

concerning the particles of the four elements. He gave to each kind of particle one of the five regular solids, about which the geometrical speculations of himself and his pupils had been employed. The particles of fire were pyramids, because they are sharp, and tend upwards; those of earth are cubes, because they are stable, and fill space; the particles of air are octahedral, as most nearly resembling those of fire; those of water are the icositetrahedron, as most nearly spherical. The dodecahedron is the figure of the element of the heavens, and shows its influence in other things, as in the twelve signs of the zodiac. In such examples we see how loosely space and number are combined or confounded by these mystical visionaries.

These numerical dreams of ancient philosophers have been imitated by modern writers; for instance, by Peter Bungo and Kircher, who have written *De Mysteriis Numerorum*. Bungo treats of the mystical properties of each of the numbers in order, at great length. And such speculations have influenced astronomical theories. In the first edition of the *Alphonsine Tables*,¹³ the precession was represented by making the first point of Aries move, in a period of 7000 years, through a circle of which the radius was 18 degrees, while the circle moved round the ecliptic in 49,000 years; and these numbers, 7000 and 49,000, were chosen probably by Jewish calculators, or with reference to Jewish Sabbatarian notions.

3. *Astrology*.—Of all the forms which mysticism assumed, none was cultivated more assiduously than astrology. Although this art prevailed most universally and powerfully during the stationary period, its existence, even as a detailed technical system, goes back to a very early age. It probably had its origin in the East; it is universally ascribed to the Babylonians and Chaldeans; the name *Chaldean* was, at Rome, synonymous with *mathematicus*, or astrologer; and we read repeatedly that this class of persons were expelled from Italy by a decree of the senate, both during the times of the republic and of the empire.¹⁴ The recurrence of this act of legislation shows that it was not effectual: "It is a class of men," says Tacitus, "which, in our city, will always be prohibited, and will always exist." In Greece, it does not appear that the state showed any hostility to the professors of this art. They undertook, it would seem, then, as at a later period, to determine the course of a man's character and life from the configuration of the stars at the moment of his birth. We do not possess any of the

¹³ Montucla, i. 511.

¹⁴ Tacit. *Ann.* ii. 32. xii. 52. *Hist.* I. 22, II. 62.