

Both Burchell and Melliss record the casting ashore of the seeds of various Leguminosæ (see Part II., p. 80) in St Helena, some of which occasionally germinate; yet, in consequence of the nature of the shore being unfavourable, they fail to establish themselves. Furthermore, not a single species of Leguminosæ is native in any of the islands of the southern Atlantic and Indian Oceans, from the Tristan da Cunha group to Amsterdam, the Macdonald group, and the outlying islands of New Zealand, if we except the problematical existence of *Sophora tetraptera* in the Chatham Islands (Mueller, Vegetation of the Chatham Islands, p. 13). In New Zealand itself native Leguminosæ are rare, and form a very insignificant part of the vegetation: only five or six genera exist, and about fifteen species, mostly belonging to the anomalous genus *Carmichaelia*. Passing on to Juan Fernandez, we there find only the widely dispersed and variable *Sophora tetraptera*; yet Leguminosæ abound in Tasmania and Chili (though absent from the Falklands and south of Magellan Strait), and introduced species flourish wherever strewn on the islands. This want of, or poverty in Leguminosæ, is less apparent in the Polynesian groups, the Galapagos, and the equatorial groups in the Indian Ocean. Nevertheless, endemic genera are unknown, and endemic species are few or altogether wanting. There are no endemic species either in Rodriguez or the Seychelles, and only one, *Acacia heterophylla*, is restricted to the Mauritius and Bourbon; and this is remarkable as being one of the very few phyllo-dineous Acacias outside of Australia, and also on account of being so closely allied to the endemic Sandwich Island *Acacia koa*, that Bentham (Trans. Linn. Soc. Lond., xxx. p. 482) doubts whether the two forms should be admitted to specific rank. The more remote Pacific Islands possess a few peculiar species associated with others of almost world-wide distribution; and eleven out of twenty-nine species found in the Sandwich Islands are regarded as endemic by Brigham; but this number is almost certainly too high. Thirty species of Leguminosæ are recorded from the Galapagos, being fully one-tenth of the number of flowering plants; yet only seven of them are peculiar to the islands.

The Gymnospermæ (Coniferæ, Cycadaceæ, and Gnetaceæ) seem absolutely unrepresented in the remoter Oceanic islands, as well as in many relatively near continents. Exceptions are: Bermudas, one species of *Juniperus*; Azores, one endemic species of *Juniperus*; Madeira and the Canaries, three species of *Ephedra*, two or three species of *Juniperus*, and one endemic *Pinus*; and in the southern hemisphere, Norfolk Island and New Caledonia possess Gymnosperms; while in New Zealand there are five genera and about a dozen species, forming a large proportion of the forests. The outlying insular groups, Chatham, Auckland, Campbell, &c., on the other hand, are destitute of Gymnosperms. In the Mauritius there is none, while in Madagascar there is one endemic species each of *Cycas* and *Podocarpus*.

Another group of plants very poorly represented in, or entirely absent from many oceanic islands, is the *Petaliferous Monocotyledons*. They are quite absent from Ascension, St Helena, South Trinidad, the Tristan da Cunha group, and all the islands