Errata in the "1890 Memoir": The Bakerian Lecture: A Magnetic Survey of the British Isles for the Epoch January 1, 1886

The Royal Society

Email alerting service	Receive free email alerts when new articles cite this article - sign up in the box at the top right-hand corner of the article or click **here**

To subscribe to *Phil. Trans. R. Soc. Lond. A* go to: **http://rsta.royalsocietypublishing.org/subscriptions**

which it may once for all be determined whether they are fixed or varying, and, if the latter, for tracing their changes. The agreement between our two surveys, and the approximate agreement of our results in Scotland with those which we deduced from Mr. WELSH's measurements made in that country about a quarter of a century before our own ("1890 Memoir," p. 293), sufficiently prove that if the local Disturbing Forces alter, they change but slowly.

We hope, however, that our work will be repeated by others in the not very distant future. It would not be necessary to observe at as many stations as those we have studied, for our pioneer investigation has shown where the most definite results are to be sought, and has also proved that the terrestrial lines may be obtained with sufficient accuracy, in the centre of the country at all events, from two hundred stations.

If from fifty to a hundred more were chosen from among those between which we have proved that the ridge lines now run, a definite answer would be obtained to the question whether the loci of attraction have moved from between those stations in the interval.

We venture to think that the results would be more conclusive if the methods of working up the observations were as similar as possible to those we have used.

ERRATA IN THE "1890 MEMOIR."

Page 77.   Probable error of Dip should be $0'\cdot5$.

„   95–231.   The following is a list of the repeat stations, to which the observers who have revisited them with Ordnance maps assign latitudes and longitudes differing from those given in the "1890 Memoir" (see p. 30 of this paper).

	Position according to "1890 Memoir."		Correct position.	
	Latitude.	Longitude.	Latitude.	Longitude.
	° ′ ″	° ′ ″	° ′ ″	° ′ ″
Golspie	57 58 20	3 58 15	57 58 42	3 57 52
Kyle Akin . . .	57 16 35	5 44 0	57 16 26	5 44 12
Thurso	58 35 30	3 31 8	58 35 30	3 31 15
Wick	58 26 20	3 5 45	58 26 30	3 5 38
Mablethorpe . . .	53 20 20	0 15 41 E.	53 20 15	0 15 41 E.
Milford	51 42 24	4 56 47	51 42 20	4 56 50
Swansea	51 36 50	3 58 57	51 37 14	3 58 8
Bantry	51 40 25	9 28 53	51 40 20	9 28 45
Killarney	52 3 50	9 32 20	52 3 48	9 32 23

Page 140.   For April 22 read April 12.

„   150.   The position of the station appears to be imperfectly described.

Page 168.   The latitude of Llanidloes is 52° 26′ 57″, not 52° 56′ 37″, as given.   This is a misprint.   The correct numbers are used in the calculations.

„   224.   For " W. of the town," read " N. of the town."

„   251–258.   Substitute the following numbers for those given in the tables on these pages :—

> *Aberdeen.* Calculated Declination, 20° 22′·1 for 20° 21′·0.   Difference, — 5′·8 for — 4′·7.
>
> *Gairloch.* Calculated Declination, 22° 49′·8 for 22° 59′·0.   Difference, — 35′·4 for — 44′·6.   Calculated Dip, 71° 48′·9 for 71° 49′·9.   Difference, — 4′·6 for — 5′·6.
>
> *Iona.* Observed Vertical Force 4·6819 for 4·6711.   Difference + ·0310 for + ·0202.
>
> *Lampeter.* Observed Declination, 19° 55′·3 for 18° 55′·3.
>
> *Loch Maddy.* Calculated Declination, 33° 44′·8 for 23° 34′·3.   Difference, — 26′·8 for 16′·3.   Calculated Dip, 71° 52′·2.   Difference, — 0′·1,
>
> *Melton Mowbray.* Observed Dips should be 68° 31′·5 and 68° 39′·7 Differences + 5·4 and + 13′·0.
>
> *Oxford.* Calculated Declination, 18° 32′·5 for 18° 34°·7.   Difference, + 1′·2 for — 1′·0.
>
> *Ranmore.* Calculated Declination, 17° 57′·2 for 17° 43′·9.   Difference, + 11′·7 for + 25′·0.
>
> *Limerick.* Observed Declination, 22° 36′·6 for 23° 36′·6.

Such of these errors as are not misprints entail small changes in the magnitude and direction of the Disturbing Forces at the stations concerned.   These corrections have been made in the Table of Disturbing Forces given in the present Memoir.

„   260.   For N. W. Z. read — N. — W. — Z.

„   270–273.   The correct values of F, ϕ, and Z at—

> *Guernsey, L'Erée,* F = 70, ϕ = — 174°.
>
> *Lincoln* F = 74, ϕ = — 63°, Z = + 169.

Table VIII., p. 322.   The declination for Lat. 60°, Long. 1°, W., should be 20° 25′·8, not 20° 15′·8.

Plate 13.   The arrow indicating the direction of the Horizontal Disturbing Force at Campbeltown should make with the meridian an angle of + 136°, not — 136° as drawn.