210

those most remarkable analogies which are ably set forth in these works, are not traceable to the times which immediately succeeded the deluge, and preceded the Dispersion.

Well may the opinion of the world hang in suspense with regard to every doubtful question in which any part of the chosen people of God is implicated. The separate existence of the Jews as a distinct people, even to this day, is a miracle which none can question; and wherever the descendants of the lost Ten Tribes are banished,-to the east, or to the west,-we may firmly believe, that, being partakers of the same striking promises with the Jews, the same God who has promised to recall to his fold the "dispersed of Judah," will not forget "the outcasts of Israel."

I feel tempted still to remark, that if the exact time in which the American continent became peopled, is a matter of uncertainty, the manner is not the less so, and as long as we confine our speculations to the narrow limits which the generality of theorists have adopted in their hypotheses, the result must be unsatis-

That a vast continent extending from the icy pole to the 56th degree of south latitude, should have been peopled either by the chance introduction of individuals by rafts or canoes, from the shores of Asia, or some of the islands at present found in the intermediate ocean,-or even by the passage of a strait almost within the limits of the frigid zone, would appear preposterous, and improbable in the highest degree; and these ideas become ludicrous when applied to the introduction of animals of every description; many of which are incapacitated from their structure, for existing in such high latitude.

The Mosaic account of the deluge, and of the manner in which it pleased God to preserve the race of men and of animals, puerile and incredible as the latter may appear to the free-thinkers and neologists of the present day, is, however, not the less worthy of credit by the philosopher, as well as the simple-minded Christian; and other testimony to its truth than that of the Bible, if such be necessary, may be culled from the belief and traditions, of both the pagan nations of the eastern hemisphere, and the central nations of America.

In whatever locality it suited the designs of Providence to bring together the various animals for their introduction into the ark, it must not be overlooked, that that part of the globe on which the ark rested after the deluge, was one which of all others was the most calculated to facilitate the replenishing of the surface of the earth with animals, to whatever climate they were attached, or whatever were their habits.

To the north of the mountains between the Black and Caspian seas, a cool and elevated plateau led to the limits of the frozen sea, when immediately to the south, the hot and arid plains of Arabia and Armenia, afforded an easy passage to the equatorial latitudes; and as far as the old world was concerned, it may be said, that no animal in leaving the ark, had to pass through a zone incongenial to its nature. Neither is it to be assumed that this evidently wise scheme of Providence was violated with regard to America.

The probability is, that there once existed easy modes of communication, which have since disappeared in some mighty physical convulsion: and the opinion that this is the case, gains additional strength, both from the configuration of this portion of the globe, and the vague but certain traditions, which are entertained by many nations, of such a second great catastrophe having taken place posterior to the deluge.

The concurrent testimony of many scientific observers as to the appearance of the eastern coasts of Asia, and the groups of islands scattered over the Indian and Pacific oceans, and the proofs of large bodies of land having disappeared, need not be dwelt upon;—nor the almost universal tradition current among these islands, of such a great physical convulsion, or disruption of the continents perfectly distinct from those of the great deluge. He who is disposed to glean, may glean from the history of the nations of the old world, testimony to the same purport. The Egyptians, the Chinese, the Hindoos, have all similar records, concerning this second great revolution, which seemingly produced these great changes on the surface of the globe, and in the disposition of its parts.

It may be further mentioned, that the signification

1 See Genesis x. 25.

of the name of the patriarch Peleg, i. e. division; 1 for in his days the earth was divided,' corroborates this idea in a singular manner. The word rendered 'division,' signifying, according to good authorities, a physical, and not a political division or separation; for proofs of which you may be referred to the ingenious work of Dr. McCulloh,—where it is shewn that both the Chinese and the Hindoo records chronicle a certain terrible geological convulsion as occurring in the years 2357 and 2456, before Christ, both of which dates fall within the life of Peleg. Moreover the signification of the name of the patriarch Salah, who was his contemporary, again favours the same hypothesis, and it must be conceded that many favourite and received theories rest on far worse grounds.

