

## LITERARY NOTICES.

THE EXISTENCE OF OTHER WORLDS, PEOPLED WITH LIVING AND INTELLIGENT BEINGS, deduced from the Nature of the Universe. To which is added, Modern Discoveries and Times contrasted with the state of knowledge of the ancient Egyptians. By ALEXANDER COPLAND, Esq., Advocate. London: 1831. pp. 210.

THE respected author of this interesting and entertaining work, who, on account of his pious and ingenious writings, is worthy to be designated a Christian philosopher; a few years since removed with his family from Scotland to this country, and having purchased a tract of land near the village of Huntingdon, is now employed in cultivating his farm, and at the same time pursuing his favourite studies in that rural retreat, where, under his hospitable roof, his friends meet a hearty welcome, and are gratified and instructed by his enlightened conversation.

The question of a plurality of worlds has long been a subject of ingenious speculation. That there are *other worlds*—other habitable and inhabited globes like our earth, has, by some of the most powerful minds, been considered highly probable. The argument, of course, is analogical; demonstration is impossible, unless, indeed, in this age of scientific discovery and improvement, the power of the telescope should be so immensely increased, as to render the planetary inhabitants and their dwellings visible to the eye of the observer. Divine revelation is silent on the subject, though some passages of scripture are considered to be favourable to the opinion. Among the writers, divines and philosophers, whom the author cites in support of his views, are FONTENELLE, STERN, LORD BOLINGBROKE, DERHAM, WHISTON, COMBEAR, PROFESSOR COPLAND, WHEWELL, HENSCHEL, CHALMERS, SHARON TURNER, GLEIG, BISHOPS PATRICK and PORTFOLIO: who all concur in believing the probability of the planets being the abodes of animated and intelligent beings. We have room only for one extract; in this, however, the author has compressed his entire argument from analogy:—

“The telescope shows us that in all the great material points, the planets resemble the earth. They all revolve round the sun, and round their axes, as the earth does, by which they must have day and night, summer and winter. They seem, like our globe, to have spots, reflecting the light differently, as proceeding from mountains, valleys, and plains. They are surrounded by atmospheres, and, as far as we can discern, are similar to the ball we inhabit, in as far as is necessary to support life, although, like all the works of the Almighty Creator, each having features differing from another. If we merely knew that they were of a size equal to the earth, or larger, it would be the most natural supposition, that they were formed for the same purpose; but when we have discovered so many similar points of resemblance, the inference is unavoidable. Ignorance may conclude that the stars were created in vain, or for no great end, proportioned to their relative importance in the universe; but when the pious and scientific observer of nature discovers them to be of such enormous magnitude, and the planets of our system so like the earth in many respects, he must consider their utter desolation as inconsistent with intelligence and evident marks of design which the Creator has shown in such boundless profusion in this world. If every part upon earth is so constituted as to support life in some sort of animals, shall we refuse to entertain the reasonable idea, that the numberless globes around us, and, more particularly, our fellow-planets, have been also formed in some degree for a similar purpose. By moving round on its imaginary axis, every part of our globe is, in its turn, exposed to the beneficial influence of the sun. Even the interval of darkness which each region experiences is not without its use to us. All living things on

earth, animal as well as vegetable, have need of repose at regular periods from the exertions which they undergo generally during the day. Every vegetable may be said to sleep in the absence of the sun, though some are seen to do so more visibly than others. Some fold up their leaves and blossoms at night; and, speaking generally, the want of light is the natural signal for creatures to take their repose. Nature, however, with that amazing diversity in contrivance which she seems to love to display in all her works, has suited some classes of animals for activity in the light of day, but others in darkness, or rather in lesser degrees of light. For our present illustration, it is sufficient to point out that some require the light of the sun, and some that of the moon, which the motions of the earth procure them.

