

ula in the sword of Orion, which is so important from its extent and form, and has become so famous from the number and celebrity of its subsequent investigators.* Huygens was the means of inducing Picard (in 1676) to devote himself diligently to the investigation of this nebulous body. Edmund Halley, during his sojourn in St. Helena in 1677, was the first to determine any of the nebulous spots belonging to portions of the southern heavens not visible in Europe, although his observations embraced only a very small number. The lively interest taken by the great Cassini (Jean Dominique) in all branches of contemplative astronomy, led him, toward the close of the seventeenth century, to a more careful exploration of the nebulæ in Andromeda and Orion. He thought he could detect alterations in the latter since Huygens's observations, and that he "had recognized stars in the former which could not be seen with telescopes of low powers." There are reasons for regarding the assertion of an alteration of figure as a delusion; not entirely so the existence of stars in the nebula in Andromeda since the remarkable observations of George Bond. Cassini, moreover, conjectured, on theoretical grounds, the possibility of such a resolution of the nebula; since, in direct opposition to Halley and Derham, he considered all nebulous spots to be very remote stellar swarms.† The faint mild effulgence in Andromeda was indeed, according to his opinion, analogous to the zodiacal light, which he also conjectured to be composed of a crowd of densely thronged, small planetary bodies.‡ Lacaille's residence in the southern hemisphere (at the Cape of Good Hope, and in the Isle of France and Bourbon, between 1750–1752), so considerably increased the number of known nebulous spots, that Struve has justly remarked, that from the observations of this traveler more was known, at that time, of

* Huygens, *Systema Saturnium*, in his *Opera varia*, Lugd. Bat., 1724, tom. ii., p. 523 and 593.

† "Dans les deux nébuleuses d'Andromède et d'Orion, j'ai vu des étoiles qu'on n'aperçoit pas avec des lunettes communes. Nous ne savons pas si l'on ne pourrait pas avoir des lunettes assez grandes pour que toute la nébulosité pût se résoudre en de plus petites étoiles, comme il arrive à celle du Cancer et du Sagittaire." "I have seen stars in the nebula of Andromeda and Orion," says Dominique Cassini, "which can not be recognized by ordinary instruments. We are ignorant whether telescopes may not be constructed of sufficient power to resolve the whole nebula into smaller stars, as has been done in the case of the nebulæ in Cancer and Sagittarius."—Delambre, *Hist. de l'Astr. Moderne*, tom. ii., p. 700 and 744.

‡ *Cosmos*, vol. i., p. 141, note.