

may be found exactly half way between the stars Lyræ, and is visible with a telescope of moderate power. It is small and well defined; so as in fact to have much more the appearance of a flat oval solid ring than of a Nebula. The axis of the ellipse are inversely in the proportion of four to five, and the opening occupies about half its diameter; its light is not quite uniform, but has a curdled appearance at the outer edge; the central opening is not entirely dark, but is filled up with a faint hazy light, uniformly spread over it like a fine gauze extended over a hoop. Planetary Nebulæ are very singular objects; they exactly resemble the Planets: round, or slightly oval discs, in some instances quite sharply terminated, in others a little hazy at the borders, and of a light very equal, or only a little mottled, which in some is as vivid as the light of the Planets.

Whatever be their nature, they must be of enormous magnitude; one is in the parallel of Aquarii—its apparent diameter 20 degrees; another in the Constellation Andromeda, presents a visible disc of 12 degrees, perfectly defined and round. Granting these Nebulæ to be from us as distant as the stars, their real dimensions would fill the whole orbit of Uranus. It is no less evident that if they are solid bodies of a solar nature, the intrinsic splendor of their surfaces must be infinitely inferior to that of the Sun's. A circular portion of the Sun's disc describing an angle of 20 degrees, would give a light equal to 100 full moons, while the objects in question are hardly discernible with the natural eye. The uniformity of their discs, and the want of apparent central condensation, would prove their light merely superficial, like a hollow spherical shell, but whether filled with solid or gaseous matter, or quite empty, it would be a waste of time to conjecture. The Nebulæ furnish a boundless field of speculation and conjecture. That the greater part of them consist of stars there can be no doubt, and in the interminable range of systems, and firmaments, which we can merely glance at, our minds are quite confused. On the other hand, if it be true, as it seems extremely probable, that a phosphorescent matter also exists, disseminated like a cloud or fog; now assuming capricious shapes, like clouds drifted by the winds, and now concentrating itself round some particular stars, what, we ask, is the nature and the destination of this nebulous matter? Is it absorbed by the stars, in whose vicinity it is found to furnish, by its condensation, their supply of light and heat, or is it progressing by the effect of its own gravity into masses, and in laying a foundation of new sidereal systems, or of insulated stars? It is much easier to propound such questions than to reply to them. Meanwhile, appeal to fact, by constant and diligent observation, is open to all; and as the double stars have yielded to this style of questioning, and disclosed a series of relations of the most intelli-