

tion of the southern heavens is the pleasing and richly-starred region of our northern hemisphere in Aquila and Cygnus, where the Milky Way branches off in different directions. While the Milky Way is the narrowest under the foot of the Cross, the region of minimum brightness (where there is the greatest paucity of stars in the Galactic zone) is in the neighborhood of Monoceros and Perseus.

The magnificent effulgence of the Milky Way in the southern hemisphere is still further increased by the circumstance that between the star η Argûs, which has become so celebrated in consequence of its variability, and α Crucis, under the parallels of 59° and 60° south lat., it is intersected at an angle of 20° by the remarkable zone of very large and probably very proximate stars, to which belong the constellations Orion, Canis Major, Scorpio, Centaurus, and the Southern Cross. The direction of this remarkable zone is indicated by a great circle passing through ϵ Orionis and the foot of the Cross. The picturesque effect of the Milky Way, if I may use the expression, is increased in both hemispheres by its various ramifications. It remains undivided for about two fifths of its length. According to Sir John Herschel's observations, the branches separate in the great bifurcation at α Centauri,* and not at β Cent., as given in our maps of the stars, or, as was asserted by Ptolemy,† in the constellation of the Altar; they reunite again in Cygnus.

In order to obtain a general insight into the whole course and direction of the Milky Way with its subdivisions, we will briefly consider its parts, following the order of their Right Ascension. Passing through γ and ϵ Cassiopeiæ, the Milky Way sends forth toward ϵ Persei a southern branch, which loses itself in the direction of the Pleiades and Hyades. The main stream, which is here very faint, passes on through Auriga, over the three remarkable stars ϵ , ζ , η , the Hædi of that constellation, preceding Capella between the feet of Gemini and the horns of the Bull (where it intersects the eclip-

aware of its having risen above the horizon, though he should not be at the time looking at the heavens, by the increase of general illumination of the atmosphere, resembling the effect of the young moon." (See Piazzi Smyth, *On the Orbit of a Centauri*, in the *Transact. of the Royal Soc. of Edinburgh*, vol. xvi., p. 445.)

* *Outlines*, § 789, 791; *Observations at the Cape*, § 325.

† *Almagest*, lib. viii., cap. 2 (t. ii., p. 84, 90, Halma). Ptolemy's description is admirable in some parts, especially when compared with Aristotle's treatment of the subject of the Milky Way, in *Meteor* (lib. i., p. 29, 34, according to Ideler's edition).