

made of those portions of the lunar surface thought to be seas, it was found that, on account of their rough, uneven surface, they could not be liquid, but were merely plains more level than the rest. Hence arose doubts whether any water existed on the moon, and we are now convinced from the absence of atmosphere, that there can be none, for if there were any, it would be converted into vapour, which would take the place of air, and present like phenomena, and, moreover, the presence of water would give rise to changes in the lunar surface, of which none have been noticed, so that we may conclude that the moon is without water as well as air.

As to the light we receive from the moon, it is merely that of the sun reflected, and under the spectroscope shows no difference from sunlight. The strength of moon-light has been computed by Zollner, who found the light of the sun to be 618,000 times as bright as that received from the full moon, so that if the whole visible hemisphere were covered with full moons, they would afford us only about one-eighth of the light of the sun.

Many experiments have been made to find whether any heat is received from the moon; Lord Rosse has found that there is a very small quantity, scarcely perceptible. He estimated the whole amount of heat sent by the full moon to be about one-eighty thousandth part of that sent by the sun, and he also found that one-seventh of this amount was reflected, and six-sevenths radiated.

As to whether there exists any form of life on the moon, there has never been any evidence to show that there is, while every thing tends to prove the contrary. Without air and water, neither of which is to be found on the moon, it is impossible for even the lowest kinds of life to subsist, and, moreover, the extremes of heat and cold probably felt there,—for during fourteen days a burning sun beams down from a cloudless sky, while for the next fourteen days everything is plunged in darkness and the most severe cold—would not allow of the existence of any kind of life with which we are acquainted.

If any human beings could for a time exist on the moon, their surroundings would be strange, indeed, compared with ours. All would be weird, ghastly stillness, no sound of life, no wind, no rustle of trees, nor ripple of water, no

clouds, but black sky lit up with a brilliant sun and studded with thousands of stars, for, without atmosphere, the sky would be perfectly black, not blue like ours, and the stars all visible. On the surface the eye would be greeted by a burning, steady glare, contrasted with deep shadows, environed with rugged hills and valleys, not green slopes, but rough, abrupt precipices, all white dazzle and deepest shade. Another strange feature would be the lightness of a person on the moon, for the force of gravity not being nearly so strong as on the earth, one would then be able to easily jump higher than our highest houses. Then, when the sun sinks below the horizon, all is cold, and still, and gloomy, save the thousands of bright stars that appear above, and the earth shining as a magnificent moon in the zenith, for next to the sun which would be seen in all its brilliancy, with its prominences, and spots, and faculae, the earth would seem the most beautiful object to the selenite observer. It would move as the moon does to it, except that it would continually shine on one side, showing successively its different seas and continents in the various phases of new earth, crescent, half earth, &c., though far more striking on account of its presenting fourteen times the extent of surface that the moon does to us.

Many remarkable phenomena result from the moon's proximity to our earth. First among these is that of eclipses, when, either by interposing its body between the earth and the sun is caused a solar eclipse, or by the earth being interposed between it and the sun is caused a lunar eclipse. These are quite frequent, though the former are not so often seen in any particular place, as the portion of the earth obscured by the moon's shadow is very small. The occurrence of an eclipse has always been a source of excitement and terror in former days, and is yet, to a certain degree, an interesting and curiously watched event. We find numerous examples in history of the fear caused by eclipses through ignorance and superstition. Hence it often happened that clever men, having learned the cycle of eclipses, took advantage of the popular terror inspired by them to gain their desires. Columbus, we are told, when he and his men were on the verge of starvation, declared that he was about to deprive the world of the moon's light, and so frighten-