The nebula, in the midst of which lies the star η Argûs, which has become so celebrated for the alterations observed in the intensity of its light, covers a space of more than four sevenths of a square degree.* The nebula itself, which is divided into many unsymmetrical masses of unequal luminous intensity, nowhere exhibits the speckled, *granular* appearance which admits of the assumption of its resolvability. It incloses a singularly shaped, oval *vacancy*, covered with a faint glimmer of light. A fine delineation of the entire appearance, the result of two months' measurements, is given in Sir John Herschel's *Observations at the Cape*.† This observer determined no less than 1216 positions of stars, mostly from the fourteenth to the sixteenth magnitudes, in the nebula of η Argûs. These extend far beyond the nebula into the Milky Way, where they stand clearly forth on the deep black ground of the sky, and they are probably, therefore, unconnected with, and far removed from, the nebula itself. The whole contiguous portion of the Milky Way is, moreover, so rich in stars (not clusters), that by means of the telescopic star-gauges 3138 stars have been found for every mean square degree between R. A. 9h. 50m. and 11h. 34m. These numbers even increase to 5093 in the sweeps for R. A. 11h. 24m., that is to say, for one square degree of the firmament, a number of stars greater than those which are visible to the naked eye in the horizon of Paris or Alexandria, from the first to the sixth magnitude.‡

The nebula in Sagittarius, which is of considerable size, appears as if composed of four separate masses (R. Asc. 17h. 53m.; N. P. Decl. 114° 21′), one of which is again three-membered. All are interrupted by spots free from nebulous matter, and the whole was imperfectly observed by Messier.§

The nebulæ in Cygnus are several irregular masses, one of which forms a very narrow divided band, passing through the double star η Cygni. Mason was the first to recognize the connection of these masses, so widely different, by means of a singular cellular tissue.‖

The nebula in Vulpes was imperfectly seen by Messier (No

* *Cosmos*, vol. iii., p. 177–179.

† *Observ. at the Cape*, § 70–90, pl. ix. *Outlines*, § 887, pl. iv., fig. 2

‡ *Cosmos*, vol. iii., p. 107.

§ *Observ. at the Cape*, § 24, pl. i., fig. 1, No. 3721 of the Catalogue *Outlines*, § 888.

‖ The nebula in Cygnus, partly in R. Asc. 20h. 49m.; N. P. Decl. 58° 27′. (*Outlines*, § 891.) Compare Catalogue of 1833, No. 2092 pl. xi., fig. 34.