.

1. Rousseau. "The Religion of Christ has brought morality to greater purity and perfection, than ever it was advanced by all the philosophers and sages of antiquity."

2. Bolingbroke. "The Gospel of Christ is one continued lecture of the strictest morality, of justice,

benevolence, and universal charity."

3. Gibbon. "Our curiosity is naturally prompted to inquire by what means the Christian faith hath obtained so remarkable a victory over the established religions of the east? To this inquiry an obvious and satisfactory answer may be returned, that it was owing to the convincing evidence of the doctrine itself, and to the ruling Providence of its great Author."

CHAP. XII.

ILLUSTRATIONS OF THE ACTS OF THE APOSTLES— THE DESTRUCTION OF JERUSALEM BY TITUS VES-PASIAN—CONCLUSION.

THE Acts of the Apostles appear to have been written by the evangelist, Luke; and this treatise, as well as his Gospel, seems to have been dedicated to THEOPHILUS. It is likely that this was the real name of an individual, and not assumed. There is a coin, bearing this very name, ΘΕΟΦΙΛΕ, which literally signifies a lover of God. It is our intention—since this Book of "The Acts" is an historical detail, and thus susceptible of proof, from the kind of evidence which forms our more immediate design-to offer, for consideration, a few facts by way of illustration. In chap. xi. 26, it is stated, that "the disciples were called Christians first in Antioch." This interesting connexion of the Christian name with Antioch reminds us of a beautiful expression made use of by the apostle: "which hope we have, as an anchor of the soul, sure and steadfast, entering into that within the veil." It seems, to us, extremely probable, that the expression has an allusion to the armorial ensign of Antioch, ("cujus fuit anchora signum.") The anchor, on Selucian medals, marks the coins struck at Antioch, where an anchor was said to have been found on digging the first foundation of the city. Among the symbols, which were few and simple, that appear on the tombs of the early Christians, the anchor is most conspicuous. This and a branch of palm; an olive-wreath, and a lamp, seem to have completed-with the sacred monogram; expressive of the name of Christ, combined with the alpha and omega—all the affecting emblems which decorated their "narrow house." Such was "the faith once delivered to the saints." This faith was the anchor of their hope—the palm of victory over "the last enemy:" their olive branch of peace—the lamp of their path. They believed that Jesus Christ was their alpha and their omega; and their faith rested in confidence on his assurance: "Because I live, ye shall live also." We confess that we are charmed with the silent eloquence of these simple but expressive symbols.

In Acts xiii. 7, it is stated, that Barnabas and Paul found favour with Sergius Paulus, who is called, deputy of the isle of Paphos or Cyprus. Proclus succeeded Sergius Paulus as proconsul in the government of the island; and a coin, bearing the name of Proclus, has been discovered with the very word, ANΘΥΠΑΤΟΣ, deputy, which had been applied by Paul to Sergius Paulus.

It is stated, in chap. xvi. 12, that the apostle went from Neapolis "to Philippi, which is the chief city of that part of Macedonia, and a colony;" or rather, as it might be more correctly translated, "Philippi, a city of the first part of Macedonia, or Macedonia prima." It appears, that under the Roman government, Macedonia was divided into several provinces, (at least four.) We now give a fac simile of a coin bearing the words

MAKEΔΟΝΩΝ ΠΡΩΤΗΣ, or Macedonia Prima. On some others, the word ΚΟΛΩΝΙΑ occurs, and this is in precise conformity with the Sacred Text. By the evidence derived from a coin, it appears that Julius Cæsar bestowed the privileges peculiar to a Roman colony, on the city of Phi-

Roman colony, on the city of Philippi. In this city, we are told in a subsequent verse, that the apostles found Lydia, a "seller of purple," and who is described to have been, originally, of "the city of Thyatira." It is a curious circumstance that among the ruins of Thyatira, an inscription has been found with

the words OI BAΦEIS, or the dyers, referring to the art of dyeing purple, as forming a branch of commerce in the city of Thyatira. The double dyed purple of Tyre, called dibapha, was a very costly affair. A pound of this precious dye could not be bought for one thousand denarii, or more than thirty pounds sterling. When we take into consideration, the length of the imperial robes and mantles, they must have been very expensive. It would hence seem that Lydia must have possessed considerable resources, to have maintained such an expensive branch of art, and therefore of some consider-

ation in the city of Philippi.

