## TRANSACTIONS

OF THE

# ROYAL SOCIETY

OF

## EDINBURGH.

## VOL. XIX. PART I.

CONTAINING THE

MAKERSTOUN MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

FOR

1845 AND 1846.

### **EDINBURGH**:

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#### MDCCCXLIX.

## **OBSERVATIONS**

IN

## MAGNETISM AND METEOROLOGY,

MADE AT

## MAKERSTOUN IN SCOTLAND,

IN THE OBSERVATORY OF

GENERAL SIR THOMAS MAKDOUGALL BRISBANE, BART.,

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## IN 1845 AND 1846.

FORMING VOL. XIX. PART I. OF THE TRANSACTIONS OF THE ROYAL SOCIETY OF EDINBURGH.

EDITED BY

### JOHN ALLAN BROUN, Esq.,

DIRECTOR OF THE OBSERVATORY.

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#### CORRIGENDA IN THIS VOLUME OF OBSERVATIONS FOR 1845 AND 1846.

Introduction, page xx., lines 9 and 10, substitute P for p and Q for q

- xxi., line 5 from foot, for termination. read termination,
- xxi., line 3 from foot, for seconds, read seconds:
- xxii., line 6, make the correction given below for 1844, Introd., p. xxii., line 11
- xxvii., line 4 from foot, and p. xxviii., lines 2, 7, and 16, substitute P for p and Q for q

- xli, heading of page, for Bifilar or Horizontal read Balance or Vertical

Page 25, 9<sup>d</sup> 1<sup>h</sup>, column "Balance Corrected," for 416.3 read 516.3

- 39, 24d 18h, column "Bifilar Corrected," for 5528 read 5128

- 51, 24<sup>d</sup> 10<sup>h</sup>, column "Balance Corrected," for 457.8 read 437.8

- 58, 5<sup>d</sup> 8<sup>h</sup>, column "Balance Corrected," for 478.6 read 578.6

- 59, 11d 22h, column " Declination," for 18.93 read 08.93

- 148, 1d 23h, column "Gött. M. T." for 1d 23h read 1d 23th
- 182, line 6 from foot, column "Gött. M. T.," for 5<sup>d</sup> 0<sup>h</sup> read 6<sup>d</sup> 0<sup>h</sup>
- 312, line 1, 2d column, "Gött. Mean Time," for 2d 2h 0m read 5h 2h 0m
- 312, " " "Balance Corrected," for 387.7 read 479.7
- 316, 22<sup>d</sup> 10<sup>h</sup>, column "Balance Corrected," for 372.1 read 266.1
- 320, 26<sup>d</sup> 10<sup>h</sup>, column "Balance Corrected," for 131.0 read 231.0
- 322, 23<sup>d</sup> 10<sup>h</sup>, column "Balance Corrected," for 272.1 read 143.3

#### CORRIGENDA IN THE VOLUME OF OBSERVATIONS FOR 1844.

Introduction, page xiv., line 13, for  $\Phi$  n read  $(1 + \Phi)$  n

- xx., lines 9, 10, and 13, substitute P for p and Q for q
- xxii., line 11, for  $\{1+k (b_0-b_1) q (t_0-t_1)\}$  read  $\{1-k (b_0-b_1) + q (t_0-t_1)\}^{\frac{1}{2}}$ (This accidental error does not extend to the reductions which were performed by the latter form.)
- xxix, lines 10, 15, 20, and 29, substitute P for p and Q for q
- xli., heading of page, for Bifilar or Horizontal read Balance or Vertical

Page 202, 20<sup>d</sup> 10<sup>h</sup>, column "Wind. Force in 10<sup>m</sup>," for 6.0 read 0.0

- 235, 18<sup>d</sup> 22<sup>h</sup>, column "Wind. Force in 10<sup>m</sup>," for 2.2 read 0.2

#### CORRIGENDUM IN THE VOLUME FOR 1843.

Introduction, page xlii., line 21, for X tan  $(u-\delta)$  read C X tan  $(u-\delta)$ ; C being a constant