The so-called solutions of the problems only reproduce the same facts in a disguised form, and the otherwise vigorous and concise style of the Stagirite degenerates in his explanations of meteorological or optical processes into a self-complacent diffuseness and a somewhat Hellenic verbosity. As Aristotle's inquiries were directed almost exclusively to motion, and seldom to differences in matter, we find the fundamental idea, that all telluric natural phenomena are to be ascribed to the impulse of the movement of the heavens the rotation of the celestial sphere — constantly recurring, fondly cherished and fostered,\* but never declared with absolute distinctness and certainty.

The impulse to which I refer indicates only the communication of motion as the cause of all terrestrial phenomena. Pantheistic views are excluded; the Godhead is considered as the highest "ordering unity, manifested in all parts of the universe, defining and determining the nature of all formations, and holding together all things as an absolute power.<sup>†</sup> The main idea and these teleological views are not applied to the subordinate processes of inorganic or elementary nature, but refer specially to the higher organizations<sup>‡</sup> of the animal and vegetable world. It is worthy of notice, that in these theories the Godhead is attended by a number of *astral spirits*, who (as if acquainted with perturbations and the dis-

explanations of meteorological processes; so also in the works De Generatione et Interitu, lib. ii., cap. 3, p. 330; in the Metcorologicis, lib. i., cap. 12, and lib. iii., cap. 3, p. 372, and in the Problemæ (lib. xiv., cap. 3, lib. viii., No. 9, p. 888, and lib. xiv., No. 3, p. 909), which are at all events based on Aristotelian principles. In the ancient polarity hypothesis, kar' avrimepioraoiv, similar conditions attract each other, and dissimilar ones (+ and -) repel each other in opposite directions. (Com pare Ideler, Metcorol. veterum Grac. et Rom., 1832, p. 10.) The opposite conditions, instead of being destroyed by combining together, rather increase the tension. The ψυχρον increases the θερμόν; as inversely "in the formation of hail, the surrounding heat makes the cold body still colder as the cloud sinks into warmer strata of air." Aristotle explains by his antiperistatic process and the polarity of heat, what modern physics have taught us to refer to conduction, radiation, evaporation, and changes in the capacity of heat. See the able observations of Paul Erman in the Abhandl. der Berliner Akademie auf das Jahr 1825, 8. 128.

\* "By the movement of the heavenly sphere, all that is unstable in natural bodies, and all terrestrial phenomena are produced."—Aristot., Meteor., i., 2, p. 339, and De Gener. et Corrupt., ii., 10, p. 336.

† Aristot., *De Cælo*, lib. i., c. 9, p. 279; lib. ii., c. 3, p. 286; lib. ii., c 13, p. 292, Bekker. (Compare Biese, bd. i., s. 352-1, 357.)

<sup>‡</sup> Aristot., Phys. Auscult., lib. ii., c. 8, p. 199; De Anima, lib. iii., c 12, p. 434; De Animal. Generat., lib. v., c. 1, p. 778, Bekker.