

lution about 32 of our years, travelling at the rate of 16,000 miles in an hour. Should it be hastily thought, that its immense distance from the sun must, from its want of light, render it a dreary abode, let it be remembered, although the light & heat received by its inhabitants must be 361 times less than we derive, yet it enjoys a proportion of light equal to 249 of our full moons; besides which, it is attended by six satellites, performing their revolutions in differently directed periods.

But our limits admonish us to stop. The youthful reader is invited, at his leisure, to pursue the interesting inquiry. It is worthy of a deathless mind. Let him think of the simple principles of attraction and repulsion by which these stupendous bodies describe their orbits. Let him endeavour to contemplate them as the seats of endlessly diffused life, and the theatres of untold Divine beneficence, by analogy forming some faint idea of their population by the little he knows of that world in which he is appointed for a little time to dwell, from man to the minutest animalcula he has been able to perceive. Let him read the instructive and captivating pages of the eloquent Chalmers, and carry his thoughts beyond the contracted span of time. Let him bow gratefully before his Maker for the rank condescendingly granted him among terrestrial beings; and lastly, let him glow with a holy earnestness to become, through Jesus Christ, an inhabitant of that upper and better world, where he shall have an eternity in which to contemplate the sublimity, the extent, and the perfection of the Almighty's works, in the company of blessed associates of every age, and kindred, and tongue.

SCRIPTURE GEOGRAPHY.

THE LAKES OF PALESTINE.

The *Lake Asphaltites* is a collection of water of considerable magnitude. It is surrounded by high hills on the east, west, and south, some of them exhibiting frightful precipices, and on the north it is bounded by the plain of Jericho, through which the river Jordan flows into it. The Kedron, Arnon, and Zazet, rush down the hills in torrents, and along with other streams, discharge themselves into the lake.—Its real size, we believe is not yet ascertained, for we are not aware that any modern traveller has measured it; and the measurements of Josephus, who found it 72 miles long and 18 broad, are still referred to. Diodorus affirms that it is 62 miles long and 7 1-2 broad; but the calculation of Pliny is much greater, for he says it is 100 miles long and 25 wide in the broadest part. Maundrell considers it 72 miles long, and 18 or 21 in breadth. Pococke agrees with Diodorus, and Dr Clarke with Josephus: and the Abbe Mariti, who seems to have paid much attention to its peculiarities, maintains that it is 180 miles in circuit. We cannot but consider it singular that its dimensions should not have been more precisely ascertained.

The waters of the Dead Sea are clear and limpid, but uncommonly salt, and even bitter. Their specific exceeds that of all other waters known: Josephus and Tacitus say that no fish can live in it; and according to the concurring testimony of several travellers, those carried through by the Jordan instantly die. Maundrell, nevertheless, states, that he found some

shellfish resembling oysters on the shore, and Bishop Pococke was informed that a monk had seen fish caught in the water; these are assertions, however, which require further corroboration. The mud is black, thick and foetid, and no plant vegetables in the water which is reputed to have a petrifying quality. Branches of trees accidentally immersed in it are speedily converted to stone, and the curious in Jerusalem then collect them. Neither do plants grow in the immediate vicinity of the lake where every thing is dull, cheerless and inanimate; whence it is supposed to have derived the name of the *Dead Sea*.—But the real cause of the absence of animals and vegetables, Volney affirms, is owing to the saltness and acidity of the water infinitely surpassing what exists in other seas. The earth surrounding it is deeply impregnated with the same saline qualities, too predominant to admit of vegetable life, and even the air is saturated with them. The waters are clear and incorruptible, as if holding salt in solution, nor is the presence of this substance equivocal, for Dr Pococke found a thin crust of salt on his face after bathing in the sea, and the stones where it occasionally overflows are covered with a similar crust. Galen considered it completely saturated with salt, for it would dissolve no more when thrown into it. There are mines of fossil salt on the south-west bank, from which specimens have been brought to Europe; some also exist in the duchivities of the mountains, & have provided time immemorial for the consumption of the Arabs and the city of Jerusalem.—Great quantities of asphaltum appear floating on the surface of the sea, and are driven by the winds to the east and west bank, where it remains fixed. Ancient authors inform us, that the neighbouring inhabitants were careful to collect it, and went out in boats, or, used other expedients for that purpose. On the south west bank are hot springs, and deep gulleys, dangerous to the traveller, were not their position indicated by small pyramidal edifices on the sides. Sulphur is likewise found on the edges on the Dead Sea, and a kind of stone, or coal, called *mussa* by the Arabs, which on attrition exhales an intolerable odour, and burns like bitumen. This stone, which also comes from the neighbouring mountains, is black, and takes a fine polish. Mr. Maundrell saw pieces of it two feet square in the convent of St. John in the wilderness, carved in bas relief, and polished to as great a lustre as black marble is capable of. The inhabitants of the country employ it in paving churches, mosques, and courts, and other places of public resort. In the polishing, its disagreeable odour is lost. The citizens of Bethlehem consider it as endowed with anti-septic virtues, and bracelets of it are worn by attendants on the sick, as an antidote against disease. As the lake is at certain seasons covered with a thick dark mist, confined within its own limits, which is dissipated with the rays of the sun, spectators have been induced to allege that black and sulphureous exhalations are constantly issuing from the water. They have been no less mistaken in supposing, that birds attempting to fly across are struck dead by pestiferous fumes. Late and reputable travellers declare, that numerous swallows skim along the surface, and from thence take up the water necessary to build their nests; and on this head Heyman and Van Egmont made decisive experiment. They carried two sparrows to the shore, and having deprived them of some of the wing