According to this, the series of convulsions which broke up the surface of the globe will have occurred eight or nine hundred years after the dispersion of mankind, and consequently after that every part of the surface may have become occupied by both men and animals.

This is not the place for repeating what others have established with regard to the analogies of the Mexican mythology, with that of the old world. The subject is a tempting one, but I have already overstepped my proper bounds, and in referring you to Humboldt, Faber, Bryant, and other well known writers, I crave

¹ Researches Philosophical and Antiquarian concerning the Aboriginal History of America, by J. H. M'Culloh, M. D. Baltimore, 1829.

your pardon for my digression, and resume my narrative.

On repairing to the House of the Moon, I found my two companions busily employed in verifying the truth of the information we had received in Mexico, of an entrance having been discovered. The opening in question lies in the southern face of the Pyramid, at the two thirds of the elevation, and possibly about the level of the third terrace from the bottom. It is difficult to determine exactly, for the whole form of this the lesser Pyramid is much more indistinct than that of its rival. A number of Indian women and children beset the entrance, which was little larger than that into a fox-earth, and after undergoing a partial stripping, I proceeded to share in the glory or danger of the enterprise, whichever it might be. As it happened, there was neither to be gained. I laid myself flat upon my face, and ducking into the aperture, squeezed myself blindly forward with my candle, through a passage inclining downwards for about ten yards, when I found myself in a more open gallery, at the termination of which, not many paces distant, I found de Pourtales and M'Euen at the brink of two wells, which, considering the height at which we entered, might perhaps be in the centre of the pyramid. The latter valorously allowed himself to be lowered by a rope into the aperture on the left hand, to the depth of perhaps fifteen feet, without making any further discovery. The other pit was still shallower,

and no signs of any other passage could be discovered. Both the walls of the passage and the sides of the wells as far as we could see, were constructed of unburnt bricks; and a plentiful mouthful of dust was our only recompence. Other and more important cavities there may be, if they could be hit upon. No entrance has been discovered in the House of the Sun.

Of the Indians, to whom our adventure was a subject of both curiosity and awe, we purchased a hundred or more of those singular terra cotta heads, which, intermingled with fragments of obsidian knives and arrows, are discovered in such inexhaustible quantity in many parts of Mexico, but principally in the vicinity of these Pyramids, and on the neighbouring plain of Otumba. I am not aware of any light having been thrown as yet, either upon the uses to which these models of the human countenance were put by the people with whose customs and ceremonies, their fabric and use in such quantities were seemingly connected. By far the greater majority of those which came under my observation bore an extraordinary resemblance to one another, both in the strongly marked features of the face, the facial angle, and the height and formation of the forehead.

I should explain, that the hinder part of the head is never given in its full proportions, so that the phrenologist is quite at fault. The physionomy has nothing in common with the present tribes of Indian descended from the Aztec race. Several of the heads were crowned with a broad and ornamented tiara or head dress; but in gene-

ral there was no ornament about them: and with the exception of a few, which had evidently served as ornaments upon some earthern vessels, all seemed to have been found in the state in which they were modelled. The composition is a fine clay, well tempered and slightly baked.

Fragments of pottery of divers colours, and a small baked mass of clay with two perforations side by side, which, whatever were its original uses, would not make a bad candlestick for those who had no better, are also picked up in great numbers; as well as an inconceivable quantity of fragments of obsidian or rather jade arrows and quadrangular knive blades, from one to two inches long. I was greatly struck in observing the uniformity of the angles presented by the majority of the latter, and several circumstances combine to make me believe that the people who fabricated them, had some method of working them into shape, by taking advantage of the conchoidal fracture.

In the vicinity of Real del Monte there are ancient obsidian mines which must have been worked in very ancient times. The mineral is disposed in thin beds alternately, with fine sand, and was reached by means of numberless small shafts or pits. It is said to lie there in inexhaustible quantities, and from thence, doubtless, the Toltecs drew much of the material for their weapons, and for the beautiful masks with which they covered the faces of their illustrious dead. But there is no lack of it elsewhere in New Spain, both above and under ground.

