

bon, *Socotra*, St. Paul's, and Amsterdam Islands, *Prince Edward's*, the *Crozets*, and *Marion* groups. Of the E. African coast to the north of Natal no part is well explored, and the greater part is utterly unknown botanically.

4. PACIFIC OCEAN.—1. N. TEMPERATE.—Collections are wanted from N. Japan and the Kuriles and Aleutian Islands. 2. TROPICAL.—Considerable collections have been made only in the Sandwich Islands, Fiji Islands, Tahiti, and New Caledonia; from all of which more are much wanted. The Marquesas, New Hebrides, *Marshall's*, Solómon's, and *Caroline's*, together with all the smaller groups, are still less known. Of the American continent, the Californian Peninsula, Mexico, and the whole coast from Lima to Valparaiso, are but imperfectly known. Of the small islands off the coast, Juan Fernandez and the Galapagos alone have been partially botanized. 3. S. TEMPERATE.—Juan Fernandez, *Masafuera*, St. Felix, and Ambroise, *Pitcairn*, *Bounty*, *Antipodes*, *Emerald*, *Macquarie* Islands.

5. INDIAN ARCHIPELAGO.—Java alone is explored, and the Philippines very partially; collections are especially wanted from all the islands east of Java to the Louisiade and Solomon Archipelagos, especially Lombok and New Guinea. Siam, Cochin China, and the whole Chinese sea-board want exploration.

6. AUSTRALIA.—All the tropical coasts are very partially explored.

Photographs or careful drawings of tropical vegetation often convey interesting information, and should contain some reference to a scale of dimensions.

An inquiry of much importance, for which the present expedition affords a favorable opportunity, is that into the vitality of seeds exposed to the action of sea-water.

Observations should especially be made on the fruits and seeds of those plants which have become widely distributed throughout the tropical regions of the world, apparently without the intervention of man; but further observations on other plants of different natural orders may be of great value with reference to questions of geographical distribution.

The following instructions have been drawn up for the botanical collectors as to objects of special attention at particular places:

*Porto Rico*.—In collecting, distinguish the plants of the savannas from those of the mountains, which, if possible, should be ascended. The palms and tree-ferns are quite unknown; marine algæ also are wanted.