

of Samos called the fixed stars) before the process could have been disturbed by means of which the less refrangible red rays had obtained the preponderance, through the abstraction or absorption of other complementary rays, either in the photosphere of the star itself, or in the moving cosmical clouds by which it is surrounded. It is to be wished that the epoch of the disappearance of the red color of Sirius had been recorded by a definite reference to the time, as this subject has excited a vivid interest in the minds of astronomers since the great advance made in modern optics. At the time of Tycho Brahe the light of Sirius was undoubtedly already white, for when the new star which appeared in Cassiopeia in 1572, was observed in the month of March, 1573, to change from its previous dazzling white color to a reddish hue, and again became white in January, 1574, the red appearance of the star was compared to the color of Mars and Aldebaran, but not to that of Sirius. M. Sédillot, or other philologists conversant with Arabic and Persian astronomy, may perhaps some day succeed in discovering evidence of the earlier color of Sirius, in the periods intervening from El-Batani (Albategnius) and El-Fergani (Alfraganus) to Abdurrahman Sufi and Ebn-Junis (that is, from 880 to 1007), and from Ebn-Junis to Nassir-Eddin and Ulugh Beg (from 1007 to 1437).

El-Fergani (properly Mohammed Ebn-Kethir El-Fergani), who conducted astronomical observations in the middle of the tenth century at Rakka (Aracte) on the Euphrates, indicates as red stars (*stellæ ruffæ* of the old Latin translation of 1590) Aldebaran, and, singularly enough,\* Capella, which is now yellow, and has scarcely a tinge of red, but he does not mention Sirius. If at this period Sirius had been no longer red, it would certainly be a striking fact that El-Fer

\* In *Muhamedis Alfragani Chronologica et Astronomica Elementa*, ed. Jacobus Christmannus, 1590, cap. 22, p. 97, we read, "Stella ruffa in Tauro Aldebaran; stella ruffa in Geminis quæ appellatur *Hajok*, hoc est Capra." *Alhajoc*, *Aijuk* are, however, the ordinary names for Capella Aurigæ, in the Arabic and Latin *Almagest*. Argelander justly observes, in reference to this subject, that Ptolemy, in the astrological work (*Τετραβιβλος σύνταξις*), the genuine character of which is testified by the style as well as by ancient evidence, has associated planets with stars according to similarity of color, and has thus connected *Martis stella*, *Quæ urit sicut congruit igneo ipsius coloris*, with Aurigæ stella or Capella. (Compare Ptol., *Quadripart. Construct.*, libri iv., Basil, 1551, p. 383.) Riccioli (*Almagestum Novum*, ed. 1650, tom. i., pars i. lib. 6, cap. 2, p. 394) also reckons Capella, together with Antares, Aldebaran, and Arcturus, among red stars.