

to Mr. Holmes's conclusion, that the area west and north-west of Carlisle consists of Keuper deposits, is also improbable, the rocks thus identified being the gypseous shales above the Penrith Sandstone.

CORRESPONDENCE.

THE CARLISLE-SOLWAY BASIN.

SIR,—In the discussion on the Carlisle-Solway basin at the Geological Society (Abstr. Proc., No. 958) I omitted to reply to Mr. Lamplugh's argument that the Point of Ayre bore in the Isle of Man supports the identification of the rock at the bottom of the Abbeytown bore as the St. Bees Sandstone. The correlation on which this view is based does not seem to me supported by the evidence. The Point of Ayre bore has been recorded in detail by Mr. Lamplugh (Isle of Man memoir, 1903, pp. 585-6), and he there classed the beds above the St. Bees Sandstone as the "Saliferous Marls" and obviously regarded them as Keuper (*ibid.*, p. 291). Mr. Lamplugh's argument depends upon the correlation of these beds with the Gypseous Shales at Abbeytown. As no specimens of the rocks from these bores are available, we can only compare them by the bore records. The following table summarizes the records:—

	Abbeytown. Times mentioned.	Point of Ayre. Times mentioned.
<i>Beds—</i>		
Shale	61	0
Micaceous Shale	1	0
Sandy Shale	10	0
Marl	0	36
Sandy Marl	0	3
Marlstone	0	19
Sandstones	6	4
Breccia	0	1
<i>Minerals—</i>		
Salt in beds	0	18
Salt in shale	1	0
Salt in marl and marlstone	0	27
Gypsum	36	18
<i>Colours—</i>		
Red	54	0
Brown	0	42
Green	17	0
Blue	20	11
Purple	1	0
Grey	8	22
White	8	0
<i>Thickness</i>	79 beds, average 10' 5"	80 beds, average 6' 2"

The two series agree in being argillaceous members of the red rock series, but the differences between the two sets of rocks seem far greater than the resemblances. They both contain some gypsum and salt. But the only salt recorded in the Abbeytown journal is present in a 5 ft. layer of red shale with gypsum and salt. In the Point of Ayre bore the salt occurred in eighteen beds, which yielded 76 ft. 8 in. of cores of salt, in addition to numerous salt-bearing marls.

No doubt the descriptions in bore journals have to be interpreted freely, but the differences in the above descriptions can hardly be thus dismissed. The original assignments in the Survey Memoirs of the two series of beds to different systems appear both to have been correct. Mr. Lamplugh was probably right in identifying the Isle of Man beds as Triassic saliferous marls and Mr. Holmes in identifying the Abbeytown beds as Permian Gypseous Shales. Why correlate the beds at Abbeytown with such different beds over 50 miles distant, while similar rocks occur only 16 miles away? If the identifications in the Isle of Man and Carlisle memoirs be correct, then the salt-bearing marls of the Isle of Man belong to a different system from the Gypseous Shales of Abbeytown, and the red sandstone below the two sets of beds is probably also of different age. The fact that the sandstone below the Keuper marls in the Isle of Man is the St. Bees Sandstone is an additional reason why the sandstone below the Permian Gypseous Shales at Abbeytown is not the St. Bees Sandstone.

J. W. GREGORY.

GEOLOGICAL DEPARTMENT,
UNIVERSITY, GLASGOW.
May 14, 1914.

OBITUARY.

EDUARD SUESS.

BORN AUGUST 20, 1831.

DIED APRIL 26, 1914.

It is with deep regret we record the death of our dear friend of long ago, Professor Eduard Suess, which occurred at Vienna on Sunday, April 26. It was so lately as in January of last year (GEOL. MAG., 1913) that we published a brief notice with his portrait (Plate I) among our list of Eminent Living Geologists.

In 1851 he was appointed an Assistant in the Imperial Museum, Vienna, and in 1857 he was made Professor in the Vienna University. In 1862 he resigned his Museum work and devoted all his leisure, not occupied by his lectures in the University, to palæogeographical researches, culminating in his great work *Das Antlitz der Erde* (The Face of the Earth), Prag, Wien, Leipzig, 1883–1909. An English translation, from the Clarendon Press, Oxford, appeared in 1904, edited by Professor Sollas, the fourth volume of which was issued in 1909.

Sir Archibald Geikie writes of the French translation, edited by M. E. de Margerie (1897–1911), that it has been “so enriched with footnotes by its Editor as to become an invaluable work of reference for published papers in every department of the wide range of subjects of which it treats”.

Professor Suess was a Foreign Member of the Royal Society and also of the Geological Society of London, and received the Copley Medal from the Royal Society in 1903, and was Wollaston Medallist of the Geological Society in 1896. “Scarcely any other investigator of modern times has influenced science so lastingly and deeply as Eduard Suess” (Steinmann).