

startled at the prospect of fields of a scarlet hue, the result of a wide expanse of microscopic vegetation.\*

But whatever charms the naturalist may find in the occupations in which he is engaged, and however wide may be the field of his exertions, they still are insufficient to satisfy the more enlarged curiosity of a philosophic mind. The passive emotion of astonishment, in which inferior intellects are content to rest, serves but to awaken, in him who has learned to think, a desire of farther knowledge. Filled with an ardent spirit of inquiry, he cannot but be impatient under the feeling that, while Nature has placed before his eyes this splendid spectacle of animation, she has thrown a dense veil over the interior machinery of life, and has concealed from his view the springs by which she sets it in motion. With the hope of discovering her proceedings, he hastens to explore the several parts which compose the organized fabric, to examine in minute detail the anatomy of its structure, and to ascertain the nature of the several actions that take place within it. But overwhelmed by the multiplicity of objects, and lost amidst the complication of phenomena, he soon becomes dismayed by the magnitude and arduous nature of the investigation. He finds that his labours will be of no avail, unless, previously to any attempt at theory, he takes a careful and accurate account of all the circumstances attending the history and conditions of life, from the dawn of its existence to its appointed close. On tracing living beings to their origin, he learns that every individual vegetable and animal takes its rise from an atom of imperceptible minuteness, and gradually increases in bulk by successive accretions of new matter, derived from foreign sources, and by some refined, but unknown process, transmuted into its own substance. Then,

\* The red snow discovered in Baffin's Bay on the 17th of August, 1818, during the Northern Expedition, under the command of Captain Ross, was found to owe its colour to minute fungi, or microscopic mushrooms, which vegetate on the surface of snow, as their natural abode. See *Phil. Trans.* for 1820, p. 165.