

GENERAL LITERATURE.

[FOR THE CHRISTIAN MIRROR.]

ORIGINAL ESSAY,

BY A MEMBER OF THE MONTREAL CHRISTIAN
MUTUAL-IMPROVEMENT SOCIETY.

THE EARTH.

(CONCLUDED.)

PROCEEDING ON those grounds, we find our globe curiously and splendidly finished; admirably adapted for the purpose intended; provided with everything suited for a temporary habitation, and great wisdom and benevolence pervading its whole construction; and hence we conclude, that some one must have created it, and that its Creator is benevolent and wise.

1st. We find it endowed with an atmosphere, capable of supporting the animal and vegetable life that exists upon it. We find the equilibrium of this atmosphere preserved by a curious mechanism. We have discovered that, without it, we could not exist for an hour; that, without its pressure, the elastic matter contained within our bodies would tear our bodies into a thousand fragments; that its component parts enter into the composition of all animal and vegetable matter; that, without it, we would be exposed to the unmodified power of the sun's rays, which would materially injure our eyes—nay, render them almost entirely useless; that, without it, we would be plunged from the brightest sunshine into worse than Tartarian darkness, and be denied the pleasures of twilight; that, without it, we would want the fertilizing agency of rain, dew, and snow—which would cause the total loss of all our rivers, and consequently destroy vegetable, and eventually animal, life; that, without it, we would lose the pleasures of conversation and music.

2d. The ground, on which we tread, and which appears so firm and enduring, is a thin crust, (comparatively about the thickness of an egg-shell,) covering an immense fluid mass. We have discovered that it has undergone convulsions and ablations; that mountain, now towering upwards towards the sky, were formerly at the bottom of the ocean; that these convulsions and disruptions have bestowed on us the pleasing variations of mountains and valley, hill and dale, and have brought up to the surface of the earth, and placed in our possession, minerals and powers, which tend materially to elevate mankind physically above the brutes, and to impart to civilized man a transcendent superiority over his uncivilized brother. By such convulsions we obtain the iron, which is now indispensable to our race, and the coal, by which we are enabled to plough the stormy deep independent of the aid of the wind; by which means the sea is made a great highway; the different nations of the earth are being formed into one great family; and the Bible and its incalculable advantages diffused over all parts of the earth.

The vegetable soil, which covers so large a portion of the surface of our globe, is chiefly formed by the decomposition of rocks, and retains the moisture which nourishes the growth of those plants and trees, which not only furnish us with pleasure in surveying their varied tints and inhaling their delightful odours, but which also supply us with the means of continuing our very existence as animated beings. What a blank would the earth be, if we saw nothing but a dreary waste extending as far as the eye could reach; if no pleasant fields met our gaze, and if no beautiful foliage delighted our vision; if no flowers with variegated tints regaled our senses. But, happily, the case is otherwise, because a Creator

“hath made the earth by his power,” and “hath established the world by his wisdom;” so that every plant may be said to exclaim, Behold the wisdom of Him who hath produced me! See! how benevolently and wisely He hath provided for my existence and my wants. Examine me narrowly, O man! Look around you. Investigate the natural mechanism and wonders lying around you, and you cannot but find innumerable proofs that “the heavens declare the glory of God, and the firmament sheweth his handiwork.”

How ingenious is the mechanism by which plants obtain their food! How wonderfully are our bodies made! What great design is exhibited in every muscle! What mechanism in every bone! How strongly our brain is enclosed in its bony case, and how skilfully that case is supported on the neck, so as to give it the power of turning round and bending! What firmness and elasticity are united in our spine! How infinite is that wisdom which can modify the hands and feet of man into members, which are peculiarly adapted in other animals to their different constitution and mode of living; which converts the hands of man into the hoofs of the horse, the wings of the eagle, the fins of the whale, and the claws of the tiger!

