

Milky Way in different places, apparently from some principle of Attraction; and in this, and in one in 1817, he published those remarkable views on the distribution of the stars in our own cluster as forming a large stratum, and on the connection of stars and nebulæ (the stars appearing sometimes to be accompanied by nebulæ, sometimes to have absorbed a part of the nebula, and sometimes to have been formed from nebulæ), which have been accepted and propounded by others as the *Nebular Theory*. Sir William Herschel's last paper was a Catalogue of 145 new Double Stars communicated to the Astronomical Society in 1822. In 1827 M. Struve, of Dorpat (in Russia), published his *Catalogus Novus*, containing the places of 3112 double stars. While this was going on, Sir John Herschel and Sir James South published (in the *Phil. Trans.* 1824) accurate measures of 380 Double and Triple Stars, to which Sir J. South afterwards added 458. Mr. Dunlop published measures of 253 Southern Double Stars. Other Observations have been published by Capt. Smyth, Mr. Dawes, &c. The great work of Struve, *Mensuræ Micrometricæ*, &c., contains 3134 such objects, including most of Sir W. Herschel's Double Stars. Sir J. Herschel in 1826, 7, and 8 presented to the Astronomical Society about 1000 measures of Double Stars; and in 1830, good measures of 1236, made with his 20-foot reflector. His paper in vol. v. of the *Ast. Soc. Mem.*, besides measures of 364 such stars, exhibits all the most striking results, as to the motion of Double Stars, which have yet been obtained. In 1835 he carried his 20-foot reflector to the Cape of Good Hope for the purpose of completing the survey of Double Stars and Nebulæ in the southern hemisphere with the same instruments which had explored the northern skies. He returned from the Cape in 1838, and is now (1846) about to give the world the results of his labors. Besides the stars just mentioned, his work will contain from 1500 to 2000 additional double stars; making a gross number of above 8000; in which of course are included a number of objects of no great scientific interest, but in which also are contained the materials of the most important discoveries which remain to be made by astronomers. The publication of Sir John Herschel's great work upon Double Stars and Nebulæ is looked for with eager interest by astronomers.

Of the observations of Nebulæ we may say what has just been said of the observations of Double Stars;—that they probably contain the materials of important future discoveries. It is impossible not to regard these phenomena with reference to the *Nebular Hypothesis*, which has been propounded by Laplace, and much more strongly in-