In our Plate, which serves for a frontispiece, fig. 4, we have given an exact copy of an ancient brass medallion, once in the possession of the late H. Rooke, Esq. of Mansfield, Notts. It was discovered near Newstead Priory, the seat of the late Lord Byron, in the year 1775, by some labourers. The nimbus, or glory, round the head, on the obverse, militates against the supposition that it can be dated farther back than the seventh century. The head, however, is fine, and seems characteristic. The legend, which occupies the entire field on the reverse, appears to have been taken from the vulgate of Psalm lxviii. 27, &c. This Priory was founded by Henry II, for canons regular of the Augustine order. Paul is here called Adoloscentulus, having sprung from Benjamin, the youngest tribe—in mentis excessu, descriptive of his excessive zeal. This medallion seems to have been worn as a pendant.

In the nineteenth chapter we have an account of a singular tunult at Ephesus, raised at the instigation of Demetrius a silversmith, and "the craftsmen" of that celebrated city, who seem to have reaped considerable emolument by supplying "silver shrines" for the temple of the Paphian goddess; whom, it was said, "Asia, and all the world worshipped." An outcry was made against the apostles, for bringing their goddess into disrepute, or rather, doubtless, the "craft by which they had their wealth." Amid this confusion, in order to appease the populace, the town clerk proclaimed, that every

body knew that Ephesus was "a worshipper" (rather NEΩKOPON—a distinction assumed by several cities,) "of the great goddess, Diana." We give the

fac simile of a coin of Ephesus, bearing the precise word used by Luke, and which may be translated temple-keeper, or sacristan.

The rescript of the letter to the Asiatic churches has been called in question; or, if admitted, assigned to Antoninus Pius, rather than to Marcus Antoninus. In



Plate II. fig. 9, is a coin of the former prince, which is unfavourable to such a supposition. It seems votive on the part of "the pious Ephesians" for some immunities conferred on their temple, seen in the back ground, with a cypress; while Jupiter the thunderer, extending the quiescent bolt toward the temple, is pouring down the vial of his wrath on a prostrate figure—likely the symbol of Christianity. The radiated crown implies divinity.

When Paul had returned from Asia to Jerusalem, he had nearly become the victim of popular fury. Being led into "the castle," he prefaced his defence by stating, that he was "a Jew of Tarsus, a city in Cilicia—a citizen of no mean city." We have given a coin of Tarsus; and it bears sufficient evidence, from the architecture of the structure represented on it, and its designation of a metropolis, that it must have been a city of considerable distinction. Other coins, too, afford palpable proof, that the fine arts, here, must have been considerably advanced. The coins of Tarsus are remarkable, according

to Froelick, for a kind of perspective in the figures represented. We have incidental proofs in Paul's writings, that he was a native of Cilicia, from peculiar provincialisms of expression, called Cilicisms. There is a remark, connected with the "great apostle of the Gen-



tiles," which may be made in reference to an observation recorded in chap. xxii. 25, 28, wherein Paul claimed the

privileges of a Roman citizen, being a native of Tarsus:

—"The chief captain answered, With a great sum obtained I this freedom. And Paul said, I was free born."

It is worthy of notice, here, that among the Roman colonies some had JUS CIVITATIS, the right of Roman citizens. Pliny calls Tarsus a free city; and Dion Cassius says, its inhabitants were friendly to Julius Cæsar; and on his account, to Augustus: no doubt they would, therefore, enjoy peculiar privileges. According to Dion Cassius, this privilege, "which had formerly been bought at a great price, became so cheap, at last, that it was commonly said, a man might be made a Roman citizen for a few pieces of broken glass."

We have, next, to direct attention to the adventure which followed Paul's shipwreck on the island of Malta, or Melita; and now give an ancient coin of that island,



in illustration. On the obverse is the representation of Isis, wherein the Egyptian contour of visage is sufficiently marked; the emblems are those of Isis. On the reverse, we have an Egyptian figure, with a flagellum and sickle: all which shews, in a way sufficiently clear, the source of their mythology. When the viper fastened on Paul's hand, the people of the island seem to have expected, from the virulence of this deadly reptile, that "he should have swollen, or fallen down dead suddenly;" and it was observed by them, "no doubt this man is a murderer, whom, though he hath escaped the sea, yet vengeance suffereth not to live." In their view of it, Isis had sent her avenger, the asp, (which is often associated with her,) to take vengeance on the criminal. "When they saw, however, no harm come to him, they

changed their minds, and said, he was a god." He had thus shewn, that he defied the vengeance of Isis, and consequently was superior to their goddess. This seems, we think, a simple and obvious solution. When the disciples received their commission from Jesus Christ, it was promised them, that "no deadly thing" should have power to hurt them. Death almost immediately follows the wound inflicted by some venomous serpents—such as the tic polonga.

