

star in Cassiopeia (November, 1572) led Tycho Brahe to compose his catalogue of the stars. According to an ingenious conjecture of Sir John Herschel,* the star referred to by Pliny may have been the new star which appeared in Scorpio in the month of July of the year 134 before our era (as we learn from the Chinese Annals of the reign of Wou-ti, of the Han dynasty). Its appearance occurred exactly six years before the epoch at which, according to Ideler's investigations, Hipparchus compiled his catalogue of the stars. Edward Biot, whose early death proved so great a loss to science, found a record of this celestial phenomenon in the celebrated collection of Ma-tuan-lin, which contains an account of all the comets and remarkable stars observed between the years B.C. 613 and A.D. 1222.

The tripartite didactic poem of Aratus,† to whom we are indebted for the only remnant of the works of Hipparchus that has come down to us, was composed about the period of Eratosthenes, Timocharis, and Aristyllus. The astronomical non-meteorological portion of the poem is based on the uranography of Eudoxus of Cnidos. The catalogue compiled by Hipparchus is unfortunately not extant; but, according to Ideler,‡ it probably constituted the principal part of his work, cited by Suidas, "On the arrangement of the region of the fixed stars and the celestial bodies," and contained 1080 determinations of position for the year B.C. 128. In Hipparchus's other Commentary on Aratus, the positions of the stars, which are determined more by equatorial armillæ than by the astrolabe, are referred to the equator by right ascension and declination; while in Ptolemy's catalogue of stars, which is supposed to have been entirely copied from that of Hipparchus, and which gives 1025 stars, together with five so-called nebulæ, they are referred by longitudes and latitudes

* *Outlines*, § 831; Edward Biot, *Sur les Etoiles Extraordinaires observées en Chine*, in the *Connaissance des temps pour 1846*.

† It is worthy of remark that Aratus was mentioned with approbation almost simultaneously by Ovid (*Amor.*, i., 15) and by the Apostle Paul at Athens, in an earnest discourse directed against the Epicureans and Stoics. Paul (*Acts*, ch. xvii., v. 28), although he does not mention Aratus by name, undoubtedly refers to a verse composed by him (*Phœn.*, v. 5) on the close communion of mortals with the Deity.

‡ Ideler, *Untersuchungen über den Ursprung der Sternnamen*, s. xxx.-xxxv. Baily, in the *Mem. of the Astron. Soc.*, vol. xiii., 1843, p. 12 and 15, also treats of the years according to our era, to which we must refer the observations of Aristyllus, as well as the catalogues of the stars compiled by Hipparchus (128. and not 140, B.C.) and by Ptolemy (138 A.D.).