the Galaxy (fully 15°), still even it may perhaps belong to that prolongation of its branch which appears to lose itself from a and ε Persei toward Aldebaran and the Hyades, and to which we have already referred at p. 147. The brilliant stars which gave early celebrity to the constellation of Orion, are, moreover, reckoned to belong to that zone of very large and probably less remote stars, whose prolonged direction indicates the vast circle of the Southern Galaxy, passing through ε Orionis and a Crucis.**

The opinion which at one time prevailed so extensively! of the existence of a galaxy of nebulæ intersecting the stellar Milky Way almost at right angles, has not been confirmed by more recent and accurate observations in reference to the distribution of symmetrical nebulæ in the firmament.‡ There certainly are, as has already been observed, very great accumulations at the northern pole of the Galaxy, while a very considerable abundance of nebulous matter is also observed at the south galactic pole near Pisces; but in consequence of the many interruptions which break the zone, we are unable to indicate any large circle connecting these poles together, and formed by a continued line of nebulæ. William Herschel, in advancing this view in 1784, at the close of his first treatise on the structure of the heavens, developed it with a caution worthy of such an observer, and from which doubt was not entirely excluded.

Some of the irregular, or, rather, unsymmetrical nebulæ (as those in the sword of Orion, near η Argûs in Sagittarius and in Cygnus), are remarkable for their extraordinary size; others (as Nos. 27 and 51 of Messier's Catalogue) for their singular forms.

It has already been noticed in reference to the large nebula in the sword of Orion, that Galileo never mentioned it, although he devoted so much attention to the stars between the girdle and the sword, and even sketched a map of this re-

* Cosmos, vol. iii., p. 147. Outlines, § 785.

† Cosmos, vol. i., p. 150, and note; Sir John Herschel's first edition of his Treatise on Astronomy, 1833, in Lardner's Cabinet Cyclopædia,

§ 616; Littrow, Theoretische Astronomie, 1834, th. ii., § 234.

‡ See Edinburgh Review, January, 1848, p. 187, and Observations at the Cape, § 96, 107. "The distribution of the nebulæ is not like that of the Milky Way," says Sir John Herschel, "in a zone or band encircling the heavens; or if such a zone can be at all traced out, it is with so many interruptions, and so faintly marked out through by far the greater part of its circumference, that its existence as such can be hardly more than suspected."

§ "There can be no doubt," writes Dr. Galle, "that the drawing"