

proposed to give to Jupiter's satellites the names of *Sidera Brandenburgica*, while Galileo preferred the names *Sidera Cosmica* or *Medicea*, of which the latter found most approval at the court of Florence. This collective appellation did not satisfy the yearnings of flattery. Instead of designating the satellites by numbers, as we do at present, Marius had named them Io, Europa, Ganymede, and Callisto; but for these mythological designations Galileo's nomenclature substituted the family names of the ruling house of Medici—Catharina, Maria, Cosimo the elder, and Cosimo the younger.

The knowledge of Jupiter's satellite-system, and of the phases of Venus, has exercised the most marked influence on the establishment and general diffusion of the Copernican system. The little world of Jupiter (*Mundus Jovialis*) presented to the intellectual contemplation of men a perfect image of the large planetary and solar systems. It was recognized that the secondary planets obeyed the laws discovered by Kepler; and it was now first observed that the squares of their

di Brandeburgo. On the whole, however, Galileo continued well disposed toward the German astronomers. He writes, in March, 1611, "Gli ingegni singolari, che in gran numero fioriscono nell' Alemagna, mi hanno lungo tempo tenuto in desiderio di vederla" (*Opere*, t. ii., p. 44). It has always appeared very remarkable to me, that if Kepler, in a conversation with Marius, was playfully adduced as a sponsor for these mythological designations of Io and Callisto, there should be no mention of his countryman either in the Commentary published in Prague, in April, 1610, to the *Nuncius Siderius, nuper ad mortales a Galileo missus*, or in his letters to Galileo, or in those addressed to the Emperor Rudolph in the autumn of the same year; but that, on the contrary, Kepler should every where speak of "the glorious discovery of the Medicean stars by Galileo." In publishing his own observations on the satellites, from the 4th to the 9th of September, 1610, he gives to a little memoir which appeared at Frankfort in 1611, the title, "*Kepleri Narratio de observatis a se quatuor Jovis satellitibus erronibus quos Galileus Mathematicus Florentinus jure inventionis Medicea Sidera nuncupavit.*" A letter from Prague, October 25, 1610, addressed to Galileo, concludes with the words "neminem habes, quem metuas amulum." Compare Venturi, Part i., p. 100, 117, 139, 144, and 149. Misled by a mistake, and after a very careless examination of the valuable manuscripts preserved at Petworth, the seat of Lord Egremont, Baron von Zach asserted that the distinguished astronomer and Virginian traveler, Thomas Harriot, had discovered the satellites of Jupiter simultaneously with, or even earlier than Galileo. A more careful examination of Harriot's manuscripts, by Rigaud, has shown that his observations began, not on the 16th of January, but only on the 17th of October, 1610, nine months after Galileo and Marius. (Compare Zach, *Corr. Astron.*, vol. vii., p. 105. Rigaud, *Account of Harriot's Astron. Papers*, Oxf., 1833, p. 37; Brewster, *Martyrs of Science*, 1846, p. 32.) The earliest original observations of Jupiter's satellites made by Galileo and his pupil Renieri were only discovered two years ago.