feathers, after a short flight, both fell into, or rather on the sea. But so far from expiring there, they got out in safety. An uncommon love of exaggeration is testified in all the older narratives, and in some of modern date, of the nature and properties of the lake. Chateaubriand speaks of a "dismal sound proceeding from this lake of death like the stifled clamours of the people engulfed in its waters!"—that its shores produce fruit beautiful to the sight but containing nothing but ashes—that it bears upon its surface the heaviest metals—these, and a thousand other stories of a like character, have been perpetually repeated with hardly any foundation of truth. Among other facts apparently unaccountable, has been ranked that of this lake constantly receiving the waters of the Jordan without overflowing its banks, seeing there is no visible outlet. Some have therefore conjectured the possibility of a subterraneous communication with the Mediterranean: others, more ingenious, are of opinion, that the daily evaporation is sufficient to carry off all the waters discharged into it, which is a simple solution of the apparent paradox.

A small quantity of the water of the Dead Sea, lately brought to Britain by Mr. Gordon of Clunie at the request of the late Sir Joseph Banks, has been analysed by Dr. Marcet. It was perfectly transparent, and deposited no crystals on standing in close vessels. Its taste was peculiar, bitter saline, and pungent. Solutions of silver produced from it a very copious precipitate; showing the presence of marine acid. Oxalic acid instantly discovered lime in the water. Solutions of barytes produced a cloud, showing the existence of sulphuric acid.

The specific gravity was ascertained to be, 1,211, which is somewhat less than what had been found by Lavoisier, being 1,250, in a portion submitted to his examination. From different experiments in the analysis which we refer to, the result proved the contents of 100 grains of water to be, muriate of lime, 3,920; muriate of magnesia, 10,246; muriate of soda, 10,360; sulphate of lime, 0,054; total 24,580.

Whence it appears that this water contains about one-fourth of its weight of salts in a state of perfect desiccation; but if these salts be desiccated only at the temperature of 180 deg. they will amount to 41 per cent of the water.

MISCELLANEOUS.

A SCENE IN THE SANDWICH ISLANDS.—This morning I went to Cox's, [Krimakoo] intending to purchase some goats. I expected to find him, as usual, either sleeping, or smoking, or drinking, or busy trafficking like myself. The door of his hut was half open, and I was about to enter unceremoniously, when a scene too striking ever to be forgotten, and which would require the hand of a master painter to do it justice, suddenly arrested my whole attention.

About a dozen natives of both sexes were seated in a circle, on the matted floor of the apartment, and in the midst of them sat John Honoree, the Otahitean catechist. (These catechists are converted natives who are appointed to impart to their less enlightened brethren the instruction they have themselves received.) All eyes were bent upon him; and the variously expressive features of each individual marked the degree of interest excited by what was passing in his mind. So absorbed indeed, were they