

detected in the tertiary and post-tertiary formations of the United States.*

Professors Unger † and Heer ‡ have advocated, on botanical grounds, the former existence of an Atlantic continent during some part of the tertiary period, as affording the only plausible explanation that can be imagined, of the analogy between the Miocene flora of Central Europe and the existing flora of Eastern America. Professor Oliver, on the other hand, after showing how many of the American types found fossil in Europe are common to Japan, inclines to the theory, first advanced by Dr. Asa Gray, that the migration of species, to which the community of types in the Eastern States of North America and the Miocene flora of Europe is due, took place when there was an overland communication from America to Eastern Asia between the fiftieth and sixtieth parallels of latitude, or south of Behring's Straits, following the direction of the Aleutian islands.§ By this course they may have made their way, at any epoch, Miocene, Pliocene, or Post-pliocene, antecedently to the Glacial epoch, to Amoorland, on the east coast of Northern Asia.

We have already seen (p. 158) that a large proportion of the living quadrupeds of Amoorland (34 out of 48) are specifically identical with those at present inhabiting the continent of Western Europe and the British Isles.

A monograph on the hippopotamus, bear, ox, stag, or any other genus of mammalia common in the European drift or caverns, might equally well illustrate the defective state of the materials at present at our command. We are rarely in possession of one perfect skeleton of any extinct species, still less of skeletons of both sexes, and of different ages.

* Proceedings of Academy of Natural Science, Philadelphia, for 1858, p. 89.

† Die versunkene Insel Atlantis.

‡ Flora tertiaria Helvetiæ.

§ Oliver. Lecture at the Royal Institution, March 7, 1862.