Chemical Geology, Sartorius von Walterhausen's Observations on the occurrence of minerals in Amygdaloid.

As a recent example of speculations concerning Botanical Palætiology, I may give Dr. Hooker's views of the probable history of the Flora of the Pacific.

In speculating upon this question, Dr. Hooker is led to the discussion of geological doctrines concerning the former continuity of tracts of land which are now separate, the elevation of low lands into mountain ranges in the course of ages, and the like. We have already seen, in the speculations of the late lamented Edward Forbes, (see Book xviii. chap. vi. of this History,) an example of a hypothesis propounded to account for the existing Flora of England: a hypothesis, namely, of a former Connexion of the West of the British Isles with Portugal, of the Alps of Scotland with those of Scandinavia, and of the plains of East Anglia with those of Holland. In like manner Dr. Hooker says (p. xxi.) that he was led to speculate on the possibility of the plants of the Southern Ocean being the remains of a Flora that had once spread over a larger and more continuous tract of land than now exists in the ocean; and that the peculiar Antarctic genera and species may be the vestiges of a Flora characterized by the predominance of plants which are now scattered throughout the Southern islands. He conceives this hypothesis to be greatly supported by the observations and reasonings of Mr. Darwin, tending to show that such risings and sinkings are in active progress over large portions of the continents and islands of the Southern hemisphere: and by the speculations of Sir C. Lyell respecting the influence of climate on the migrations of plants and animals, and the influence of geological changes upon climate.

In Zoology I may notice (following Mr. Owen)[2] recent discoveries of the remains of the animals which come nearest to man in their structure. At the time of Cuvier's death, in 1832, no evidence had been obtained of fossil Quadrumana; and he supposed that these, as well as Bimana, were of very recent introduction. Soon after, in the oldest (eocene) tertiary deposits of Suffolk, remains were found proving the existence of a monkey of the genus Macacus. In the Himalayan tertiaries were found petrified bones of a Semnopithecus; in Brazil, remains of an extinct platyrhine monkey of great size; and lastly, in the middle tertiary series of the South of France, was discovered a fragment of the jaw of the long-armed ape (*Hylobates*). But no fossil human

[2] *Brit. Asso.* 1854, p. 112.