

of June, 1847, and of which a full abstract is contained in the fourth volume of the 'Proceedings,' p. 691. The long historical memoir, and quotations from former authors, have now been omitted.

"Attempt to apply instrumental measurement to the Zodiacal Light." By Prof. C. Piazzi Smyth.

After describing the manner in which the zodiacal light was first strongly represented to him in South Africa in 1843, and which seemed to imply that some of the received opinions with regard to it were erroneous, the author describes an equatorial instrument which he contrived for the purpose of measuring the right ascension and declination of the apex of the light; some instrumental method of determining these data, and thence the principal phenomena of the appearances, being evidently desirable on account of the immense extent to which the judgement may be biassed by prejudice or casual circumstances, when the mere senses are trusted to for determining the extent, situation and character of so faint and vague a body.

The most favourable astronomical, atmospheric and personal conditions requisite to obtain undeniable observations of the zodiacal light are pointed out; and aided partly by strict attention to these, and partly by the clear atmosphere of the high mountains on which he was then residing, the author found the phenomenon to be of a far more stable and determinate character than has generally been represented; and his observations, made by the above instrument in the years 1844-45, of which a list is given, seem to be affected with a probable error not greater than 2° .

Since his return from the Cape, the author's geographical position has wholly prevented him from continuing his observations: he therefore now publishes his experiences to induce others in more favourable situations to follow up the subject; which by comparing his results with those of other observers in the northern hemisphere, he shows has many of its principal features in a state of ambiguity, that ought not in the present day to be allowed to exist any longer; and further, to enable others to take up the subject as nearly as possible as he left it off, the author adds to his paper a series of views of the different appearances of the zodiacal light at various seasons of the year, and explains the peculiar projections employed to give a true as well as a pictorial representation of the sky.

The ordinary Meetings of the Society were then adjourned to Thursday, November 16.

June 9, 1848.

The General Meeting for the election of Fellows was held this day, The MARQUIS OF NORTHAMPTON, President, in the Chair. The President addressed the Society as follows:—