

The actual northern maximum lies, therefore, between 12h. and 13h., very near the north galactic pole. Beyond that point, between 15h. and 16h. toward Hercules, the diminution is so rapid that the number 130 is followed directly by 40.

The southern hemisphere presents not only a smaller number, but a far more regular distribution of nebulæ. Regions destitute of nebulæ here frequently alternate with sporadic nebulæ. An actual local accumulation, more dense, indeed, than the nebulous region of Virgo in the northern heavens, occurs only in the Great Magellanic Cloud, which alone contains as many as 300 nebulæ. The immediate polar regions of both hemispheres are poor in nebulæ, and to a distance of  $15^\circ$  the Southern Pole is still more so than the Northern, in the ratio of 4 to 7. The present North Pole exhibits a small nebula, only 5 minutes' distance from it, while a similar nebulous body, which Sir John Herschel has aptly named *Nebula polarissima Australis* (No. 3176 of his *Cape Catalogue*, R. A. 9h. 27m. 56s. ; N. P. D.  $179^\circ 34' 14''$ ), is situated at a distance of 25 minutes from the South Pole. This paucity of stars in the south polar region, and the absence of any polestar visible to the naked eye, were made the subject of bitter lamentation by Amerigo Vespucci and Vicente Yañez Pinzon, when, at the close of the fifteenth century, they penetrated far beyond the equator to Cape San Augustin, and when the former even expressed the erroneous opinion that the fine passage of Dante, "*Io mi volsi a man destra, e posi mente . . . . .*" and the four stars described as "*non viste mai fuorch' alla prima gente,*" referred to antarctic polar stars.\*

\* Humboldt, *Examen Critique de l'Hist. de la Géographie*, tom. iv., p. 319. The Venetian Cadamosto (more properly called Alvise da Ca da Mosto) first turned his attention to the discovery of the position of a south polar star when in company with Antoniotto Usodimare, at the mouth of the Senegal, in 1454, in the course of one of the many voyages in which the Portuguese engaged, under the auspices of the Infante Don Henrique, for the purpose of advancing along the western shores of Africa, beyond the equator. "While I still see the north polar star," he writes, being then in about  $13^\circ$  north latitude, "I can not see the south polar star itself, but the constellation which I perceive toward the south is the *Carro del ostro* (wagon of the south). (*Aloysii Cadam. Navig.*, cap. 43, p. 32; Ramusio, *Delle Navigazioni et Viaggi*, vol. i., p. 107.) Could he have traced the figure of a wagon among some of the larger stars of the constellation Argos? The idea that both poles had a constellation of the "Wain" or wagon appears to have been so universal in that age, that there is a drawing of a constellation perfectly similar to Ursa Minor, supposed to have been seen by Cadamosto, both in the *Itinerarium Portugallense*, 1508, fol. 23, b, and in Grynaeus