

essential feature of the Divine character and illustrated by each successive event in the past history of our planet—a law too, in accordance with which we ourselves are constituted, if that require it, if the endowments and faculties of the human soul plainly fit it for such an existence; if, moreover, such an existence explain, and if it be the only thing that will explain what we see in this world consistently with those moral attributes which our whole being leads us to ascribe to its Author and Governor, who shall gainsay the doctrine? who would gainsay such a doctrine resting upon such evidence? Who would do ought to weaken in himself or in others a faith which thus has its foundations in reason no less than in revelation; which tends to strengthen all the higher aspirations and better impulses of our natures, which chastens the joys and tempers the sorrows of life, which spreads beauty over decay and death, and makes the tomb the portal to a higher and more glorious state of existence.

ARTICLE IV.

THE DELUGES OF OGYGES AND DEUCALION.

The Deluges of Ogyges and Deucalion: were they real and specific events, or were they altered traditions of a universal deluge? By M. Cuvier.

Translated from the French, as given in Ovid's Works, Oxford edition, 1826, Vol. 3d. By Rev. J. Richards, D. D., Hanover, N. H.

GEOLOGISTS have admitted, from the actual state of the superficial strata of the terrestrial globe, that the surface of our planet must have experienced, at an epoch relatively not far remote, a grand revolution, which engulfed beneath its waters the continents then inhabited by men, and from which there escaped but a small number of individuals, the sole ancestors of the nations who successively re-peopled the new lands which that same revolution disclosed. Divers nations have preserved a tradition, more or less confused, of this catastrophe, whence recommences, necessarily, the history of men, such as has been transmitted to us; and, what is very remarkable, those nations who have preserved the slightest relations with one another have yet agreed in placing this event at about the same time, that is to say, from 4,000 to 5,000 years before the year now current (1820).

Every one indeed knows that the books of Moses, according to the text of the Septuagint, (which allows the longest interval between the deluge and us,) do not place the deluge higher than 5340 years ago; and according to the Hebrew text, whose chronology is the shortest, than 4168, following the calculation of Usher, or 4393 following that of Freret. But few have remarked that the dates given to this catastrophe by the Chaldeans, the Chinese, the Hindoos, and the Greeks, are very nearly the same.

The authors who have written in Chaldee, in Syriac, or who, by their means, have consulted the ancient traditions, as Berosus,¹ Hieronymus, Nicolas of Damascus, agree in speaking of a deluge. Berosus describes it with circumstances so similar to those of Genesis, that it is almost impossible that what he says of it should not have been drawn from the same sources. It is true that, so far as one can judge from the scattered extracts which Josephus (Lib. I. c. 3), Eusebius (Praep. Ev. Lib. IX. c. 12), and Syncellus (p. 30) have given us of his writings, he has removed the epoch a great number of centuries; but those numerous centuries, that long line of kings between Xixuthrus² and Ninus, is something novel and peculiar to him. Ctesias,³ who is anterior to him, had no such idea; nor have they been adopted by any profane authors posterior to Berosus. Justin and Velleius consider Ninus the first of conquerors, and do not place him more than forty-two centuries anterior to the present time.

The Armenian authors of the middle ages, who have collected the traditions concerning Xixuthrus, and perhaps extracted the ancient chronicles of their country make it reach back a little further (to 4916 years), according to M. M. Cirbied and Martin (Researches on the Ancient History of Asia, p. 26).

It is true that the principal of these authors, Moses Chorenensis, was a Christian and had known Eusebius; nevertheless, it is certain that the tradition of the deluge existed in Armenia long before him. The city which, according to Josephus, was called the *Place of the Descent*, exists still at the foot of Mt. Ararat, and bears the name of Nakchevan, meaning *place of the descent*. See the Preface of the brothers Whiston, on Moses Chorenensis, p. iv.

The Chinese commence in Chouking, their authentic history, by a

¹ Berosus, a Babylonian historian, priest of the temple of Belus, lived in the time of Alexander. Hieronymus, of Cardia in the Thracian Chersonesus, a companion of Alexander. Nicholas of Damascus, friend of Herod the Great, wrote 144 books.

