heliocentric theory, in other ways than by throwing light upon its physical principles. I speak of the new views of the heavens which the Telescope gave; the visible inequalities of the moon's surface; the moon-like phases of the planet Venus; the discovery of the Satellites of Jupiter, and of the Ring of Saturn. These discoveries excited at the time the strongest interest; both from the novelty and beauty of the objects they presented to the sense; from the way in which they seemed to gratify man's curiosity with regard to the remote parts of the universe; and also from that of which we have here to speak, their bearing upon the conflict of the old and the new philosophy, the heliocentric and geocentric theories. It may be true, as Lagrange and Montucla say, that the laws which Galileo discovered in Mechanics implied a profounder genius than the novelties he detected in the sky: but the latter naturally attracted the greater share of the attention of the world, and were matter of keener discussion.

It is not to our purpose to speak here of the details and of the occasion of the invention of the Telescope; it is well known that Galileo constructed his about 1609, and proceeded immediately to apply it to the heavens. The discovery of the Satellites of Jupiter was almost immediately the reward of his activity; and these were announced in his *Nuncius Sidereus*, published at Venice in 1610. The title of this work will best convey an idea of the claim it made to public notice: "The *Sidereal Messenger*, announcing great and very wonderful spectacles, and offering them to the consideration of every one, but especially of philosophers and astronomers; which have been observed by *Galileo Galilei*, &c., &c., by the assistance of a perspective glass lately invented by him; namely, in the face of the moon, in innumerable fixed stars in the milky-way, in nebulous stars, but especially in four planets which revolve round Jupiter at different intervals and periods with a wonderful celerity; which, hitherto not known to any one, the author has recently been the first to detect, and has decreed to call the *Medicean stars*."

The interest this discovery excited was intense: and men were at this period so little habituated to accommodate their convictions on matters of science to newly observed facts, that several of the "paper-philosophers," as Galileo termed them, appear to have thought they could get rid of these new objects by writing books against them. The effect which the discovery had upon the reception of the Copernican system was immediately very considerable. It showed that the real universe was very different from that which ancient philosophers had imagined,