

inorganic particles. The yellow, soft, writing chalk of the north of Europe, is composed of about half its bulk of fossil bodies; but in the chalk of the south of Europe, the organic remains largely predominate. The inorganic matter of the chalk does not arise from a precipitate of lime previously held in solution in water, but from a disintegration of the assembled microscopic organisms, into more minute calcareous particles, which have been reunited by a crystalloid action, into regular, elliptical, granular laminæ. In like manner it is inferred, that the compact nodules of flint have originated from an aggregation of pulverulent particles of siliceous infusoria. Upon this hypothesis M. Ehrenberg explains the absence of flint nodules, and the abundance of siliceous infusoria, in the beds of marl that alternate with the chalk in the south of Europe; and their presence in the chalk of northern Europe, in which the infusorial marls are wanting. In other words, it is supposed, that in the former case the siliceous shells of the animalcules were deposited in layers or strata; and in the latter were aggregated together in nodular masses. This opinion should, however, be received with much reservation; for, although the animal origin of lime, flint, and iron, must be admitted to a great extent, yet the deposition of flint, and lime, from aqueous solutions is carried on at the present moment upon an enormous scale; and it cannot be doubted that the same process contributed largely to the formation of the