

was distinctly visible to the naked eye, would have attracted attention sooner.*

The first *isolated* nebula which was observed and recognized by the telescope as wholly starless and as an object of special nature was the nebula near ν Andromedæ, which, like that last mentioned, is also visible to the naked eye. Simon Marius [Mayer], of Gunzenhausen, in Franconia, originally a musician, and subsequently court mathematician of one of the Margraves of Colmbach, the same person who saw the satellites of Jupiter nine days earlier than Galileo,† has also the merit of having given the first, and, indeed, a very accurate description of a nebula. In the preface to his *Mundus Jovialis*,‡ he relates that, “on the 15th of December, 1612, he observed a fixed object differing in appearance from any he had ever seen. It was situated near the 3d and northern star of Andromeda’s girdle; seen with the naked eye, it appeared to him to be a mere cloud, and by the aid of the telescope he could not discover any signs of a stellar nature, a

* Sir John Herschel, *Observations at the Cape*, § 132.

† *Op. cit.*, p. 357, 509 (note 43). Galileo, who endeavored to refer the difference in the days of discovery (29th of December, 1609, and 7th of January, 1610) to a difference in the calendar, maintained that he had seen the satellites of Jupiter one day earlier than Marius, and even allowed himself to be so far carried away by his indignation at “the falsehood of the heretical impostor of Gutzenhausen” (*bugia del impostore eretico Guntzenhusano*) as to declare his belief “that very probably the heretic, Simon Marius, never observed the Medicean planets” (“*che molto probabilmente il eretico, Simon Mario, non ha osservato giammai i Pianeti Medicei*”).—See *Opere di Galileo Galilei*, Padova, 1744, tom. ii., p. 235–237; and Nelli, *Vita e Commercio letterario di Galilei*, 1793, vol. i., p. 240–246. The “heretic” had nevertheless expressed himself very pacifically and modestly in reference to the extent of merit due to his discovery. “I simply affirm,” says Simon Marius, in the preface to the *Mundus Jovialis*, “*hæc sidera (Brandenburgica) a nullo mortalium mihi ulla ratione commonstrata, sed propria indagine sub ipissimum fere tempus, vel aliquanto citius quo Galilæus in Italia ea primum vidit, a me in Germania adinventata et observata fuisse. Merito igitur Galilæo tribuitur et manet laus primæ inventionis horum siderum apud Italos. An autem inter meos Germanos quispiam ante me ea invenerit et viderit, hactenus intelligere non potui.*” “I simply affirm that I was led to the discovery of these stars, not by any reasonings of others, but by the result of my own investigations, and that they were observed by me in Germany about the very same time, or a little sooner, than Galileo first saw them in Italy. To Galileo, among the Italians, is therefore due the merit of having first discovered these stars. But whether, among my own countrymen in Germany, any person before me has discovered and seen them, I have not as yet been able to ascertain.”

‡ *Mundus Jovialis, anno 1609, detectus ope perspicilli Belgici.* (Noribergæ, 1614.)