

Dr. Hooker's remarks on the limits of species, their dispersion and variation, are striking and instructive. He is of opinion that species vary more, and are more widely diffused, than is usually supposed. Hence he conceives that the number of species has been needlessly and erroneously multiplied, by distinguishing the specimens which occur in different places, and vary in unessential features. He says that though, according to the lowest estimate of compilers, 100,000 is the commonly received number of known plants, he thinks that half that number is much nearer the truth. "This," he says, "may be well conceived, when it is notorious that nineteen species have been made of the Common Potatoe, and many more of *Solanum nigrum* alone. *Pteris aquilina* has given rise to numerous book species; *Vernonia cinerea* of India to fifteen at least. Many more plants are common to most countries than is supposed; I have found 60 New Zealand flowering plants and 9 Ferns to be European ones, besides inhabiting numerous intermediate countries. So long ago as 1814, Mr. Brown drew attention to the importance of such considerations, and gave a list of 150 European plants common to Australia."

As an example of the extent to which unessential differences may go, he says (p. xvii.) "The few remaining native Cedars of Lebanon may be abnormal states of the tree which was once spread over the whole of the Lebanon; for there are now growing in England varieties of it which have no existence in a wild state. Some of them closely resemble the Cedars of Atlas and of the Himalayas (*Deodar*;) and the absence of any valid botanical differences tends to prove that all, though generally supposed to be different species, are one."

Still the great majority of the species of plants in those Southern regions are peculiar. "There are upwards of 100 genera, subgenera, or other well marked groups of plants, entirely or nearly confined to New Zealand, Australia, and extra-tropical South America. They are represented by one or more species in two or more of those countries, and thus effect a botanical relationship or affinity between them all which every botanist appreciates."

In reference to the History of Botany, I have received corrections and remarks from Dr. Hooker, with which I am allowed to enrich my pages.

"P. 359. Note 3. *Nelumbium speciosum*, the Lotus of India. The *Nelumbium* does not float, but raises both leaf and flower several feet above the water: the *Nymphaea Lotus* has floating leaves. Both enter largely into the symbolism of the Hindoos, and are often confounded.