

increasing series of gauging powers, by which the profundity in space of every object consisting of stars can be ascertained, as far as the light of the instrument will reach, Sir William Herschel proceeds to make use of some of his numerous observations made upon those occasions, to show how the distances of globular and other clusters of stars may be obtained, and has represented their situations in space by a figure, in which their distances are made proportional to the diameter of a globular space, sufficiently large to contain all the stars that are visible to the eye of an observer in the clearest nights.

The author then details a series of observations of clusters of stars, from which the order of their profundity in space is determined, and describes the manner in which he represents the profundity of celestial objects in space by diagrams; and in the concluding section of his paper, considers the extent of the power of telescopes to reach into space when they are directed to ambiguous celestial objects.

*On the Structure of the Poisonous Fangs of Serpents.* By Thomas Smith, Esq. F.R.S. Read June 4, 1818. [*Phil. Trans.* 1818, p. 471.]

The object of this paper is to explain the existence of a slit in the fangs of serpents, extending from the foramen at the base to the aperture near the point, and to show that this slit is caused by the manner in which the tube through which the poison flows is formed. After describing the growth of the teeth of poisonous serpents, the author observes, that in those which are not venomous, there are no traces of any furrow or depression.

A drawing, illustrating the author's description, is annexed to this paper.

*On the Parallax of a Aquilæ.* By John Pond, F.R.S. Astronomer Royal. Read April 16, 1818. [*Phil. Trans.* 1818, p. 477.]

The telescope erected for this investigation resembles in its construction that which was formerly used for the observations of  $\alpha$  Cygni. It has an achromatic object-glass of 10 feet focal length, and 4 inches diameter.

The Astronomer Royal had first selected  $\beta$  Canis Minoris as a proper star to be compared with  $\alpha$  Aquilæ; but finding, upon trial, that it could rarely be seen in the day-time, he was induced to substitute  $\lambda$  Pegasi. Not being quite satisfied of the stability of the instrument, the author has only computed those observations in which each star was observed in the same day, and in the short interval of three hours; so that it was not likely any sensible change in the telescope should have taken place. The result of fifty-four observations between the 25th of July and the 29th of December 1817, afforded no appearance of parallax; indeed the author considering it as a hopeless task to establish its existence by observations on a star so far from the zenith, was about to abandon the subject, when his at-