² Noah, by Chaldean tradition.

³ Greek historian, age of Artaxerxes Mnemon.

deluge occurring under Yao, and whose epoch would be but 4117 years anterior to the present time.

The Hindoos admit, in their sacred books, many revolutions, of which the last, called Caliyong, took place about 4924 years since.

The Greeks, who have always confounded everything, because their later authors have wished to consider as positive facts, the vague traditions or mythological allegories of their ancient priests and poets;—the Greeks, I say, speak of two deluges, whose epochs they pretend to assign, but to which they add circumstances irreconcilable among themselves, and even with the epochs.

Of those yet obscure deluges of Homer and Hesiod, the first is that called the deluge of Ogyges, said to have occurred in Attica and Bœotia. Its date as fixed by Varro, and referred by Censorinus¹ in his book entitled *Natal Day*, c. 21, to 1600 years before the first Olympiad, reaches back to 4196 years, that is, to within 28 years of the epoch fixed for the deluge of Noah by the Hebrew text of Genesis, after the calculation of Usher. Varro expressly places this deluge four centuries before Inachus; and every one knows that Varro passed, in his time, for a man who displayed the greatest erudition and judgment in chronology. Meanwhile it appears that Acusilaus² and Hellicus,² the first authors known who have spoken of the deluge of Ogyges, and from whence Plato, in the *Timæus*, pag. m. 524, Clement of Alexandria, in the *Stromata* I. p. m. 321, and Eusebius, *Praep. Ev.* X. p. m. 489, have extracted what we know of it, placed it one hundred years after Inachus in the time of Phoroneus, consequently more than five hundred years later than Varro; but since this synchronism hinders neither those authors nor many others from making Phoroneus the first man, it is manifest that the traditions which they had of it were mingled with fables, and really appertain to nothing but mythology.

The second of these deluges is that of Deucalion. The most ancient author extant who mentions this deluge is Pindar, *Olymp. Od.* IX. He makes Deucalion land on Parnassus, establish himself in the village of Protogenia (first birth), and there reproduce his people with stones; in one word, he already refers to the whole human race, though applying it to one nation only, the fable afterwards generalized;—as we see in Ovid (*Met.* I. v. 399).

Moreover, the most ancient Greek historians whom time has preserved for us, Herodotus, Thucydides, Xenophon, make no mention of any deluge, neither of the time of Ogyges, nor of the time of Deuca-

¹ Rom. historians—Varro *fl. A. D.* 114, *Censo. A. D.* 238.

² Greek hist.—Acu. *flor. B. C.* 450, *Hel. B. C.* 460.

lion, although they name Deucalion and speak of him as one of the first Grecian kings. They seem even then to have considered these great inundations as appertaining to times anterior to history, or as making part of mythology.

What Herodotus says, that Thessaly must have once formed a lake, before the Peneus found an outlet between Ossa and Olympus, is but one of those geological hypotheses, applicable to any particular country, and such as we daily see in our own times. Herodotus makes no application of this to Deucalion nor to his deluge, although this, assuredly, was an occasion very natural to speak of a like event. But soon after the age of Herodotus, philosophers, to accredit either their physical systems, or their moral and political romances, availed themselves of this tradition and attributed to it an extension greater or less, according as it suited their ideas.

Plato, in the *Timæus* says but few words in commencing his recital of the grand catastrophe which, according to him, destroyed the Atlantis; but in those few words, he places the name of Deucalion immediately after that of Phoroneus, without any mention of Ogyges.

Aristotle, *Meteor.* I. 14, seems to consider the deluge of Deucalion as a local inundation, which occurred near Dodona and the river Archelous, places different from those of the ordinary locality, since he is at the same time treating of a Dodona and an Archelous in Phocis; as Clavier also, on Apollodorus, Vol. II. p. 79, seems to me to have clearly established.