In 2 Cor. xi. 32, it is stated, that "in Damascus, the governor, under Aretas the king, kept the city of the Damascenes with a garrison." We give a fac simile

of a coin of Damascus, on which this very name occurs as the king. The word, $\Phi I \Lambda E \Lambda \Lambda H NO\Sigma$, we may suppose, refers to his attachment to the Helenistic Jews, which may be inferred from his anxiety to apprehend Paul. If, however, the letters, ΛP , are to be considered as indicating the



date, and to be calculated from the era of the Seleucidæ, it must be 160 A.C. This, however, is an unsettled point; and it suffices us to know, that there were several kings of Damascus of this name. In connexion with Damascus, we may quote the following remark, from a modern traveller: "In the city of Damascus, there is a street still called, Straight, and where Paul is, with reason, said to have lived. It is entered by the road from Jerusalem. It is as straight as an arrow, a mile in length, broad, and well paved."

From the mount of Olives our Saviour, on one memorable occasion, "beheld the city of Jerusalem, and wept over it." He had already foretold, that there should "not be left one stone upon another that should not be thrown down." How literally that event was verified in the destruction of Jerusalem, by Titus Vespasian, history proclaims, and existing monuments record. This terrible calamity, both Tacitus and Josephus have described; and the Arch of Titus, at Rome,

of which we have given a representation in our first Plate, fig. 2, still affords, in its falling splendour, a memorial to the truth of this fact. In Plate II. fig. 11, is a copy from the bas reliefs, with which it is decorated: our figure is copied from "The Architectural Remains of Rome."* This triumphal Arch of Titus, designed to commemorate the taking of Jerusalem, was erected on the via sacra, which commenced at the Circus Maximus, and extended to the Capitol. The sides of the arch-way are decorated by bas reliefs: on the south side is seen the triumphal entry into Rome; and on the opposite side is shewn the procession of captive Jews, "with staves in their hands," bearing the spoils of the temple of Jerusalem: the GOLDEN CAN-DLESTICK, with its SEVEN BRANCHES; the GOLDEN TABLE, and the CENSER: the SILVER TRUMPETS, &c. There can be no doubt that these are exact representations of the sacred furniture of the temple, and also complete models of those which decorated the tabernacle in the wilderness, agreeably to the "pattern shewed in the mount." This interesting arch is now fast falling into ruin; and when we were at Rome, the bas reliefs were much defaced. In Plate I. fig. 3, is a fac simile of a cast, in our cabinet, taken from a fine "Judea capta," discovered a few years ago at Gloucester. On the obverse, is the head of Vespasian; and on the reverse, the "daughter of Zion," weeping beneath the palm-tree; with emblems of the captive spoils of Judea.

The following is a fac simile from a silver denarius of Vespasian, in our possession, illustrative of the capture of Judea; and still more literally expressive of



the attitude of grief, and of the language of the Prophet: "She being desolate, shall sit upon the ground." + "How is she become as a widow! she that

^{*} Taylor and Cressy, Folio, London, 1821, p. 1.
† Isaiah, iii. 26.

was great among the nations, princess among the pro-

vinces, how is she become tributary! "*

Let it not be presumed that these great events were done in a corner. No: they embraced a wide sphere:
—Galilee, Judea, Decapolis, Idumea, and from beyond Jordan; from Tyre and Sidon. Among the many books which have perished amidst the wrecks of time, it is rather wonderful that so much has been preserved Justin Martyr, about one hundred years after the crucifixion, in his dispute with Crescens, appeals to the acts of Pontius Pilate, in reference to the sufferings and death of Christ. About fifty years afterwards, Tertullian tells the governor of Rome, that Tiberius had received from Palestine, in Syria, an account of Jesus CHRIST, and had not only protected the Christians, but would have enshrined him among the deities had not the senate refused their consent. Severus, also, wished to enroll Jesus Christ among his gods. Tertullian was deeply versant with the Roman laws, and no stranger to the records of imperial Rome. Whether the asserted correspondence with Agbarus, the king of Edessa, was true or not, certain it is that such a document was found among the archives of the city.

