Planets.	Periods of sidereal Revolutions.	Rotation.
Mercury	87d·96928	
Venus	224·70078	d. h. m. s.
Earth	365·25637	0 23 56 4
Mars	686·97964	1 0 37 20
Jupiter	4332·58480	0 9 55 27
Saturn	10759·21981	0 10 29 17
Uranus	30686·82051	
Neptune	60126·70000	

In another more perspicuous form the two periods of revolution are:

Mercury	87d.	23h.	15m.	47s.
Venus	224	16	49	7
Earth	365	6	9	10 ·7496:

whence it follows that the period of the tropical revolution, or the length of the solar year, is 365d·24222, or 365d. 5h. 48m. 47″·8091; the length of the solar year is shortened 0″·595 in 100 years on account of the precession of the equinoxes:

Mars	1 year,	321d.	17h.	30m.	41s.
Jupiter	11 years,	314	20	2	7
Saturn	29 years,	166	23	16	32
Uranus	84 years,	5	19	41	36
Neptune	164 years,	225	17	0	0

The rotation is most rapid in the case of the exterior planets, which have, at the same time, a longer period of revolution; slower in the case of the smaller interior planets, which are nearer to the Sun. The periods of revolution of the asteroids between Mars and Jupiter are very various, and will be spoken of in the enumeration of the individual planets. It is therefore sufficient, in this place, to give a comparative result, and to observe that among the small planets Hygeia has the longest, and Flora the shortest period of revolution.

8. *Inclination of the Planetary Orbits and Axes of Rotation.*—Next to the masses of the planets, the inclination and eccentricity of their orbits are among the most important elements upon which the disturbances depend. The comparison of these, in the order of succession of the interior, small intermediate and exterior planets (from Mercury to Mars, from Flora to Hygeia, from Jupiter to Neptune), presents manifold similarities and contrasts, which lead to considerations as to the formation of these cosmical bodies, and their changes dur