In Apollodorus, *Bibl. Lib. I.* § 7, the deluge of Deucalion resumes something of its grandeur, and all of its mythological character. It happened at the epoch of the transition from the brazen to the iron age; Deucalion is the son of the Titan Prometheus, the fabricator of men; after the cataclysm he created anew the human race with stones; and yet, even according to Apollodorus himself, it inundated only Greece out of the Peloponnesus and Isthmus; as if all Greece out of the Peloponnesus and Isthmus could have been inundated, without a multitude of other countries and the Peloponnesus itself which is no higher than Greece, being inundated also.

Diodorus, *Lib. I.* p. m. 10, does not assign to this catastrophe so narrow limits, since he conjectures its effects might have extended even to Upper Egypt.

The tradition of Phrygia relative to Annacus or Nannacus, who was a sort of precursor of Deucalion, supposes also that that deluge extended over Asia Minor, and even destroyed the whole human race; for it is only after this deluge that the tradition places Prometheus, commissioned by Jupiter to reproduce the species. It is true that this

tradition, so different from the others, has been preserved to us only by authors of the Lower Empire, Stephen of Byzantium, under the word *Iconium*, Zenodotus or Zenobius, Prov. Cent. VI. n. 10, and Suidas on the word *Nannacus*. But Zenodotus cites authors more ancient, as Hermogenes, author of a treatise on the Phrygians, and Herode le Jambographe.

Iconium, where it is supposed Anniacus reigned, is on the grand plateau of Asia Minor; so that it could not have been inundated without almost that whole peninsula being inundated at the same time.

Apollodorus as well as Pindar makes Deucalion land on Parnassus; but other authors assign different places. According to Servius on Virgil, Ecl. VI. 41, it was Mt. Athos; and according to Hyginus,¹ Fab. 153, it was upon *Ætna* that he found refuge. According to the account of Lucian in *the Syrian Goddess*, it was near the city of Hierapolis,² where they believed Deucalion made his descent.

The ark (*coffre*) which Apollodorus, in the place cited, gives to Deucalion for means of safety, the doves by whose instinct, according to Plutarch (*de Solertia Animalium*), he sought to know if the waters had subsided, the animals of every species which he had embarked with him, according to Lucian in *the Syrian Goddess*,—are circumstances so evidently borrowed from the narration of Moses, that it is almost impossible but that these authors derived them from him, either immediately, or by the knowledge they had obtained from the account of Berosus.

It appears certain, therefore, that the idea most commonly received, whether of the deluge of Ogyges or of Deucalion, was derived from the tradition of a universal deluge, insensibly modified and diversified according to the places where men lived. Each colony carried with it the memory of a deluge. But in those times, when nothing was yet fixed by writing, the priests were charged with preserving the memory of important events; and from that circumstance more than from any other, the deluge, by little and little, was localized,—following a tendency natural to all men of fixing near the places where they dwell, the great events of which they have but a confused remembrance; and following too the interest still more natural, which the priests of every place had to inspire religious veneration for their temples, so that by accrediting them they might at the same time accredit themselves.

It is particularly with this latter view that in many places openings

¹ Rom. writer—Augustan age.

² City of Syria, near the Euphrates, south of Zeugma.

are pointed out, through which it is said the waters of the deluge were engulfed: the most celebrated of which was that of Parnassus.

According to Pausanias (*Attic. Lib. I. c. 18*), there was something similar at Athens, in a sacred grove called Olympias. A hollow place of a cubit's depth, passed for having received the waters of the deluge of Deucalion; and they cast into it, every year, cakes of meal and honey. Also they pretended that Deucalion had dwelt at Athens, that he built there a temple to Jupiter Phyxius, and that they had there his sepulchre;—just as the people of Pyrrha in Phthiotis pretended that they had his sepulchre.

The Hieropolitans of Syria, according to Lucian in *the Syrian Goddess*, pretend on their part to possess an orifice, through which the waters of the deluge were drained. A celebrated temple covered this opening of the earth, into which they cast, twice every year, a great quantity of sea-water, which it entirely absorbed; moreover, that it was very narrow, proving that it conducted to some great cavity.

