

austral stars; geodesical measures, &c. Secondly, a treatise on the astronomical refractions in the torrid zone, considered as the effect of the decrement of caloric in the strata of the air; thirdly, the barometric measurement of the Cordillera of the Andes, of Mexico, of the province of Venezuela, of the kingdom of Quito, and of New Grenada; followed by geological observations, and containing the indication of four hundred and fifty-three heights, calculated according to the method of M. Laplace, and the new co-efficient of M. Ramond; fourthly, a table of near seven hundred geographical positions on the New Continent; two hundred and thirty-five of which have been determined by my own observations, according to the three co-ordinates of longitude, latitude, and height.

II. *Equinoctial plants collected in Mexico, in the island of Cuba, in the provinces of Caracas, Cumana, and Barcelona, on the Andes of New Grenada, Quito, and Peru, and on the banks of the Rio Negro, the Orinoco, and the River Amazon.* M. Bonpland has in this work given figures of more than forty new genera of plants of the torrid zone, classed according to their natural families. The methodical descriptions of the species are both in French and in Latin, and are accompanied by observations on the medicinal properties of the plants, their use in the arts, and the climate of the countries in which they are found.

III. *Monography of the Melastoma, Rhexia, and other genera of this order of plants,* comprising upwards of a hundred and fifty species of melastomaceæ, which we collected during the course of our expeditions, and which form one of the most beautiful ornaments of tropical vegetation. M. Bonpland has added the plants of the same family, which, among many other rich stores of natural history, M. Richard collected in his interesting expedition to the Antilles and French Guiana, and the descriptions of which he has communicated to us.

IV. *Essay on the geography of plants, accompanied by a physical table of the equinoctial regions, founded on measures taken from the tenth degree of northern to the tenth degree of southern latitude.* I have endeavoured to collect in one point of view the whole of the physical phenomena of that part of the New Continent comprised within the limits of the torrid zone from the level of the Pacific to the highest summit of the Andes; namely, the vegetation, the animals, the geological relations, the cultivation of the soil, the temperature of the air, the limit of perpetual snow, the chemical constitution of the atmosphere, its electrical intensity, its barometrical pressure, the decrement of gravitation, the intensity of the azure colour of the sky, the diminution of light during its passage through the successive strata of the air, the horizontal refractions, and the heat of boiling water at different heights. Fourteen scales, disposed side by side with a