

aggregation. These include luminous dense bodies like the sun and stars; non-luminous dense bodies like the earth, the moon, the planets, and invisible partners of certain stars; nebulæ, comets, and meteorites. The larger of these bodies are separated by vast extents of space which contain only rare meteorites, perhaps minute traces of gaseous material, and cosmic dust. There can be little doubt that other types of bodies do not commonly occur in that portion of the universe which is open to astronomical investigation. Both the enormous collections of astronomical data which are now at hand and the beginnings of clear knowledge of cosmic processes justify this belief. Of what may lie beyond the visible stars we can, of course, know nothing.

The nature of the stars is revealed to us chiefly by study of their spectra, according to which they have been roughly classified, by Vogel¹ for example, quite simply into three principal types.

I. White stars in which there is marked evidence of the presence of hydrogen, or, in some instances, helium. The stars of this class undoubtedly are extremely hot, the helium stars probably especially so. Their atmospheres seem to be very dense and to

¹ See Arrhenius's "Lehrbuch," pp. 23-27.