It is very remarkable that we find, in one of those numerous poems or versified romances which compose the body of the Hindoo mythology, a personage, whose name and adventures have striking relations to the Deucalion of the Greeks. It is Deva-cala-yavana, or in familiar language, Deo-cal-yun, who, having attacked Krishnoo at the head of the northern people (the Scythians, such as, according to Lucian, the Deucalion of the Greeks was), was repulsed by fire and water. The resemblance extends even to his father Garga, one of whose surnames is Pramathesa (Prometheus), and who, according to another legend, is devoured by the eagle Garuda. From these details, truly astonishing by their conformity with the Greek fables, and which have been extracted by M. Wilfort (*Memoirs of Calcutta, Vol. V. of the Sanscrit Drama, entitled Hari-vansa*), M. Charles Ritter, in his "Vestibule of European History before Herodotus," concludes with great plausibility, that the whole fable of Deucalion was of foreign origin, and was imported into Greece with the other legends of that more ancient part of Greek worship which came by way of the North.

Those of the moderns who, with Freret and Clavier, have thought that the deluge of Ogyges and that of Deucalion are real events, but local and different, rely principally on what the Greek chronology assigns to those two princes in respect to their places being distinct in space and time. But who does not see that as to those remote epochs the Greeks, as well as all nations still less enlightened, have sought to ally their history to their mythology by factitious genealogies, and that on those genealogies reposes all their chronology before the Olympiads? He who believes, in good faith, that Codrus and Medon de-

scended from Deucalion by Hellen and by Dorus, cannot refuse also to believe, that Deucalion descended from Uranus by Japetus and Prometheus, and that Saturn was his great uncle, and Jupiter and the Centaur Chiron his uncles *a la mode de Bretagne*. The same authors relate all these. Is there an Arab Sheik who does not trace his descent from Noah by Ishmael, or an Irish gentleman his by Milesius? We ourselves,—have we not long put faith in our Trojan origin, as Fredegair asserts, and in that long catalogue of princes in direct line from Priam to Clovis, which the romances of the middle ages engrafted on that primal imagination?

Apollodorus gives to Deucalion a son, named Hellen, chief of all the Greeks, and makes descend from him Dorus, chief of all the Dorians, and Eolus, chief of the Eolians, with as much authority as Albugazi (*Hist. Gen. of the Tartars*, ch. 2. and 3.), gives to Japhet, son of Noah, a son named Tusk, and to Turk two great-grand-sons, Tartar and Mongol, whence descended the two great nations which now bear those names; or as Jean le Maire (*Illus. of the Gauls*, p. 43) derives from Galatas king of the Gauls, Allobrose, prince of Dauphiny, and his son Romus, who founded the city of Romans, and gave birth to the Romane language.

Besides, although it were true that Deucalion had been in fact the head of the Grecians when that people first established themselves in the environs of Parnassus, popular opinion, regarding him as the author of the nation, would have placed in his time the catastrophe from which all nations date, by a simple confusion of epochs,—very natural when nothing is written, not even committed to verse and learned by heart,—and still no one be able at this day to draw any conclusion whatever concerning the reality of that event.

There have been also in certain places, traditions relative to a deluge with which the name of Deucalion was not connected. Such was the inundation of Arcadia, related by Dionysius of Halicarnassus (*Ant. Rom. Lib. I. c. 61*), and to which he attributes the emigration of Dardanus to the island of Samothracia, and then to the Hellespont; such, again, was that of a great overflow of water of which Diodorus speaks (*Lib. V. c. 47*), which behoves to have taken place in Samothracia before the other deluges, and which some attribute to the rupture of the Bosphorus and Hellespont.

Independently of this tradition of Samothracia on the rupture of the Straits, we find in antiquity various hypotheses.