The census, ordered by Augustus Cæsar, is mentioned by Tacitus, Suetonius, and Dion Cassius. The new star is recorded by Chalcidius. The slaughter of innocents, by Herod, is mentioned by Macrobius. Celsus admits that our Saviour had been in Egypt. Tacitus records that Pontius Pilate was governor of Judea, and that our Saviour was accused before him, condemned and crucified. That many miraculous cures were performed by Christ, is a fact confessed by Julian, Porphyry, and Hierocles. That our Saviour foretold things that came to pass, is attested by Phlegon. Other facts, and circumstances of a similar

kind, we have already stated.

It is as false to say, that Christianity rose in a dark age, as to assert, that none but ignorant individuals

^{*} Lamentations, i. 1.

embraced the cause. Many there were, no doubt, who "knew not the wrath of Achilles:" but, there were also numbers, who were as distinguished in rank as they were in the literature and science of the age: Aristides, the Athenian sage, embraced Christianity, convinced of its numerous attestations and overpowering truth. Joseph, of Arimathea, was a member of the Jewish sanhedrin; Nicodemus, too, was a ruler of the Jews; Dionysius was of the Areopagus, the high court of Athens; and Flavius Clemens, was a member of the Roman senate; and, before he died, consul of Rome. Tertullian manfully told the Roman governors, that their corporations, councils, armies, tribes, companies—the palace, the senate, and the bar—were filled with Christians; and Arnobius asserts, that men, of the first-rate talents, orators, grammarians, rhetoricians, lawyers, physicians, and philosophers, turned from paganism to embrace the standard of the cross.

We have a long and unbroken chain of evidence, which connects John, the divine, with Constantine: nor have we the loss of one link to lament. John lived till 100; Polycarp, his disciple, lived till 167; Irenæus, the disciple of Polycarp, lived till 202. These suffered the martyr's fate; when Origen sprung up in the Christian school of Alexandria, and "fought the good fight of faith" till 254. Numerous and diversified streams issued from these fountains of truth; and the

tide swelled onward, in irresistible grandeur.

This condensed summary we have partly derived from Addison; and, when all circumstances are considered, it is extraordinary that even so much evidence should have been left on record in the annals of Pagan Rome; for, we find that the most memorable circumstances have often been passed over by the ancients with the most unaccountable indifference, even in the works of the more enlightened periods. Pliny makes no mention, whatever, of the destruction of Herculaneum and Pompeii—large and populous cities. Even Tacitus merely glances at the event in these words: "Haustæ aut abrutæ urbes"—cities mere consumed or buried.

Suetonius is silent as to the cities, though the eruption is incidentally mentioned. Martial has a slight allusion to them; and Dion Cassius, about one hundred and fifty years after Pliny, adverts to the *traditional* account of them. "A multitude of things," says Montfaucon, "are daily found out, which have been hitherto unobserved and not mentioned; such as the temple of Mithras, in the Viminal vale, of which not one word is met with in authors."

In reference to the FACTS of Christianity, we can cite, as testimony, the following PROFANE WRITERS, whom by a strange perversion of reason, some may consider as more substantial than the evidence of what they designate interested witnesses. We appeal, therefore, to Tacitus, Martial, Juvenal, Suetonius, Pliny, ADRIAN, XIPHILINUS, LUCIAN, DION CASSIUS, CELSUS, PORPHYRY, and JULIAN. As to the precepts of the Christian religion, we have the Book itself, and surely can, with our enlightened judgment, form a more accurate opinion than those who were plunged in the vortex of idolatry and superstition, and over whom it had just dawned in all its overpowering splendour. Besides, we have had the "experience" of ages, and the lapse of eighteen centuries. We have already cited the evidence of three enemies. Nothing can be MORE CERTAIN than these things, though some might wish them untrue; but to set about to deny them, is just about as foolish as to call in question any physical truth which the senses have attested, though there have been some sufficiently insane to deny their own existence. To reason with such aberrations of intellect, would be just as foolish as whistling a lullaby to the winds. those who imagine, that there may be, after all, something in Hume's designing artifice, and cunning sophistry, though they may be unable to comprehend it, we can safely recommend to their perusal an excellent pamphlet, entitled, "Historic Doubts relative to Napoleon Buonaparte."*

^{*} Oxford, 1827, 3rd. Edition, 8vo.

