http://www.geology.19thcenturyscience.org/books/1837-Phillips-Geology/README.htm

limestones, and gypsum are locally traceable: 40 per cent. of the shells belong to existing species.

Superga or lower tertiaries, consisting of fine green sand and marl, resting on conglomerate, full of boulders of primary rocks; unconformed beneath the subapennine marls, and containing only a small proportion of recent shells.

Geographical Extent, and Physical Geography. — The tertiary system of strata is the most recent of all the regular marine series of deposits: its relation to the existing oceans is therefore a highly interesting subject of inquiry; the more so, as, from the phenomena of alternating marine and freshwater deposits, conclusions have long since been presented by distinguished writers that particular tracts were alternately raised above and sunk below the sea. Cuvier and Brongniart proposed this hypothesis to explain the freshwater interpolations among the marine strata of Paris; and the notion has gradually become a popular part of geological speculation. The geographical relations of tertiary strata must be understood before venturing to adopt or to reject the hypothesis.

Before the deposition of the tertiary system, Europe had acquired many of its marking features: the Pyrenees, Brittany, parts of Wales and Scotland, Scandinavia, the Carpathians, Apennines, the mountains of Bohemia, the Vosges, Auvergne, and other tracts, were uplifted above the sea. But these appear to have stood up like unconnected islands, round which the ocean currents passed variously into wide basins like those of the Danube, Paris, &c.; or poured into insulated bays, like what may be termed the Gulf of Bohemia. The direction, force, and materials mixed with these currents, would be materially influenced by the submarine slopes from these insulated ridges, and by other undulations in the bed of the sea; the nature and abundance of the tertiary sediments, and the organic forms which are buried in them, would be greatly dependent on the force and origin of the currents; and thus we see a reason why