

3. The subject before us addresses important considerations to the unconverted and the sinner.

The path of life may well be dreary, the valley of death may well be dismal, when you walk without light. Do let me assure you, that to die in this state, is to be lost to every comfort; that if you close your eyes in death, without looking to him who is the light of life, you must be eternally benighted. But you need not perish. Look to the Lord of life and glory; as a fountain of light, his radiance is exhaustless as it is free, and free as it is exhaustless. Hear, now, the words of thy redeemer: hour, and that thy soul shall live—"I am the light of the world: he that followeth me, shall not walk in darkness, but shall have the light of life."

SACRED GEOGRAPHY.

CITY OF JERUSALEM.

By moonlight next morning, we were on the way to the sacred city: for about three hours it led over the plain, and then ascending the hills became excessively disagreeable, in some parts so narrow that one horse only could proceed at a time, and that not always with safety, as the rains had made the rocky paths much worse than usual. At the end of nine hours, however, we proceeded over a summit of a rugged hill, we beheld Jerusalem at a small distance before us. Its aspect certainly was not magnificent or inspiring, but sad and dreary.

On reaching the gate of Bethlehem, we were speedily admitted, and after some research procured a lodging in the house of a native, not far from the walls and near the tower of David. We had enough of convents, and a traveller will find himself much more agreeably situated, and more at his ease, in living orientally, than confined within the walls and obliged to conform to the hours of a monastery.—However, there is no avoiding one's fate. I had my divan and coffee, excellent wine, and music in the evening, and wished only to remain in peace. But in a day or two repeated messengers came from the superior of the convent urging my entry into it: it was so unusual for a traveller to lodge without, and so unsafe in those times, and he would come himself to remonstrate with me; so that I was fain to comply. An unlucky letter from the convent of Constantinople, and an unwillingness to lose the fees which every traveller pays, were the causes of this civility. They put me there into a little cold cell, with a single chair and table in it, and a small flock bed, as if I came to perform a pilgrimage; and the pictures of saints and martyrs on the walls were pi or consolations for the substantial comforts I had lost. Here, however, it was my good fortune to meet with a most amiable traveller, a Mr. G., an Irish gentleman, whose companion had just left him for Europa.

The morning after my arrival was a very lovely one; and, though it was in February, perfectly warm. I passed out of the gate of Bethlehem, and traversing part of the ravine beneath, ascending the mount of Judgment on the south side of the city. How interesting was her aspect, beheld over the rocky valley of Hinnom! her gloomy walls encompassing Mount Zion on every side; and as yet there was no sound to disturb the silence of the scene. The beautiful mount of Olives was on the right, and at its feet the valley of Jehoshaphat, amidst whose great rocks and trees stood the tomb of Zacharias, the last of the prophets that was slain: the only stream visible, flowed from the fountain of Siloam, on the side of Zion opposite. It is true, the city beloved of God has disappeared, and with it, all the hallowed spots once contained within its walls; and keen must be the faith that can now embrace their identity. Yet the face of nature still endures; the rocks, the mountains, lakes and valley are unchanged, save that loneliness and wildness are now, where once were luxury and every joy; and though their glory is departed, a high and mournful beauty still rests on many of those silent and romantic scenes. Amidst them a stranger will ever delight to wander, for there his imagination can seldom be at fault; the naked mountain, the untrodden plain, and the voiceless shore, will kindle into life around him, and his every step be filled with those deeds, through which guilt and sorrow passed away, and "life and immortality were brought to light."

The day had become hot ere I returned to my dwelling, just within the walls. It was the most desirable time of the year to be at Jerusalem, as the feast of Easter was about to commence, and many

of the pilgrims had arrived. The streets of the city were very narrow and ill paved, and the houses in general have a mean appearance. The bazaar is a very ordinary one. The American quarter is the only agreeable part of the city: the convent, which stands near the gate of Zion, is very spacious and handsome, with a large garden attached to it, and can furnish accommodations for eight hundred pilgrims within its walls; the poorer part lodging in out-houses and offices in the courts, while the richer find every luxury and comfort, for all the apartments in this convent are furnished in the oriental manner.—The wealthy pilgrims never fail to leave a handsome present, to the amount sometimes of several hundred pounds. If a pilgrim dies in the convent, all the property he has with him goes to the order. The church is very rich, and ornamented in a very curious taste, the floor being covered, as is the case in all their religious edifices, with a handsome carpet.

The lower division of the city, towards the east, is chiefly occupied by the Jews: it is the dirtiest and most most offensive of all. Several of this people, however, are rather affluent, and live in a very comfortable style; both men and women are more attractive in their persons than those of their nation who reside in Europe, and their features are not so strongly marked with the indelible Hebrew character, but much more mild and interesting. But few passengers, in general, are met with in the streets, which have the aspect, where the convents are situated, of fortresses, from the height and strength of the walls the monks have thought necessary for their defence. Handsomely dressed persons are seldom seen, as the Jews and Christians rather study to preserve an appearance of poverty, that they may not excite the jealousy of the Turks.

The population of Jerusalem has been variously stated; but it can hardly exceed twenty thousand; ten thousand of these are Jews, five thousand Christians, and the same number of Turks. The walls can with ease be walked round on the outside in forty-five minutes, as the extent is scarcely three miles.

LITERATURE.

OF THE AIR AND ATMOSPHERE.

[CONTINUED.]