Few events have been more celebrated than the Vision of Constantine, on the Milvian bridge, before his memorable battle with Maxentius. relates the circumstance as verified by the personal communication of the emperor himself to the historian. Constantine was marching with his troops against Maxentius, and had prayed to heaven for direction, when he saw, soon after mid-day, a large luminous cross in the heavens, directly over the sun, with these words on it—ΤΟΥΤΩ NIKA—IN HOC VINCE: "By this conquer." Such is the vision as detailed by Constantine. Whatever opinion may be formed on the subject, it is, at any rate, certain, that, at this period, he renounced idolatry, embraced the Christian religion, and had a particular standard made for the use of his army: thenceforth called the LABARUM. The first standard of this kind was formed of costly materials: Eusebius, who saw it, gives a minute account of it: the sacred monogram of Christ was emblazoned on the field: the ensign consisted of a long spear, richly gilt, with a cross bar, also gilt: from the point of this spear rose a crown, or coronet, of gold and precious stones; from each end of the cross bar was also suspended a kind of small flag, or tassel, of superb workmanship, adorned with gold and costly gems, of indiscribable beauty; these tassels were each of the same length with the cross bar, and with the monogram, the latter being enclosed between them as in the midst of a square area. This description is, doubtless correct. In Plate III. fig. 29, is the reverse of one of the coins of Constantine, in which is represented the sacred standard, and fig. 30 represents the Labarum carried before the emperor, Jovian, who is seated on horseback, pointing to it as his pioneer, followed by a victory. There still exists, in the island of Corfu, the front of a temple erected for Christian worship by the emperor, Jovian, two hundred and sixty-four years after the canon of Scripture was closed, with a Greek inscription still remaining to commemorate the event. In Plate II, fig. 14, is the reverse of a silver denarius of Valentinian, containing the

Labarum; since this figure, however, was executed,

we have obtained a much more perfect one.

The radiance of Christianity sheds a glow of beauty on the objects upon which it falls, but can acquire lustre from none. It shines not by a reflected splendour, for it is illuminated by the Sun of Righteousness; and by that Light have the wisest and best of men walked safely, adored its source, and acknowledged its guid-These lessons of immortality can receive no new ornament from the most magnificent genius, or the most gifted mind, in any age; though Christianity can strew our path with flowers, and fix a rainbow in our sky. We shall add the sentiments of a few distinguished writers in reference to the Scriptures; not for the purpose of sustaining the pillars of truth: No! these pillars rest on "the rock of ages." Truth requires no adven-We do it to confront the infidel on the titious aid. basis of literature and science. What, we ask, has a Mirabeau, or a Condorcet; a Volney, or a Voltaire; a Hume, or a Gibbon, done to benefit or bless mankind, apart from self, and irrespective of the meteor, fame? Shall we contrast these individuals with a NEWTON, a HOWARD, a JENNER, a SICARD, a MASON GOOD, and myriads more of "the excellent ones of the earth?" is not difficult to see to which side the balance will incline. These men were luminaries in the hemispheres of science and of philanthropy, and their memories will be cherished and esteemed when the worthless names of Mirabeau, Condorcet, and Voltaire, shall have been consigned to contempt and oblivion. We, of course, take no note of Paine, and his followers-whippers-in to a knot of scorpions.

SIR MATTHEW HALE.—"I have been acquainted with men and books: I have had long experience in learning and in the world. There is no book like the BIBLE for excellent learning, wisdom, and use; and it is want of understanding in them who think or speak otherwise."

HONOURABLE ROBERT BOYLE.—"THE BIBLE, that matchless book! It is impossible we can study it too

much, or esteem it too highly."

JOHN LOCKE.—" Study the HOLY SCRIPTURES; especially the NEW TESTAMENT: therein are contained the words of eternal life. It has God for its author, salvation for its end, and truth, without any mixture of error, for its matter."

JOHN MILTON.—"There are no songs comparable to the songs of Zion; no orations equal to those of the prophets; and no politics like those which the Scrip-

tures teach."

