

who believe that they can trace in nature the operation of motive and design as distinct from a mere necessity arising out of the nature of things and the so-called conservation of *vis viva*.

(12.) Let us take our globe as we find it—revolving on its axis in twenty-four hours; and carried round the sun (in an orbit oblique to its equator) in a year; which is divided into two somewhat unequal halves (if such an expression may be pardoned) from equinox to equinox by its unequal angular motion in a slightly elliptic orbit; thus giving rise to unequal summers and winters in the two hemispheres:—its surface very unequally divided between land and sea—the land mainly congregated upon one half of it, and that half principally belonging to the northern hemisphere; and so distributed as effectually to bar all free circulation of the ocean in the direction of the diurnal rotation (or round the equator), and allow but a restricted one in that at right angles to it (or across the poles): thus compelling whatever circulation does exist, to take place within three great basins or semi-land-locked areas, and a vast southern expanse into which all the three open; and within each of which a system of circulation is kept up by the action of the winds; its course being determined partly by the sinuosities of their shores, partly by the inequalities of their bottoms, and partly by the rotation of the earth itself.

(13.) We have, besides, to consider the globe as entirely and deeply covered by an atmosphere of mixed gases—highly elastic, very dilatable by heat, and of extreme mobility: expanding itself in virtue of its elas-