By some unaccountable forgetfulness we left the Teocallis without visiting the so called 'Fainting Stone,' which lies in the hollow between two of the smaller pyramids at the foot of the House of the Moon. It is a large square mass with a sculptured face, and the popular belief with regard to it is, that any one sitting down on it faints dead away. We heard one anecdote, singularly confirmatory of this incredible tradition, from some of our European acquaintances in Mexico, and therefore regretted the more having been so neglectful, as to have omitted to set the matter at rest by our own experience.

The following morning we addressed ourselves early to the duty of escorting our ponderous vehicle to the north towards lake Zumpango, over a line of country on which we were led to believe that the banditti were as plentiful as the nopal bushes. But here again our perverse good fortune brought us through without adventure, or any chance of trying our mettle; and to tell the truth, had it not been for the coach and its ten mules, a more banditti-looking party than our own, could hardly have been met with.

The range of secondary hills over which our track lay on our early morning ride to Tecama, an old halting place on the Real del Monte road, gave us frequent glimpses of the lakes in the plain below, and particularly of that of San Cristobal, between which and the marshes of lake Tezcuco, the old Spaniards have

left one of the noblest monuments of their skill and magnificence, in the construction of the celebrated dike and causeway, by which they prevented the surplus waters of the higher from entering the lower. Its length is fifteen hundred veras, its breadth ten, and height from three to four; the whole structure being a mass of solid masonry.

A short pause at Tecama, was followed by our descent into the great level, which, once doubtless covered with waters, extends from the present shores of the lake, round the base of a group of volcanic hills, towards the foot of the great chain, which hems in the valley of Mexico to the north and north east.

Zumpango is about five leagues distant from Tecama, or eight from San Juan Teotihuacan.

It may give you some idea of the utter ignorance which reigns in the capital among the better classes, both natives and Europeans, as to the topography of the country, when I assure you that we had set out on this excursion, as upon a journey of discovery; without being able to gather the slightest information of a positive character with regard to the practibility of what we proposed achieving, though we sought it for a week in advance on every hand. The possibility of rounding the southern end of the lake of Tezcuco to the town of that name, was again and again positively denied. Distances were tripled: and as to the scheme

of proceeding directly with our train from San Juan Teotihuacan to Huehueteca, that was laughed at as quite chimerical. We found not only no great difficulty, as you read, but discovered that all the information we had received with regard to distances had been greatly overrated.

The town of Zumpango, where we made our main halt, presents nothing worthy of note so far as we could discover. The northern shore of the lake of that name, which we skirted in the course of the afternoon, is, however, very pretty.

Passing one or two picturesque villages, we gained the plains beyond. Our road led us close to the walls of the great Hacienda of Jalpa; and, in fine, at an early hour of the evening, to the village of Huehuetoca, whose massive church had long served as our landmark in approaching from the eastward.

There is little either in the miserable town itself, or in the surrounding country, as far as its general features are considered, to allure the traveller to a halt; or to tempt me to put a tail to this long letter; but, in the Desague Real, this otherwise uninteresting corner of the Valley of Mexico contains one of the most gigantic monuments of human design to be found in any country; and to visit it was the motive of our excursion thus far to the northward.

You may have gathered from what I have already communicated, that nature has provided no natural outlet for the waters of the five lakes of the Valley;

and that in times of extraordinary and sudden flood, the surplus of waters of all the more elevated lakes to the north and south, must be discharged into lake Tezcuco, which forms the lowest level of the Valley of Mexico.

I have also remarked that both the ancient capital, and the present city, have been exposed from this cause to great inundations, in spite of the gradual decrease of the waters in lake Tezcuco, from causes which I have hinted at in the first page of this letter.

