bands are visible at both sides of the equator, and a number of smaller streaks run parallel to them. An elliptical red spot can also be seen. From these observations it would appear that this planet is encircled by a mantle of cloud or by floating layers of vapour, through which the still incandescent nucleus shows itself as a red spot. Saturn displays a surface similar to that of Jupiter; its remarkable ring was explained by Kant as a vaporous mass composed of infinitely fine particles. The two outermost planets are too remote from the Earth to permit of detailed telescopic examination.

As regards the spectra of the planets, Fraunhofer had determined their agreement with the sun's spectrum, and in more recent years the spectroscope has shown that for the most part the planets only reflect the sun's rays.

If one may venture to draw conclusions from these observations, Mars with its thin atmosphere may probably be regarded as the planet most akin to the Earth. Mars, and possibly Venus, with its thick cloud-mantle, are the only planets upon which living creatures could be supposed to exist. Life must be impossible on Mercury on account of its proximity to the sun; Jupiter and Saturn radiate light of their own to a certain degree, and are probably still in an incandescent state. The spectra of Uranus and Neptune would seem to indicate a condition of incomplete consolidation, and the low density of these planets is an additional fact in favour of this hypothesis.

The Moon.—The moon is the heavenly body which has been examined by astronomers in greatest detail. This has been rendered possible by its relatively small distance from the earth, the absence of water or clouds, as well as by the absence or very slight development of an atmosphere on the side of the moon which is exposed to us. Although classical literature contains scattered observations regarding the moon's surface, the cartography of the moon was not attempted until the telescope came into use. Then Galilei and other astronomers of the seventeenth century made sketches of the moon's surface. In the middle of the eighteenth century Professor Tobias Mayer projected a topographical map of the moon on the basis of measurements, the precision of which far surpassed previous attempts. In the earlier part of this century several astronomers published maps and reliefs of the