

considers all these things; and who will dare to assert, that the Being who made them all is not benevolent?

5. *Of the Laws of Absorption, Radiation, and Reflection of Heat and Light.*—These laws as applied to the earth generally, are at present but very imperfectly understood. The following remarks will serve to convey some idea of the little we know on the subject.

The reader will bear in mind what was formerly stated, that the absorbing power of bodies with respect to heat, and perhaps light also, is *directly* as their radiating power, and *inversely* as their reflecting power. Such is the general opinion; and, as far as solar heat and light are concerned, this opinion appears to be well founded; but we shall see presently, that there are strong reasons for suspecting, that the radiating power does not always follow the same law, as the absorbing power. In the mean time, however, we shall proceed to state what has been advanced on these points.

Mr. Daniell has attempted to show, that the absorption, and radiation, of solar heat, increase as we proceed from the equator toward the poles. Thus, in a tropical climate, and under a vertical sun, the greatest extent of the difference between two thermometers, the one covered with black wool, and exposed to the direct rays