periods of intense metamorphic action;—one before and the other after the accumulation of the Upper Silurian strata, as has been stated in the Memoirs of the Geological Survey, and in the "Geology of Ireland." Mr. Symes was the first to suggest that these metamorphic rocks belonged to two distinct geological formations; which was subsequently satisfactorily proved, because at the junction of his and my work, his younger metamorphic rocks graduated into unmetamorphosed rocks in which occur numerous fossils principally of Wenlock types. G. HENRY KINAHAN.

IRISH DRIFTS.

SIR,—In the April Number of the GEOL. MAG., Mr. Swanston in reference to a former paper of mine on the Irish Drifts (GEOL. MAG. Vol. X. 1873, p. 447) says, that if Mr. Howorth had relied "more on the work of Portlock" "and less on" myself, certain inaccuracies would have been avoided.

The mis-spelling of a name by the substitution of the letter r for the letter v (an error due to my caligraphy I presume), was hardly worth cavilling about, and the height of the glacial bed at Bovevagh was correctly given in my paper.

Referring to Portlock, I find at p. 157, Turritella, Cyprina, and Nucula (Leda oblonga) all referred to in the same sentence, the first species being confined to the bed near Bovevagh Old Church, the next reference, p. 159, says the bed is full of Turritella and contains only fragments of any other shell, yet at p. 737 Astarte multicostata (A. compressa) is recorded. Will Mr. Swanston kindly say what species are represented by these fragments?

After carefully reading Portlock's chapters, I cannot come to any other conclusion than that he found them all associated together. His special reference to *Turritella* being on account of its abundance at this place and not elsewhere.

I acknowledge that I have not personally examined the beds concerning which I wrote; but inasmuch as no two Irish geologists were in accord upon these beds, and having had the advantage of inspecting collections of species from most of the localities I have referred to, besides an intimate acquaintance with nearly, if not quite all the papers that have treated upon the subject, and the use of communications, lists of species, and parcels of unsorted stuff sent by various geological friends, I wrote with a view to bring together all that had been done up to that time. If Mr. Swanston will point out my inaccuracies, being on the spot, he can easily do so, and the cause of geology will be served.

Should Mr. Swanston be desirous of publishing a list of Irish Post-Tertiary fossils, a work much needed, I shall be very happy to assist him. ALFRED BELL.

With the deepest regret we have to announce the death of the President of the Royal Society—Mr. W. Spottiswoode, LL.D., F.R.S., on the 27th of June, 1883, aged 58 years. The death is also announced of the former President, General Sir Edward Sabine, aged 95 years.