http://www.geology.19thcenturyscience.org/books/1901-Zittel-HistGeol/README.htm

In comparison with the Earth, the relative density of the planets is as follows :—

Sun	0.25	Jupiter	0.24
Mercury	1.12	Saturn	0.13
Venus	1.03	Uranus	0.17
Earth	1.00	Neptune	0.16
Mars	0.70		

The inner planets are therefore considerably heavier and more firmly consolidated than the outer.

Great advances have been made in our knowledge of the physical constitution of the planets by means of improved telescopic methods and the construction of the modern large telescope. Mars has always been an interesting object of astronomical observation. As early as 1659, Huygens observed white spots at both poles, and the elder Herschel in 1781 was able to draw a sketch of the surface of Mars, which was afterwards improved by Hieronymus Schröter on the basis of researches conducted between 1786 and 1803. Beer and Mädler distinguished pale, white, and yellowish-red spots from dark greenish-blue spots, and regarded the former as land masses, the latter as seas. Maps of Mars were published by several other astronomers. The Milan astronomer, Schiaparelli, published in 1878 a work which added much to our knowledge of Mars. The dark streaks crossing the light spots in straight or in bent lines, opening into the dark, iron-grey seas, are regarded by Schiaparelli as canals, and are mapped with hitherto unsurpassed precision, while he confirms the observation that mountain-chains and solitary mountains are quite absent.

The telescopic examination of the rest of the planets has so far brought less satisfactory results. The small planet Venus, next in position to the Earth, seems to be surrounded by a dense, cloudy atmosphere, which obscures the view of the actual surface of the planet; at the same time recent observations have demonstrated round or elliptical spots of light colour (perhaps continents dimly visible through the atmosphere), and these are separated from one another by dark ribbon-like streaks.

Keeler in 1889, by the use of the famous refractor of the Lick Observatory, obtained the first information about the constitution of Jupiter. With this instrument two reddish