accordingly, in the solar system, at one time void, at another occupied by matter. All that has been advanced with regard to the existence of a dark central body in the center of gravity of double stars, or at least of one originally dark, but faintly illuminated by the borrowed light of the planets which revolve round it, belongs to the ever-enlarging realm of mythical hypotheses.

It is a more important consideration, and one more deserving of thorough investigation, that, on the supposition of a revolving movement, not only of the whole of our planetary system which changes its place, but also for the proper motion of the fixed stars at their various distances, *the center of this revolving motion* must be 90° distant* from the point toward which our solar system is moving. In this connection of ideas, the position of stars possessing a *great* or *very small proper motion* becomes of considerable moment. Argelander has examined, with his usual caution and acuteness, the degree of probability with which we may seek for a general center of attraction for our starry stratum in the constellation of Perseus.† Mädler, rejecting the hypothesis of the existence of a central body preponderating in mass, as the universal center of gravity, seeks the center of gravity in the Pleiades, in the very center of this group, in or near‡ to the bright star η Tauri (Alcyone). The present is

* Argelander, *ibid.*, p. 42; Mädler, *Centralsonne*, s. 9, and *Astr.*, s. 403.

† Argelander, *ibid.*, p. 43; and in Schum., *Astr. Nachr.*, No. 566. Guided by no numerical investigations, but following the suggestions of fancy, Kant long ago fixed upon Sirius, and Lambert upon the nebula in the belt of Orion, as the central body of our starry stratum. (Struve, *Astr. Stell.*, p. 17, No. 19.)

‡ Mädler, *Astr.*, s. 380, 400, 407, and 414; in his *Centralsonne*, 1846, p. 44–47; in *Untersuchungen über die Fixstern-Systeme*, th. ii., s. 183–185. Alcyone is in R. A. 54° 30′, Decl. 23° 36′, for the year 1840. If Alcyone's parallax were really 0″·0065, its distance would be equal to 31½ million semi-diameters of the earth's orbit, and thus it would be fifty times further distant from us than the distance of the double star 61 Cygni, according to Bessel's earliest calculation. The light which comes to the earth from the sun in 8′ 18″·2, would in that case take 500 years to pass from Alcyone to the earth. The fancy of the Greeks delighted itself in wild visions of the height of falls. In Hesiod's *Theogonia*, v. 722–725, it is said, speaking of the fall of the Titans into Tartarus: "If a brazen anvil were to fall from heaven nine days and nine nights long, it would reach the earth on the tenth." This descent of the anvil in 777,600 seconds of time gives an equivalent in distance of 309,424 geographical miles (allowance being made, according to Galle's calculation, for the considerable diminution in the force of attraction at planetary distances), therefore 1½ times the distance of the moon from