

association of mucous granules constitutes a definitely-formed cytoblast, around which a vesicular membrane forms a closed cell," this cell being either produced from another pre-existing cell,* or being due to a cellular formation, which, as in the case of the fermentation-fungus, is concealed in the obscurity of some unknown chemical process.† But in a work like the present we can venture on no more than an allusion to the mysteries that involve the question of modes of origin; the geography of animal and vegetable organisms must limit itself to the consideration of germs already developed, of their habitation and transplantation, either by voluntary or involuntary migrations, their numerical relation, and their distribution over the surface of the earth.

The general picture of nature which I have endeavored to delineate would be incomplete if I did not venture to trace a few of the most marked features of the human race, considered with reference to physical gradations—to the geographical distribution of cotemporaneous types—to the influence exercised upon man by the forces of nature, and the reciprocal, although weaker action which he in his turn exercises on these natural forces. Dependent, although in a lesser degree than plants and animals, on the soil, and on the meteorological processes of the atmosphere with which he is surrounded—escaping more readily from the control of natural forces, by activity of mind and the advance of intellectual cultivation, no less than by his wonderful capacity of adapting himself to all climates—man every where becomes most essentially associated with terrestrial life. It is by these relations that the obscure and much-contested problem of the possibility of one common descent enters into the sphere embraced by a general physical cosmography. The investigation of this problem will impart a nobler, and, if I may so express myself, more purely human interest to the closing pages of this section of my work.

The vast domain of language, in whose varied structure we see mysteriously reflected the destinies of nations, is most intimately associated with the affinity of races; and what even slight differences of races may effect is strikingly manifested in the history of the Hellenic nations in the zenith of their intellectual cultivation. The most important questions of the civilization of mankind are connected with the ideas of races,

* Schleiden, *Grundzüge der wissenschaftlichen Botanik*, 1842, th. i., s. 192-197.

† [On cellular formation, see Henfrey's *Outlines of Structural and Physiological Botany*, op. cit., p. 16-22.]—Tr.