CHAPTER VI.

ON THE KINETIC OR MECHANICAL VIEW OF NATURE.

IT was a favourite idea with the philosophers of antiquity 1. The idea of that everything is in motion, that rest is to be found motion in nowhere in nature, and that the entire process of life and philosophy. sensation in particular is brought about by the communication and transference of minute movements of a purely mechanical kind. Out of the deep conviction that everything around us and in us is in a perpetual flux—a doctrine which is usually fathered upon Heraclitus of Ephesus 1—two distinct problems resulted, and occupied the thinkers of antiquity: the problem of explaining the apparent rest and permanency of many observable pheno-

ancient

1 The doctrine of Heraclitus (B.C. 500) is placed by Zeller ('Philosophie der Griechen,' vol. i.) in direct opposition to that of the Eleatic School (Parmenides, Zeno) and of Pythagoras. The Eleatics argued from the unity of all existence to the impossibility of the multiplicity and the change of things. Heraclitus sets out from the conception that everything is in continual motion and flow (κινείσθαι, εν κινήσει elvai). Our knowledge of Heraclitus is derived mainly from references in the writings of Plato and Aristotle. A very full account is given by Zeller, and by E. Pfleiderer ('Die Philosophie des Heraklit von Ephesus,' Berlin, 1886), who sums up the fundamental idea in the beautiful verses of Goethe (Gedichte. "Eins und Alles":-

"Und umzuschaffen das Geschaffne Damit sich's nicht zum Starren waffne, Wirkt ewiges, lebendiges Thun. Und was nicht war, nun will es werden, Zu reinen Sonnen, farbigen Erden. In keinem Falle darf es ruhn.

Es soll sich regen, schaffend handeln, Erst sich gestalten, dann verwandlen; Nur scheinbar steht's Momente still. Das Ewige regt sich fort in Allen: Denn Alles muss in Nichts zerfallen, Wenn es im Sein beharren will."