The Development of Life 47

"I think that this pyknotic theory of substance will prove more acceptable to every biologist who is convinced of the unity of nature than the kinetic theory which prevails in physics to-day" (p. 78).

In other words, he appeals to a presumed sentiment of biologists against the knowledge of the physicist in his own sphere—a strange attitude for a man of science. After this it is less surprising to find him ignoring the elementary axiom that "action and reaction are equal and opposite," i.e. that internal forces can have no motive power on a body as a whole, and making the grotesque assertion that matter is moved, not by external forces, but by internal likes and desires:—

"I must lay down the following theses, which are involved in Vogt's pyknotic theory, as indispensable for a truly monistic view of substance, and one that covers the whole field of organic and inorganic nature:—

"I. The two fundamental forms of substance, ponderable matter and ether, are not dead and only moved by extrinsic force, but they are endowed with sensation and will (though, naturally, of the lowest grade); they experience an inclina-