## **PROCEEDINGS**

OF

## THE ROYAL SOCIETY.

1848.

No. 71.

## April 6, 1848.

The MARQUIS OF NORTHAMPTON, President, in the Chair.

"Determinations of the Magnetic Inclination and Force in the British Provinces of Nova Scotia and New Brunswick in the summer of 1847." By Professor George W. Keely, of Waterville College, Maine, United States. Communicated by Lieut.-Col. Sabine, R.A., For. Sec. R.S.

The observations recorded in this paper are of two kinds; first, those for the relative total force, which were made with a pair of Lloyd needles and an inclination-circle, seven inches in diameter, with two verniers reading to single minutes; and secondly, those for the absolute horizontal force made with a unifilar magnetometer. After a detailed description of these instruments, the results of the observations are given, occupying several pages of tables.

## April 13, 1848.

The MARQUIS OF NORTHAMPTON, President, in the Chair.

"Minute structure of the Organ of Taste in Vertebrate Animals." Part I. By Augustus Waller, M.D. Communicated by Richard Owen, Esq., F.R.S.

The author states that, in 1839, his attention was first directed to the organ of taste on discovering the peculiar advantages for microscopic examination which are offered by the tongue of the living frog. When prepared in the manner he describes, it is much more transparent than the web of the foot; and its papillæ, mucous membrane, blood-vessels, nerves, muscular fibres, &c. may all be examined during life.

He subsequently found that, contrary to the opinion of anatomists,