NEPTUNE: Galle, at Berlin, September 23, 1846.
The first satellite of Neptune: W. Lassell, at Starfield, near Liverpool, November, 1846; Bond, at Cambridge (U. S.).
HEBE*: Hencke, at Dresden, July 1, 1847.
IRIS*: Hind, in London, August 13, 1847.
FLORA*: Hind, in London, October 18, 1847.
METIS*: Graham, at Markree Castle, April 25, 1848.
The seventh satellite of Saturn (Hyperion): Bond, at Cambridge (U. S.), September, 16–19; Lassell, at Liverpool, September 19–20, 1848.
HYGEIA*: De Gasparis, at Naples, April 12, 1849.
PARTHENOPE*: De Gasparis, at Naples, May 11, 1850.
The second satellite of Neptune: Lassell, at Liverpool, August 14, 1850.
VICTORIA*: Hind, in London, September 13, 1850.
EGERIA*: De Gasparis, at Naples, November 2, 1850.
IRENE*: Hind, in London, May 19, 1851; and De Gasparis, at Naples, May 23, 1851.

In this chronological summary* the principal planets are distinguished from the secondary planets or satellites by a different type. Some bodies are included in the class of principal planets, which form a peculiar and very extended group, forming, as it were, a ring of 132 millions of geographical miles, situated between Mars and Jupiter, and are generally called small planets, as well as telescopic planets, co-planets, asteroids, or planetoids. Of these, four were discovered in the first seven years of this century, and ten during the last six years; which latter circumstance is to be attributed less to the perfection of the telescopes, than the industry and dexterity of the investigators, and especially the improved charts enlarged by additions of fixed stars of the ninth and tenth magnitudes. It is now more easy to distinguish between

* In the history of the discoveries, it is necessary to distinguish between the epoch at which the discovery was made, and the time of its first announcement. In consequence of a neglect of this distinction, dissimilar and erroneous dates have been introduced into astronomical manuals. So, for example, Huygens discovered the sixth satellite of Saturn (Titan) on March 25, 1655 (*Huygenii Opera varia*, 1724, p. 523), and did not announce it until March 5, 1656) *Systema Saturnium*, 1659, p. 2). Huygens, who devoted himself uninterruptedly from March, 1655, to the study of Saturn, had already obtained the full and indubitable view of the open ring on December 17, 1657 (*Systema Saturnium*, p. 21), but did not publish his scientific explanation of all the phenomena until the year 1659. (Galileo had thought that he saw, on each side of the planet, only two projecting circular disks.)