of Leibnitz), and assume that their movements (attraction and repulsion) are also connected with sensations (pleasure and displeasure) like the movements of the atoms of which they are composed. Without the assumption of some such lower (unconscious) form of sensation and will-movement in matter, the simplest chemical and physical processes remain unintelligible, for surely it is upon this supposition that the whole idea of *elective-relationship* or chemical affinity is based. The plastidules, however, differ from all other molecules by their capacity for reproduction or for memory. As Ewald Hering, the physiologist, pointed out, as early as 1870, in his admirable treatise, "On Memory as a Universal Function of Organic Matter," unless we assume some such (unconscious) memory, the most important phenomena of life, and above all those of propagation and inheritance, remain utterly unintelligible (p. 51). And in connection with this he thinks that we may term "Inheritance the memory of the plastidules, and Variability their power of apprehension" (p. 72).

III. The Theory of Idioplasm was established in 1884 by Carl Naegeli, in his comprehensive work, "Mechanicophysiological Theory of the Doctrine of Descent." This excellent botanist regards *idioplasm* (*i.e.* only that portion of plasma or plasson which, as germ, conveys all the inheritable qualities, in contrast to the purely nutritionplasma) as the essential factor of inheritance and as the bearer of the transmitted qualities. The minutest particles of it, which, owing to their peculiar arrangement, determine the nature of the idioplasm, Naegeli calls *Mi-cells*; they correspond in all essential points to my plastidules, and are conceived of as surrounded by water. The specific