Samuel Johnson.—(On his death-bed, to a by-stander.)—"Young man! attend to the advice of one who has possessed some degree of fame in the world, and who will shortly appear before his Maker. Read

the BIBLE every day of your life."

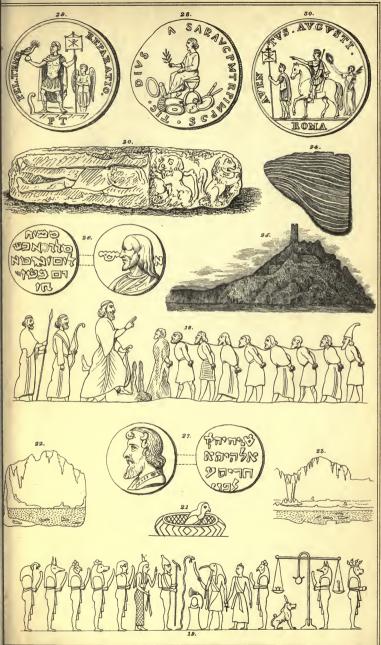
SIR WILLIAM JONES.—(Written on the last leaf of his Bible.)—"I have regularly and attentively read the Holy Scriptures, and am of opinion that this Volume, independently of its divine origin, contains more sublimity and beauty, more pure morality, more important history, and finer strains of poetry and eloquence, than can be collected from all other books, in whatever age or language they may have been composed."

LORD BACON.—"There never was found, in any age of the world, either philosopher, or sect, or law, or discipline, which did so highly exalt the public good as the

CHRISTIAN FAITH."

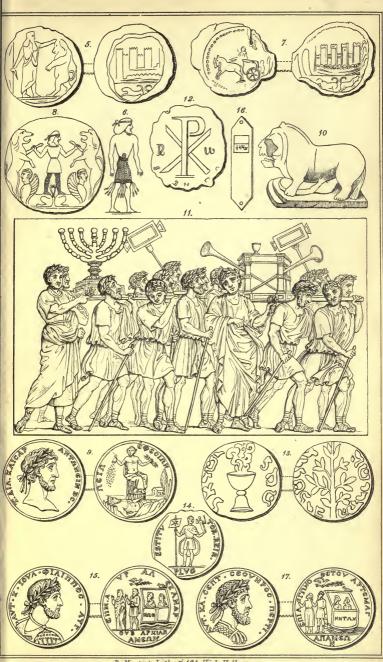
[&]quot;Before thy mystic altar, HEAVENLY TRUTH, I kneel in manhood, as I knelt in youth. Thus let me kneel, till this dull form decay, And life's last shade be brightened by thy ray: Then shall my soul, now lost in clouds below, Soar without bound, without consuming glow."*

^{*} Sir William Jones



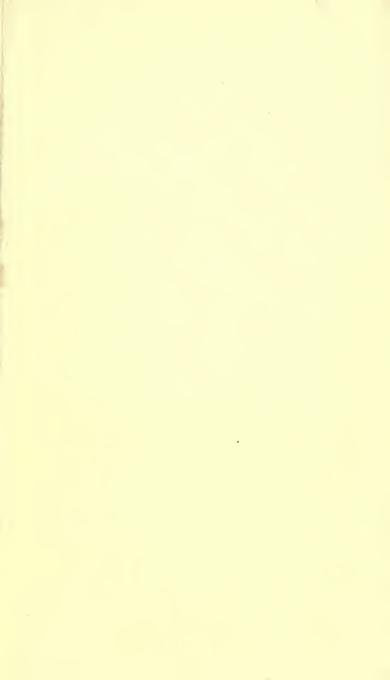
R Martin's Lithay 77.124 High Helborn





R. Martin's Lithog of 124 High Holborn.







MAIN CIRCULATION

ALL BOOKS ARE SUBJECT TO RECALL RENEW BOOKS BY CALLING 642-3405

DUE AS STAMPED BELOW	
JUL 2 8 1945	
CIRCULATION DEPT.	-
RECEIVED	
JUL 3 0 1995	
CIRCULATION DEPT.	
Trace (control to the control to the	
	1

UNIVERSITY OF CALIFORNIA, BERKELEY BERKELEY, CA 94720

FORM NO. DD6



27817 83651 M8

UNIVERSITY OF CALIFORNIA LIBRARY