The Bosphorus is a channel of small width, whose banks are steep but for a short distance, and of inconsiderable height. Nevertheless, these declivities have sufficed certain of the ancients for the hypothe-

sis that this channel was really the product of a rupture. Strato¹ of Lampsacus, according to Strabo (Geog. Lib. I. p. 49), even sought to explain by this supposed event, the shells and other marine remains which are seen in many places on the plains and plateaus of Asia Minor. Before this rupture, according to Strato, the Euxine Sea must have been much more extensive than at this day, and must have covered a part of Asia Minor. A similar rupture must have taken place at some epoch and from analogous causes, at the Pillars of Hercules, and the ocean have flowed in over the whole extent of the Mediterranean.

The moderns, from the observations made by Pallas of the great plains of sand which extend from the north of the Black Sea to the Caspian and to Lake Ural, have even imagined that, at some time these three seas were united, and were separated only by a draining of their waters, occasioned by a rupture of the Bosphorus. Certain traces of volcanoes observed at the Cyanean islands and towards the entrance of the Black Sea, have seemed to them sufficient to furnish a physical explanation of such a rupture; they have even gone further and believed they could connect this draining with the deluge of Deucalion by historical proofs.

Since it is said in Apollodorus that the deluge of Deucalion happened in the time of Nyctimus, king of Arcadia, Clavier (History of the first times of Greece, I. p. 44) supposes it was under that same king Nyctimus, that the inundation of Arcadia took place, which, according to Dionysius, constrained Dardanus to go to Samothracia; and, by a second supposition, he would persuade himself that it was this same inundation which obliged Deucalion to flee to Parnassus; consequently, according to him, Deucalion must have come originally from Arcadia.

But a combination stronger yet is that of M. Dureau de la Malle (Phys. Geog. Black Sea, etc., p. 241). Uniting the tradition of Samothracia touching the eruption of the Euxine, which Diodorus relates as far anterior to Dardanus, and even to *all other deluges*, with the tradition relative to the inundation of Arcadia and to the emigration of Dardanus, in which Dionysius of Halicarnassus from whom alone we obtain it, makes no mention of the Euxine; admitting next, that the second of these events is identical with the deluge of Deucalion, he makes of all this together with the rupture of the Bosphorus and that of the Pillars of Hercules which he also places at the same epoch,

¹ Gr. Philos. 286 B. C.

one and the same catastrophe ; to which, consequently, he can assign an historic date.

Unfortunately this whole theory is as little founded in physics as in history. The phenomenon of marine relics on continents is universal, and cannot depend on a local cause. Not only around the Black Sea are fossil shells found, but everywhere. Moreover, it results from the testimony of two learned men who have visited the places, M. Olivier, in a report made to the Academy of Sciences, and General Andreossy (*Voyage to the Outlet of the Black Sea*, p. 48 et seq.), that the Black Sea, had it been much elevated above its own level, would have found many drains through hills and plains less elevated than the actual banks of the Bosphorus, without the necessity of opening for itself this long and narrow outlet. Besides, every one knows that a volcanic irruption is incapable of producing such an effect in a limestone country like the plateaus which traverse the Bosphorus. Finally, had the Black Sea, at some period suddenly fallen, in cascade, through this new passage, the small quantity of water capable of being drained by an opening so narrow, would have spread itself gradually over the immense surface of the Mediterranean, without causing on its shores a tide even of a few fathoms, much less a deluge which would have destroyed provinces, and forced men to seek a refuge on the heights of Parnassus.

Gen. Andreossy, who has made these places a particular study, and whose talents as an engineer and hydraulician are well known, has himself proved from the elevation of the banks of the Strait,—that portion where they are steep,—that the simple inclination of the surface of the waters necessary for draining, would have reduced to nothing the excess of elevation they would have produced, when once they had reached the shores of Attica.

But if the historical proofs they pretend to give of the identity of the deluges of Samothracia, of Arcadia, and of Deucalion, and above all of their date, and the physical explanations they have imagined for them, disappear before a serious criticism ; there can remain little doubt that all which is real in these traditions, and even in those of the deluges of Ogyges, of Syria, of Phrygia, of Assyria, and of China, resolve themselves into the memory of one and the same event, viz., of that which is known in the Hebrew annals under the name of the

UNIVERSAL DELUGE.