

sharper contrasts in the vegetation of different areas of this large region than there are in the Indian, the Australian, or any of the southern regions. The poverty in genera and species of the woody element of the European and West-American Floras and its extreme richness in the Floras of China and Japan and Eastern N. America are well known; but with very few exceptions the genera of the former Floras are represented in the latter. As Gray remarks:—"All round the world in our zone the woods contain Pines and Firs and Larches, Cypresses and Junipers, Oaks and Birches, Willows and Poplars, Maples and Ashes, and the like"\*. The distribution of many of the genera of herbaceous plants of the poorer Floras is even wider. Thus, in California, where there is an enormous development of peculiar genera of some orders, the Ranunculaceæ are represented by thirteen genera, whereof eleven are also British, and one other is European, and the solitary one remaining is anomalous and endemic, and has been referred to various natural orders. The Orchidaceæ, again, are represented by ten genera, eight of which are British. *Calypso borealis* is a native of Northern Europe and Siberia, and the monotypic *Aplectrum* ranges across the continent to the Atlantic, being the only one restricted to America.

The subregions of Wallace's palæarctic and nearctic zoological regions are perhaps less in harmony with botanical subregions than those of any other part of the world. His Mediterranean and Mandshurian subregions in the Old World, and his Californian, Rocky Mountains, and Eastern United States in the New World, are, however, substantially identical with botanical subregions. It does not come within the scope of this sketch to examine and discuss all these subregions, but a few remarks follow on the Chinese and North-Mexican Floras, which have recently been more fully investigated. In a lecture delivered before the Royal Institution of Great Britain in 1878, and afterwards published, Sir Joseph Hooker explains the main features of the distribution of the Flora of North America, and Professor C. S. Sargent has exhaustively described and elaborately illustrated cartographically the distribution of the arboreous element†; and Mr. C. J. Maximowicz has made a valuable contribution to the botanical geography of Central Asia in a paper which has already been referred to‡. In these and various other more generally known publications much new light is thrown on the nature, composition, and distribution of the vegetation of the countries under consideration.

With regard to Wallace's Mandshurian or Japanese subregion, as already hinted, a corresponding botanical subregion would be differently bounded; its northern limit barely reaching Peking and its western limit not extending so far, if at all, into

\* "Forest Geography and Archæology," Am. Journ. Sc. xvi. (1878) p. 183.

† 'Report on the Forests of North America (exclusive of Mexico).' Department of the Interior: Census Office, 1884.

‡ "Sur les Collections botaniques de la Mongolie et du Tibet septentrional (Tangout) recueillies récemment par des voyageurs Russes et conservées à St. Pétersbourg," Bulletin du Congrès International de Botanique et d'Horticulture à St. Pétersbourg, 1884, pp. 135-196.