The Ocean is another leaf from Nature's book, and which exhibits distinctly and clearly that there is One “who layeth the beams of his chambers in the waters; who maketh the clouds his chariot; who walketh upon the wings of the wind;” and who covereth the earth “with the deep as with a garment.” The ocean is agitated, and thus preserved in a pure and healthy state, by means of tides; and its usefulness is great. It serves to connect nation with nation, and continent with continent. It is the ready-made commercial highway of the world. Its waters teem with animals, which afford healthy and plenteous food to man. It assists in equalizing the temperature of the land which is surrounded by it, or which is situated on its shores; and some of its waters are evaporated by the powerful rays of the sun, ascend in the form of clouds, and form the moisture which afterwards descends to irrigate the soil.

Water is indispensable to man; without it he could not exist many hours. It forms a part of all his meals; it is of great use in furnishing him with clothing, and preserving the cleanliness of his person, and it attends him from his morning ablutions until the completion of his last meal; and it is even being evaporated from his body during the period of his nocturnal repose.

Fishes are wonderfully and curiously formed; and their structure is so modified as to adapt their form to, and enable them to live in, the element assigned them. The feet of animals are in their case converted into powerful fins, to enable them to move rapidly through the water; and they are also provided with a powerful finny tail, to enable them to direct their course, and scull themselves with speed; and with an air-bladder, to give them the power of elevating or depressing themselves in the water. The refracting power of their eyes is less than that of animals. Being surrounded with water, they are furnished with gills to enable them to breathe in that element; and they have no glands to lubricate their food, and their teeth are more adapted to seize than to masticate it. Their intestine is short and simple, as they live almost entirely on animal substances; and their organ of hearing is confined within the skin, (with the exception of one species,) and that sense is consequently not so keen as that of animals. Here we behold a modification

of parts, and an adaptation of structure, to suit an alteration of circumstances, which could not have been produced by accidental means, but which everywhere displays the presence and working of a Designer “supreme in wisdom as in power.”

Was it chance that amalgamated the two deadly gases which compose the atmosphere in such exact proportions as to render them the supporters instead of the destroyers of life? Was it mere chance that so wisely and admirably formed all animals to live in different climates and elements; or was it not rather a beneficent Creator who clothed one animal with wool, and another with fur, to resist the biting blasts of winter; who furnished birds with a prow-like breast, powerful wings, and a tail for a rudder, that they might soar aloft among the clouds; who filled their hollow bones with air; and, by several ingenious contrivances, enabled them to float through the azure sky?

These are not a thousandth part of the examples of wisdom, beneficence, and foresight displayed above, below, and around us. Ascend into the aerial regions, and you behold these attributes exhibited in the creations of, and consequently forming characteristics which belong to, the Creator. Descend into the bowels of the earth, and you will find these attributes written on the rocks and wrecks of bygone ages lying around you.—Look on every side—examine deeply—investigate closely—and you will see your own ignorance, and be led to “gaze, to wonder, and adore.”

That the earth is the temporary abode of man, is evident from the numerous and rapid changes which are continually occurring in every part of it. Scarcely has spring been ushered in with the songs of the feathered tribes, and assumed its green covering, when summer appears, and quickly vanishes away, to make way for autumn, distinguished by its sear and yellow features; and this is almost immediately replaced by dreary winter with its snow-clad hills and valleys. Scarcely has man reached manhood when his strength begins to fail, and he descends the hill of life, and perishes like a tale that it told. Generation succeeds generation—family succeeds family—and kingdom succeeds kingdom with marked rapidity. Nothing but change is to be seen in all quarters. Ought not we also, therefore, be prepared for such changes when we see them occurring so frequently? Can we expect that our condition will remain unaltered, when we behold all men and things yielding to time?

Happily, Science “no longer struts about on stilts,”* but submissively acknowledges the sway of that religion which exalts man to such a high degree of moral and intellectual excellence. By such submission, science has achieved its noblest triumphs—the ocean has been subdued under man's dominion—the earth hath been ransacked, and the remains of wonderful animals and plants, and additional proofs of the vast and comprehensive wisdom and beneficence of the Almighty, have been brought to light—the mechanism of the heavens has been laid bare—millions of new worlds have been discovered—and a part of the riches of Divine power has thus been unfolded. The animal and vegetable kingdoms have been investigated, and there also have been traced the marks of Divine presence and superintendence—and even the depths of the ocean have not escaped the observation of the Christian professor of science; for even there it has been discovered that fishes have undergone variations of structure, to adapt them to their

* Rev. Mr. Cooney.