

The stream of the November asteroids has occasionally only been visible in a small section of the Earth. Thus, for instance, a very splendid *meteoric shower* was seen in England in the year 1837, while a most attentive and skillful observer at Braunsberg, in Prussia, only saw, on the same night, which was there uninterruptedly clear, a few sporadic shooting stars fall between seven o'clock in the evening and sunrise the next morning. Bessel* concluded from this "that a dense group of the bodies composing the great ring may have reached that part of the Earth in which England is situated, while the more eastern districts of the Earth might be passing at the time through a part of the meteoric ring proportionally less densely studded with bodies." If the hypothesis of a regular progression or oscillation of the nodes should acquire greater weight, special interest will be attached to the investigation of older observations. The Chinese annals, in which great falls of shooting stars, as well as the phenomena of comets, are recorded, go back beyond the age of Tyrtæus, or the second Messenian war. They give a description of two streams in the month of March, one of which is 687 years anterior to the Christian era. Edward Biot has observed that, among the fifty-two phenomena which he has collected from the Chinese annals, those that were of most frequent recurrence are recorded at periods nearly corresponding with the 20th and 22d of July, O.S., and might consequently be identical with the stream of St. Lawrence's day, taking into account that it has advanced since the epoch† indicated. If the fall of shooting stars of the 21st of October, 1366, O.S. (a notice of which was found by the younger Von Boguslawski, in Benessius de Horowic's *Chronicon Ecclesie Pragensis*), be identical with our November phenomenon, although the occurrence in the fourteenth century was seen in broad daylight, we find by the precession in 477 years that this system of meteors, or, rather, its common center of gravity, must de-

* From a letter to myself, dated Jan. 24th, 1838. The enormous swarm of falling stars in November, 1799, was almost exclusively seen in America, where it was witnessed from New Herrnhut in Greenland to the equator. The swarms of 1831 and 1832 were visible only in Europe, and those of 1833 and 1834 only in the United States of North America.

† Lettre de M. Edouard Biot à M. Quetelet, sur les anciennes apparitions d'Etoiles Filantes en Chine, in the *Bull. de l'Académie de Bruxelles*, 1843, t. x., No. 7, p. 8. On the notice from the *Chronicon Ecclesie Pragensis*, see the younger Boguslawski, in Poggend., *Annalen*, bd. xlvi., s. 612.