“Now, when we see the same great and benevolent contrivance in the planets, are we not to infer, that, with them, it answers a similar purpose as on earth. Can we credit that they turn like this globe, but for no such end? The similitude holds still further. Some of them also revolve *obliquely*, but being inclined to the plane of their ecliptic, and thus must have a change of seasons, and their surfaces must be therefore adapted from different degrees of heat, to the subsistence of various kinds of animal and vegetable productions, as with us. When we see planets attended by moons, shall we not suppose these meant for a like use as our own? I may here point out a strong argument for their being inhabited, founded on the evident means of enlightening them according to their distance from the sun, which is almost demonstrable proof on this question. Those planets which are nearer the sun than the earth is, have no moons that we can discern, but they may probably require less reflected light than we do, from their being immersed in more concentrated and direct light, which, radiating from the sun as a centre, is of course densest the nearer that centre: their atmospheres also may refract it more, which would prolong a strong twilight appearance to them. There is reason to believe that the planet Mars—the one immediately beyond us—has a very dense atmosphere, and thus, these three, although unprovided with a moon, may have sufficient light on their parts which are turned from the sun. But those great planets beyond Mars have each several moons; Jupiter having four; Saturn, seven; and Uranus, (or the most distant planet,) six: all which must contribute light to them, while, owing to their vast distance from the sun, they might otherwise be deficient in it. One of them has also two immense broad flat rings, (at some distance from its body,) which must receive and reflect to its surface a great portion of light, which would otherwise go past. It is far from impossible that the two planets nearest the sun, Mercury and Venus, have a moon each, or some contrivance similar to the *aurora borealis*, to illumine their lights; but the earth, as the planet in the third place of the system of planets, has a moon, one great use of which is to receive the sun's light, and reflect it upon those parts of the earth on which the sun does not shine directly, and this by a wonderfully-contracted rotary motion in the earth as well as in the moon. No person disbelieves that one purpose of our moon was to contribute light to the earth in the absence of the sun—the contrivance is too apparent to be doubted for a moment, even if the Scriptures had not remarked it; and shall we then discredit the idea, that exactly similar bodies, (in as far as we can see,) when circling round other planets, are intended to answer a similar purpose to them as our moon does to us? It can indeed be demonstrated that they must reflect a considerable quantity of light on the planets to which they belong; and can we, consistent with common sense, think that this light is meant only to shine on uninhabited solitudes, where there are no eyes to be benefited by their light? No! Such inferences of their uselessness would be absurd, for they too clearly indicate the contrary, to leave room for our fancying that they enlighten nothing which can be the better of their rays. That the moons and rings round Saturn, for example, are for the purpose, and actually will reflect light on his surface, can no more be doubted, than that our moon does so on the earth, or that this is done for the sake of living creatures, capable of seeing it. The design, therefore, from which proceeded these contrivances for giving the planetary bodies more reflected light in proportion

as their distance from the sun permits them to receive less and less direct light, as evidently shows and even proves a purpose or end to be answered, as the construction of the eyes of all animals which prey in the night, enables them, whenever they choose, to admit a greater quantity of light by a capability of withdrawing a greater portion of the iris than usual, while those creatures which are exposed to a bright light, are able to contract the pupil of their eyes to a mere point.

“To suppose that the stars were made only to give a faint glimmering light to the inhabitants of our globe, must bespeak a very unworthy opinion of the divine wisdom—for many of the stars are so far from benefiting us, that they cannot be seen without the aid of a telescope; and the Deity, by an infinitely less exertion of creative power, could have given our earth far greater light by only one additional moon. Every star is undoubtedly the centre of a magnificent system of worlds, as our own sun is. Thus, the greatness of God is magnified, and the grandeur of his empire made manifest. He is not glorified on one earth, or in one world alone, but in ten thousand times ten thousand.”

The work is written in a pleasing style, and is for sale at the book store of ARMOUR & RAMSAY.

THE DOCTRINES OF MODERN GEOLOGY REFUTED, in a Discourse on Exodus xx. 11. By A. J. WILLIAMSON. Toronto: 1841.

THE writer of the above Tract appears to have been influenced in its composition by a commendable zeal for the interests of revealed truth, and a wish to defend the cosmogony and chronology of Moses in the first chapter of Genesis, against the theories of modern geologists, who, rejecting the ancient and popular interpretation of that chapter, suppose a succession of creations—successive races of plants, and generations of animals, to have pre-existed the work of creation described by MOSES.

Mr. W. confines himself principally to an examination of a Lecture by Dr. PEE SMITH, “On the relation between the Holy Scriptures and some parts of Geological Science.” He speaks of having given that work an “extremely hurried but attentive perusal,” and promises, that should another edition of his Tract be called for, that it shall be “re-written;” with a view, we presume, to a more careful and extensive consideration of the subject. Before, however, he writes again, we would recommend the author to consult the geological works of Professor BUCKLAND and Mr. GRANVILLE PENN, and especially “The Truths of Revelation Demonstrated by an appeal to Existing Monuments, &c. By John Murray, F.S.A., &c.” He will then be better prepared to undertake the task of refuting “Doctrines,” which, however novel and anti-scriptural they may appear to be, have the support of men eminent in science, and firm believers in divine revelation.

## CANADA TEMPERANCE ADVOCATE.

THIS useful, and extensively circulated monthly publication, appears this month greatly improved in appearance and size, containing sixteen pages instead of eight, with a stitched cover, upon which will be found notices and advertisements, the proceeds of which, are to assist in defraying the additional expense. The journal is now devoted to three objects—TEMPERANCE, AGRICULTURE, and EDUCATION, and is, therefore, calculated to promote some of the most vital interests of the country. The objects proposed by the diffusion of this work, are worthy of the most enlightened philanthropy; and while the conductors of it seek, in the spirit of Christian charity and candour, to attain these objects, we shall rejoice in the most extensive and triumphant success with which their efforts can be crowned. It is published at the very low price of 2s. 6d. per annum, and already has a circulation of about 6,000 copies.