

December 16, 1858.

SIR BENJAMIN C. BRODIE, Bart., President, in the Chair.

In accordance with notice given at the last Meeting, the Right Rev. the Lord Bishop of Ripon was proposed for election and immediate ballot.

The ballot having been taken, his Lordship was declared duly elected.

The following communications were read :—

- I. Extract of a Letter from Professor LAMONT to Major-General SABINE, Treas. and V.P.R.S., dated Munich, Dec. 19, 1858. Communicated by Professor W. H. MILLER, For. Sec. R.S.

“My magnetic observations in France, Spain, and Portugal are now published, and a copy for you is on the way. The observations of last summer are under the press. They comprehend about thirty stations in the North of Germany, Belgium, Holland, and Denmark. Next year I am going to Italy, and in 1860 I intend to revisit Spain, in order to observe the total eclipse of the sun, and also to make magnetic observations.

“I have found that on the Continent the lines of horizontal intensity move from south-west to north-east, making an angle of about 20° with the meridian, that is, in a direction coinciding with the lines of declination. The lines of inclination seem to move in the same direction, and the motion of the lines of declination will probably coincide with the lines of horizontal intensity. Calling $+\Delta H$ and $-\Delta i$ the annual changes of horizontal intensity and inclination of a central station (suppose London), the annual changes for a place situated x degrees in latitude to the north, and y degrees in longitude to the west, will be—

$$\Delta H - 0.00018x + 0.00008y \text{ (absolute measure, French units),}$$

$$-\Delta i + 0.21x - 0.09y.$$

“The new survey of the British Islands will offer an opportunity of testing the correctness of these formulæ.”