for which no teleological mechanism has been invented, still more are we baffled by the apparent "autonomy of the living cell," in consequence of which it is, *e.g.*, "able to select its food, retaining what is useful and rejecting what is harmful."[1] And what shall we say of the so-called "wandering cells, which are actually sent out by the organism in order to absorb in the alimentary canal food-stuffs, notably fat, returning with it into the blood, or to receive into themselves malignant bacteria, making them innocuous by a process of digestion?"[2] No mechanical physico-chemical explanation of this process is imaginable, and the word "selection," with which Darwin charmed away so many mysteries, has revealed new ones in their place.[3]

[1] See the very interesting and frequently quoted address by Prof. G. E. Rindfleisch (Würzburg, 1888), entitled 'Ärztliche Philosophie,' p. 13.

[2] Rindfleisch, *loc. cit.*, p. 15.

[3] In this connection it is interesting to refer to a discussion which was raised by the suggestive address of Prof. F. R. Japp, entitled, "Stereochemistry and Vitalism" ('Brit. Assoc. Report,' 1898, p. 813). It refers to the discovery by Pasteur of "chirality" in solutions of certain crystallised organic salts, on which I reported in vol. i. p. 450. "Pasteur regarded the formation of asymmetric organic compounds as the special prerogative of the living organism. Most of the substances of which the animal and vegetable tissues are built up—the proteids, cellulose—are asymmetric organic compounds." Now, in his experiments on fermentation Pasteur found that "the asymmetric living organism selected for its nutriment that particular asymmetric form" out of a mixture of two enantiomorphous compounds held in solution—"which suited its needs—and left the opposite form either wholly or, for the most part, untouched" (p. 817). Prof. Japp proceeds to consider the opinion then formed by Pasteur, "that compounds exhibiting optical activity have never been obtained without the intervention of life" (p. 818). This view, to which Pasteur adhered, and which he defended against eminent opponents, has been frequently challenged, and seemed definitely set aside by the explanation of Prof. Emil Fischer of Berlin, and by Jungfleisch's synthesis of racemic acid and its resolution into dextro- and lævo-tartaric acids. . . . "Consequently, the overwhelming marjority of chemists hold that the foregoing synthesis and separation of optically active compounds have been effected without the intervention of life, either directly