

equable distribution of electricity, accumulating it here, and reducing it there, but a restorative force exists, and the broad-faced lightning is but a demonstration that that force is active. The earth may rob the atmosphere, or the atmosphere may rob the earth, but it is only a means to produce an effect necessary to sustain the present terrestrial arrangements, and when this has been accomplished, the equilibrium is again established. The changes which are constantly happening, and the want of perpetuity that characterizes nearly all terrestrial phenomena, are the elements by which the Creator sustains the freshness and vigour of the world destined to support and delight man and the inferior animals under his control.

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## CHAPTER VII.

### PHENOMENA DEPENDANT ON TERRESTRIAL MAGNETISM.

HAVING described the natural phenomena which result from the agency of electricity, it may be well to make some allusion to those which depend on magnetism. Philosophers are as ignorant of the nature of the magnetic as they are of the electric agent; and they are as imperfectly acquainted with their influence upon and relations to each other. So far as observation has extended, there is no lack of evidence calculated to impress the inquirer with a belief that these causes are intimately connected, if they be not in fact identical. But, before we make any reference to the nature of the agency, it will be necessary to describe some of those effects by which its presence may always be determined.

The fundamental principle of magnetism, or the science which explains the phenomena resulting from an occult agent so named, is that iron and ferruginous bodies in general, in a particular state, have a directive power, one end pointing to a spot near the north pole of the earth, and the other to a corresponding point in the south. There seems, in fact, to be a peculiar affinity between the poles of the earth, or points near them, and the ends or poles of magnets. This attractive