

emanating from the same source." In making this statement he fails to see that precisely the same may be said of his own hypothesis, and that the very same words might apply to himself—"their fault, as in every other such philosophical doctrine, is, that they set up their suppositions as facts, make use of inappropriate scientific designations, and most unjustifiably assume them to be of scientific value" (p. 81). The same may be said of the metaphysical and last part of his work, entitled, "Forces of Forms in the Domain of Molecules," and more especially of his hypothesis of isagity (p. 807). No exact physicist could regard it as anything but a metaphysical speculation full of fancies. However, apart from his wholly unfounded theory of inheritance and many errors connected with it, Naegeli's work contains a number of valuable contributions to the theory of descent, but, unfortunately, not its "mechanico-physiological foundation." Especially excellent are his chapters on the Phylogenetic History of Development and Change of Generations (VII. and VIII.), on Morphology and Classification as Phylogenetic Sciences (IX.), and on Spontaneous Generation (II.). Many of the details there given coincide with those which I first developed in my "General Morphology" in 1866.

IV. *The Theory of Germ-plasma* was established in 1885 by August Weismann, in a treatise "On the Continuity of Germ-plasma as the Foundation for a Theory of Inheritance." This theory agrees with the two preceding ones in assuming that the direct cause of individual development, and the material basis of inheritance, must be looked for in the molecules of the plasmic germ-substance, either in the kernel or in the protoplasm of the propagating cells. But