

tinguished as σ^1 and σ^2 . The first is somewhat the brightest, and O is not lettered in Flamsteed (No. 22), but he puts its magnitude as 5. In Hercules, Flamsteed registers σ and O of the 4th and 5th magnitudes respectively. The latter is really below the sixth. It is not included in the useful list of naked-eye stars in the third volume of Mr. Chambers's 'Handbook,' and the same remark applies to the star of that name in Leo. It will be noticed how comparatively close σ and O are in Perseus, whereas in Taurus they are at almost opposite ends of the constellation, which led to the difficulty mentioned at the beginning of this letter. Both in Perseus and Taurus O is about a magnitude fainter than σ . But in Virgo the difference is even greater, σ being of the 4.3 magnitude and O only about the sixth, and not included in Mr. Chambers's list. As in the case of Taurus, σ is near the western part of the constellation, O quite in the eastern.

Yours faithfully,

Blackheath, 1908, Dec. 10.

W. T. LYNN.

[It is to be noted that the O (English) here referred to is the small type letter, but is printed here as a capital to avoid confusion.—EDS]

Simon Mayr.

GENTLEMEN,—

As the late Prof. Oudemans succeeded in rescuing the memory of the above from the obloquy under which it so long rested, that he was a fraudulent pretender to the independent discovery of the four large satellites of Jupiter, perhaps a few particulars with regard to him may be of interest.

Born at Gunzenhausen, in Bavaria, in the year 1570, he studied astronomy at Prague under Tycho Brahé and Kepler a little before the death of the former in 1601, and afterwards went through a medical course of study at Padua. His first publication is a tract entitled 'Hypothesis de systemate Mundi,' which appeared in 1596, but is probably very rare; at any rate I have not succeeded in meeting with a copy. Later tractates issued from his pen on storms, weather prognostics, and natural phenomena; he also published at Nürnberg in 1610 an edition of the first six books of Euclid. In 1604 he was appointed Court Astronomer to Georg Friedrich, Margrave of Brandenburg-Anspach, Franconia, and soon after the invention of the telescope in 1609 applied one to the observation of the heavenly bodies. He first mentioned his discovery of four bodies revolving round Jupiter (the designation satellites was afterwards proposed by Kepler and generally adopted) in a publication edited by him, called 'Frankischer Kalender oder Practica,' in 1612, but the full description is given in his 'Mundus Jovialis, anno MDCIX. detectus ope perspicilli Belgici,' which appeared at Nürnberg in 1614. (The author's name is here in the Latin form, "Marius," more familiar perhaps to us than the native Mayr.) He here describes, in the "Præfatio

ad candidum lectorem," how, having obtained one of these "perspicilla" (formed by the combination of a concave and convex lens) in the summer of 1609, he proceeded to study the stars with it. About the end of November (which would correspond to early in December by New Style), he says, "Tunc primum aspexi Jovem, qui versabatur in opposito Solis, et deprehendi stellulas exiguas, modo post, modo ante Jovem, in linea recta cum Jove." At first he thought these were some of the telescopic stars in the planet's path; but when Jupiter retrograded in December and these stars still followed him, he gradually came to the conviction that they were moving round him as the large planets do round the Sun [it will be noticed how convinced a Copernican Mayr was then], and began to take more accurate observations of their successive places, beginning on December 29 (= January 8, 1910, N.S.), "quando tres ejusmodi stellæ in linea recta à Jove versus occasum cernebantur." Shortly after this he obtained two other excellent Belgic (convex and concave) lenses, and fitted them to a wooden tube, thus forming a telescope superior to the former. Thus he discovered also a fourth attendant to the planet. "Ab hoc itaque tempore usque in 12 Janua. diligentius attendebam his Jovialibus sideribus, et deprehendi aliquo modo quatuor ejusmodi corpora esse, quæ Jovem sua circuitione spectarent." The 12th of January O.S. corresponds to the 22nd N.S., so that Mayr was about a week after Galileo in detecting the fourth satellite, but preceded him by two or three days in the satisfactory recognition of the revolutions of the other three.

In the second part of the 'Mundus Jovialis,' Mayr proceeds to give tables of the motions of the satellites, and in this he has the undoubted priority.

Mayr's last tractate was on the great comet of 1618, which he observed first on the 24th of November O.S. (= December 4 N.S.), and his account appeared (in German) at Nürnberg in 1619. He died at Anspach on the 26th of December, 1624.

I am greatly obliged to Mr. Hardcastle for calling my attention to this matter again, and for pointing out an error in my letter in the *Observatory*, vol. xxvi. p. 255, where it is stated that Galileo detected all the four satellites on the 7th of January, 1610. He saw indeed three that night, and on the following that their positions with respect to Jupiter had changed; but it was not till the 10th (the 9th was cloudy) that he suspected the true cause, which he felt sure of on the 11th (noticing also the fourth). Mayr had already satisfied himself of this on the 8th.

Before closing it may be well to refer to his first telescopic observation of the great nebula in Andromeda, which he described in 1612 as resembling a candle shining through horn. Probably Sir John Herschel's mention and approval of this description furnished many of us with our first knowledge of Mayr's name; it certainly did that of

Yours faithfully,

W. T. LYNN.

Blackheath, 1909, Aug. 2.