

appear to exhibit no tendency whatever to occur associated together. We have so accustomed ourselves, although erroneously, to regard Coniferæ as a northern form, that I experienced a feeling of surprise when, in ascending from the shores of the South Pacific toward Chilpansingo and the elevated valleys of Mexico, between the *Venta de la Moxonera* and the *Alto de los Caxones*, 4000 feet above the level of the sea, I rode a whole day through a dense wood of *Pinus occidentalis*, where I observed that these trees, which are so similar to the Weymouth pine, were associated with fan palms\* (*Corypha dulcis*), swarming with brightly-colored parrots. South America has oaks, but not a single species of pine; and the first time that I again saw the familiar form of a fir-tree, it was thus associated with the strange appearance of the fan palm.† Christopher Columbus, in his first voyage of discovery, saw Coniferæ and palms growing together on the northeastern extremity of the island of Cuba, likewise within the tropics, and scarcely above the level of the sea. This acute observer, whom nothing escaped, mentions the fact in his journal as a remarkable circumstance, and his friend Anghiera, the secretary of Ferdinand the Catholic, remarks with astonishment "that *palmeta* and *pineta* are found associated together in the newly-discovered land." It is a matter of much importance to geology to compare the present distribution of plants over the earth's surface with that exhibited in the fossil floras of the primitive world. The temperate zone of the southern hemisphere, which is so rich in seas and islands, and where

\* This corypha is the *soyate* (in Aztec, *zoyatl*), or the *Palma dulce* of the natives. See Humboldt and Bonpland, *Synopsis Plant. Æquinoct. Orbis Novi*, t. i., p. 302. Professor Buschmann, who is profoundly acquainted with the American languages, remarks, that the *Palma soyate* is so named in Yepe's *Vocabulario de la Lengua Othomi*, and that the Aztec word *zoyatl* (Molina, *Vocabulario en Lengua Mexicana y Castellana*, p. 25) recurs in names of places, such as *Zoyatitlan* and *Zoyapanco*, near Chiapa.

† Near Baracoa and Cayos de Moya. See the Admiral's journal of the 25th and 27th of November, 1492, and Humboldt, *Examen Critique de l'Hist. de la Géographie du Nouveau Continent*, t. ii., p. 252, and t. iii., p. 23. Columbus, who invariably paid the most remarkable attention to all natural objects, was the first to observe the difference between *Podocarpus* and *Pinus*. "I find," said he, "en la tierra aspera del Cibao pinos que no llevan pinas (fir cones), pero portal orden compuestos por naturaleza, que (los frutos) parecen azeytunas del Axarafe de Sevilla." The great botanist, Richard, when he published his excellent Memoir on Cycadææ and Coniferæ, little imagined that before the time of L'Héritier, and even before the end of the fifteenth century, a navigator had separated *Podocarpus* from the Abietinæ.