Another way of inquiry is to analyse the existing organic tissues still further by microscopic and chemical methods, in order to find out how they are built up. As the result of such inquiries we have a framework theory of protoplasm, a foam theory, a filament theory, a granular theory; and the attempt has been made to define living protoplasm as a colony of still smaller structural units termed "bioblasts." By this twofold method—by synthesis and by analysis—the biologist may attempt to approach the physiological unit, the seat and stronghold of the vital process.[1]

nitrogen entering into a cyanogen-like relation with the atoms of carbon, probably with the absorption of considerable heat." Cyanogen being a radicle possessing a great quantity of internal energy, the addition of it to the living molecule "introduces into the living matter energetic internal motion." The interest which attaches to the theory lies in this, that it allows us to form some conception how living matter originated. This problem is indentified with the problem, How does cyanogen arise? This we know is formed at an incandescent heat. "Accordingly, nothing is clearer than the possibility of the formation of cyanogen compounds when the earth was wholly or partially in a fiery or heated state. . . . If, now, we consider the immeasurably long time during which the cooling of the earth's surface dragged slowly along, cyanogen, and the compounds that contain cyanogen and hydrocarbon substances, had time and opportunity to indulge extensively their great tendency towards transformation, . . . and to pass over, with the aid of oxygen, and later of water and salts, into that self-destructive proteid, living matter. . . . The first proteid to arise was living matter, endowed in all its radicles with the property of vigorously attracting similar constituents, adding them chemically to its molecule, and thus growing *ad infinitum*." This theory is interesting, as it is, so far as I know, the only attempt to reconcile the existence of living matter with the fact of the high temperature which once existed on the earth.

[1] A description of these several theories on the structure of protoplasm, among which the micellar theory of Nägeli, the foam theory of Bütschli, and the "bioblasts" of Altmann, have been elaborately developed, will be found in Prof. O. Hertwig's work on 'The Cell' (Engl. transl., p. 19, &c.), as also in M. Yves Delage's great work, 'L'Hérédité' (pp. 299-310). Verworn (*loc. cit.*, p. 87) draws special attention to the "alveolar" or "foam" theory, which, built upon investigations of Prof. Quincke, has "completely clarified our ideas upon the real nature of the protoplasmic structures so much observed. . . . As a result of these recent investigations the following picture can be formed of the finer morphological structure of proto-