This letter is dated 1536, and implies that the work of Copernicus was then written, and known to persons who studied astronomy. Delambre says that Achilles Gassarus of Lindau, in a letter dated 1540, sends to his friend George Vogelin of Constance, the book De Revolutionibus. But Mr. De Morgan has pointed out that the printed work which Gassarus sent to Vogelin was the Narratio by Rheticus of Feldkirch, a eulogium of Copernicus and his system prefixed to the second edition of the De Revolutionibus, which appeared in 1566. In this Narration, Rheticus speaks of the work of Copernicus as a Palingenesia, or New Birth of astronomy. Rheticus, it appears, had gone to Copernicus for the purpose of getting knowledge about triangles and trigonometrical tables, and had had his attention called to the heliocentric theory, of which he became an ardent admirer. He speaks of his "Preceptor" with strong admiration, as we have seen. "He appears to me," says he, "more to resemble Ptolemy than any other astronomers." This, it must be recollected, was selecting the highest known subject of comparison.

## CHAPTER III.

Sequel to Copernicus.—The Reception and Development of the Copernican Theory.

Sect. 1.—First Reception of the Copernican Theory.

THE theories of Copernicus made their way among astronomers, in the manner in which true astronomical theories always obtain the assent of competent judges. They led to the construction of Tables of the motion of the sun, moon, and planets, as the theories of Hipparchus and Ptolemy had done; and the verification of the doctrines was to be looked for, from the agreement of these Tables with observation, through a sufficient course of time. The work De Revolutionibus contains such Tables. In 1551 Reinhold improved and republished Tables founded on the principles of Copernicus. "We owe," he says in his preface, "great obligations to Copernicus, both for his laborious

<sup>&</sup>lt;sup>9</sup> Ast. Mod. i. p. 188. I owe this and many other corrections to the personal kindness of Mr. De Morgan.