

period of thirty-seven years. Throughout this examination I have kept in view the Chinese observations of *extraordinary* stars, most of which, according to the opinion of the most eminent astronomers, are deserving of our confidence. Why it is that of the new stars seen in Europe, that of Kepler in Ophiuchus (1604) is in all probability recorded in the records of Ma-tuan-lin, while that of Tycho in Cassiopeia (1572) is not noticed, I, for my part, am as little able to explain as I am to account for the fact that no mention was made in the sixteenth century, among European astronomers, of the great luminous phenomenon which was observed in China in February, 1578. The difference of longitude ( $114^\circ$ ) could only, in a few instances, account for their not being visible. Whoever has been engaged in such investigations, must be well aware that the want of record either of political events or natural phenomena, either upon the earth or in the heavens, is not invariably a proof of their never having taken place; and on comparing together the three different catalogues which are given in Ma-tuan-lin, we actually find comets (those, for instance, of 1385 and 1495) mentioned in one but omitted in the others.

Even the earlier astronomers (Tycho Brahe and Kepler), as well as the more modern (Sir John Herschel and Hind), have called attention to the fact that the great majority (four fifths, I make it) of all the new stars described both in Europe and China have appeared in the neighborhood of or within the Milky Way. If that which gives so mild and nebulous a light to the annular starry strata of the Milky Way is, as is more than probable, a mere aggregation of small telescopic stars, Tycho Brahe's hypothesis, which we have already mentioned, of the formation of new, suddenly-shining fixed stars, by the globular condensation of celestial vapor, falls at once to the ground. What the influence of gravitation may be among the crowded strata and clusters of stars, supposing them to revolve round certain central nuclei, is a question not to be here determined, and belongs to the mythical part of Astrognosy. Of the twenty-one new stars enumerated in the above list, five (those of 134, 393, 827, 1203, and 1584) appeared in Scorpio, three in Cassiopeia and Cepheus (945, 1264, 1572), and four in Ophiuchus (123, 1230, 1604, 1848). Once, however (1012), one was seen in Aries at a great distance from the Milky Way (the star seen by the monk of St. Gall). Kepler himself, who, however, considers as a new star that described by Fa-