agree with Delambre, in doubting or extenuating the claim of Albategnius to this discovery, on the ground of his not having expressly stated it.

In detecting this motion, the Arabian astronomers reasoned rightly from facts well observed: they were not always so fortunate. Arzachel, in the 11th century, found the apogee of the sun to be less advanced than Albategnius had found it, by some degrees; he inferred that it had receded in the intermediate time; but we now know, from an acquaintance with its real rate of moving, that the true inference would have been, that Albategnius, whose method was less trustworthy than that of Arzachel, had made an error to the amount of the difference thus arising. A curious, but utterly false hypothesis was founded on observations thus erroneously appreciated; namely, the *Trepidation of the fixed stars*. Arzachel conceived that a uniform Precession of the equinoctial points would not account for the apparent changes of position of the stars, and that for this purpose, it was necessary to conceive two circles of about eight degrees radius described round the equinoctial points of the immovable sphere, and to suppose the first points of Aries and Libra to describe the circumference of these circles in about 800 years. This would produce, at one time a progression, and at another a regression, of the apparent equinoxes, and would moreover change the latitude of the stars. Such a motion is entirely visionary; but the doctrine made a sect among astronomers, and was adopted in the first edition of the Alphonsine Tables, though afterwards rejected.

An important exception to the general unprogressive character of Arabian science has been pointed out recently by M. Sedillot.[45] It appears that Mohammed-Aboul Wefa-al-Bouzdjani, an Arabian astronomer of the tenth century, who resided at Cairo, and observed at Bagdad in 975, discovered a third inequality of the moon, in addition to the two expounded by Ptolemy, the Equation of the Centre, and the Evection. This third inequality, the *Variation*, is usually supposed to have been discovered by Tycho Brahe, six centuries later. It is an inequality of the moon's motion, in virtue of which she moves quickest when she is at new or full, and slowest at the first and third quarter; in consequence of this, from the first quarter to the full, she is behind her *mean* place; at the full, she does not differ from her mean place; from the full to the third quarter, she is before her true

[45] Sedillot, Nouvelles Rech. sur l'Hist. de l'Astron. chez les Arabes. *Nouveau Journal Asiatique.* 1836.