The attention of the Spanish viceroys being thus imperatively drawn to the subject, about the commencement of the seventeenth century, a scheme was formed by a Spanish engineer, Enrico Martinez, by the execution of which, the surplus waters from the two upper lakes to the northward,—San Cristobal and Zumpango; were to be drawn off in another direction; their basins being the most liable to overflow, from the character and size of their tributaries.

The comparative depression and narrowness of the mountain rampart, hemming in the Valley to the northward, in the vicinity of lake Zumpango, favoured the project of constructing a tunnel by which this should be effected, forming a duct through which all the waters rising above a certain level should be conveyed into the bed of the river Tula, the main branch of the Panuco, whose source lay on the other side of the ridge, and which you will recognize as entering the Gulf at Tampico.

This great work was commenced in 1607, and in

the course of its prosecution by the hands of the native Indians, hundreds are said to have perished by the caving in of the earth and other casualities. But what was that?—the work was to be done, and if Indians were wanted, a party of horsemen armed with the lasso were sent out to the distant villages, and the poor natives were secured and brought to the scene of toil like so many wild horses. The memory of what their ancestors endured at Huehuetoca, both at this epoch and in after times, is not forgotten by the present race.

A tunnel or subterranean gallery was at length finished, 20,000 feet in length: but, in 1629, the stoppage of the passage by the fall of the roof, or other casualty, combined with a season of unusual flood, caused such a rise in the waters of lake Tezcuco, that the whole of the ancient bed, and the streets of the Capital itself, with the exception of the very highest levels, were covered with water to the height of three feet, and remained submerged till 1634.

Many projects were set afloat in the interval, and even the propriety of abandoning the present site, and rebuilding the metropolis on the rising ground beyond Tacuba agitated; but at length it was determined to convert the tunnel through the hill of Nochistongo into an open cut. This was effected, after years of labour, and infinite delay, expense, and loss of Indian life; and the completion of the work dates from the year 1789. The cost of this prodigious canal, and of the various dikes raised in furtherance of the same design,

among which that of San Cristobal is to be included, amounted to far above the sum of six millions of dollars.

The morning after our arrival, a visit to the Desague Real was our only business, and we accordingly rode along its whole line, to the summit of the hill through whose bowels it has been carried.

At the summit it presents an enormous excavation, cut to the depth of one hundred and ninety-six feet perpendicular, through alternate beds of clay, and loose gravel and sand, with a breadth of upwards of three hundred feet at the top. Northward the eye loses it in the distance, as it runs towards the fall of the Tula: and southward, it appears like a deep groove, stretching straight across the plain, towards the north-eastern angle of lake Zumpango; beyond which you descry the Cerro de Cristobal; and, far in the distance, the snowy summits of Iztaccihuatl and Popocatepetl. From one extremity to the other the length of the Desague exceeds 67,000 feet, or upwards of twelve miles.

At the time we visited it, a most insignificant stream was passing to the northward; and it appeared to us probable that the quantity of rubbish brought down into the cavity by the crumbling beds of gravel above, and the washing of the clayey strata, might become a serious impediment in course of time, if not attended to. There is no doubt that this costly enterprise has so far answered the purpose for which it was under-

taken: yet should an extraordinary but yet possible chain of circumstances conspire to raise the southern lakes to an unusual level, the danger to the capital would not be lessened.

After thus spending the morning in the survey of this great work, we prepared to return by the direct road to Mexico, eleven leagues distant. Guautitlan is a considerable town, with a fine church, and curious old colonnaded buildings, lying in a valley at the northern side of that spur of hills which connects the Cerro de Cristobal with the main eastern branch of the Sierra Madre. The river of that name is properly a tributary of lake Zumpango, though I believe its waters now pass at once into the Desague. It is the most powerful stream in the valley of Mexico.

The passage of the ridge to the town of Tanepantla presented nothing very worthy of note; but, when in continuing our route through the cultivated fields in its vicinity, the view upon the opening plain, lake, and wide panorama of mountains, with the domes of the city illuminated by the declining sun, again unfolded itself to us, we were at a loss for language to express our sense of its indescribable beauty.

Our amusing excursion had been but of four days duration.