The uses of the atmosphere are so many and great, that it seems indeed absolutely necessary, not only to the comfort and convenience of men, but even to the existence of all animal and vegetable life, and to the very constitution all kinds of matter whatever, and without which they would not be what they are; for by it we live, breathe, and have our being; and by insinuating itself into all the vacuities of bodies, it becomes the great spring of most of the mutations here below, as generation, corruption, dissolutions, &c. and without which none of these operation could be carried on. Without the atmosphere, no animal could exist, or indeed be produced; neither any plant, all vegetation ceasing without its aid; there would be neither rain nor dews to moisten the face of the ground; and though we might perceive the sun and stars like bright specks, we should be in utter darkness, having none of what we call day light, or even twilight; nor would either fire or heat exist with out it. In short, the nature and constitution of matter would be changed and cease; wanting this universal bond and constituting principle.

As to the weight and pressure of the air, it is evident that the mass of the atmosphere, in common with all other matter, must be endowed with weight and pressure; and this principle was asserted by almost all philosophers, both ancient and modern. But it was only by means of the experiments made with pumps and the barometrical tube, by Galileo and Torricelli, that we came to the proof, not only that the atmosphere is endowed with a pressure, but also what the measure and quantity of that pressure is. Thus it is found, that the pressure of the atmosphere sustains a column of quicksilver, in the tube of the barometer, of about thirty inches in height;—it therefore follows, that the whole pressure of the atmosphere is equal to the weight of a column of quicksilver, of an equal base, and thirty inches in height; and, because a cubical inch of quicksilver is found to weigh nearly half a pound *avordupoise*, therefore the whole thirty inches, or the weight of the atmosphere on every square inch of surface is equal to 15lb. Again, as it has been found that the pressure of the atmosphere balances in the case of pumps, &c. a column of water of about 34 1-2 feet

high; and, the cubical foot of water weighing just 1000 ounces or 62 1-2lb. 34 1-2 times 62 1-2, or 2160lb. will be the weight of the column of water, or the atmosphere, on a base of a square foot, and consequently the 144th part of this, or 15lb. is the weight of the atmosphere on a square inch: the same as before. Hence Mr. Cotes computed that the pressure of this ambient fluid on the whole surface of the earth, is equivalent to that of a globe of lead of sixty miles in diameter. And hence also it appears, that the pressure upon the human body must be very considerable: for as every square inch of surface sustains a pressure of 15lb. every square foot will sustain 144 times as much, or 2160lb. then, if the whole surface of a man's body be supposed to contain fifteen square feet, which is pretty near the truth, he must sustain 15 times 2160, or 32400lb. that is, near 14 1-2 tons weight for his ordinary load. By this enormous pressure we should undoubtedly be crushed in a moment, if all parts of bodies were not filled either with air or some other elastic fluid, the spring of which is just sufficient to counterbalance the weight of the atmosphere. But, whatever this fluid may be, it is certain, that it is just able to counteract the weight of the atmosphere, and more: for if any considerable pressure be superadded to that of the air, as by going into deep water, or the like, it is always severely felt, let it be ever so equal, at least when the change is made suddenly; and if, on the other hand, the pressure of the atmosphere be taken off from any part of the human body, as the hand for instance, when put over an open receiver, from whence the air is afterwards extracted, the weight of the external atmosphere then prevails, and we imagine the hand strongly sucked down into the glass.

The difference in the weight of the air which our bodies sustain at one time more than another, is also very considerable, from the natural changes in the state of the atmosphere. This change takes place chiefly in countries at some distance from the equator: and, as the barometer varies at times from twenty-eight to thirty-one inches, or above one-tenth of the whole quantity, it follows, that this difference amounts to above a ton and a half on the whole body of a man, which he therefore sustains at one time more than at another. On the increase of this natural weight, the weather is commonly fine, and we feel ourselves what we call braced, and more alert and active; but, on the contrary, when the weight of the air diminishes, the weather is bad, and people feel a listlessness and inactivity about them. And hence it is no wonder, that persons suffer very much in their health, from such changes in the atmosphere, especially when they take place very suddenly.

The weight of the atmosphere has great influence on a number of physical phenomena. It compresses all bodies, and opposes their dilatation. It is an obstacle to the evaporation of fluids. The water of the sea is by this cause preserved in its liquid state, without which it would take the vaporous form, as we see in the vacuum of the air pump. The pressure of the air on our bodies preserves the state both of the solids and fluids; and from the want of this pressure it is that on the summits of lofty mountains the blood often issues from the pores of the skin, or from the lungs.

BENEFICIAL EFFECTS OF A TASTE FOR THE BELLES LETTRES.

Belles Lettres and Criticism chiefly consider Man as a being endowed with those powers of taste and imagination, which were intended to embellish his mind, and to supply him with rational and useful entertainment. They open a field of investigation peculiar to themselves. All that relates to beauty, harmony, grandeur, and elegance; all that can sooth the mind, gratify the fancy, or move the affections, belongs to their province. They present human nature under a different aspect from that which it assumes when viewed by other sciences. They bring to light various springs of action, which, without their aid, might have passed unobserved; and which, though of a delicate nature, frequently exert a powerful influence on several departments of human life.

Such studies have also this peculiar advantage, that they exercise our reason without fatiguing it.—They lead to enquiries acute, but not painful; profound, but not dry nor abstruse. They strew flowers in the path of science; and while they keep the mind bent, in some degree, and active, they relieve it at the same time from that more toilsome labour to which it must submit in the acquisition of necessary erudition, or the investigation of abstract truth.—Blair.