which the dynasty of Ming ruled. I repeat here (see Cosmos, vol. i., p. 99), that while from the middle of the third to the end of the fourteenth century it was necessary to calculate comets exclusively from the Chinese observations, the calculation of Halley's Comet, on its appearance in the year 1456, was the first calculation which was made from altogether European observations, those of Regiomontanus. These latter were again followed by the very accurate observations of Apianus at Ingoldstadt, upon the occasion of the reappearance of Halley's Comet in August of the year 1531. In the interval (May, 1500) appeared a magnificently brilliant comet,\* rendered famous by African and Brazilian travels of discovery, which was called in Italy Signor Astone, the great Asta. Laugiert has detected, by similarity of the elements in the Chinese observations, a seventh appearance of Halley's Comet (that of 1378); as well as that the third comet of 1840, discovered by Galle,<sup>‡</sup> on the 6th of March, appears to be identical with that of 1097. The Mexicans also connected events in their records with comets and other observations of the heavens. The Comet of 1490, which I discovered in the Mexican manuscript of St. Tellier, and of which an engraving is inserted in my Monumens des Peuples indigènes de l'Amérique, I have found, singularly enough, to be mentioned as having been observed in December of that year only in the Chinese comet-register. The Mexicans had inserted it in their register twenty-eight years before the first appearance of Cortez upon the coasts of Vera Cruz (Chalchinhcuecan).

I have, in the Delineations of Nature (Cosmos, vol. i., p. 101), treated fully of the configuration, alterations of form,

\* This is the "evil-disposed" comet to which was ascribed the death of the celebrated Portuguese discoverer Bartholomæus Diaz, by shipwreck, as he was sailing to the Cape of Good Hope; Humboldt, *Ex amen Crit. de l'Hist. de la Géogr.*, tom. i., p. 296, and tom. v., p. 80 (Sousa, *Asia Portug.*, tom. i., p. i., cap. v., p. 45.)

† Laugier, in the Connaissance des Temps pour l'an 1846, p. 99. Compare also Edward Biot, Recherches sur les Anciennes Apparitions Chinoises de la Comète de Halley antérieures à l'année 1378, op. cit., p. 70-84.

<sup>‡</sup> Upon the comet discovered by Galle in March, 1840, see Schumacher, Astr. Nachr., bd. xviii., p. 188.

§ See my Vues des Cordillères (ed. in folio), pl. lv., fig. 8, p. 281, 282 The Mexicans had also a very correct view of the cause of a solar eclipse. The same Mexican manuscript, written at least a quarter of a century before the arrival of the Spaniards, represents the Sun as almost entirely covered by the Moon's disk, and with stars visible at the same time.