

eaten away so as to form the Vale of Winscombe? Professor Jukes implies that the sea, during the Glacial submergence, did no more to make valleys than a canal is made by the water it contains. I think the contrary can be shown by three facts: 1. The rate at which the sea wears back its cliffs in many parts of the Bristol Channel may be fairly stated as, at least, a foot in a year. 2. The accumulations of drift in the midland and other counties (which exhibit no trace of being re-arranged Tertiary gravels, and which are only a part of what must have been excavated and removed to a distance,) would be sufficient to fill up many valleys, and obliterate many escarpments. 3. The duration of the glacial submergence may have been at least 50,000 years, probably much longer. During this period the sea *must* have converted many \cup shaped vales into \sqcup shaped plains, and may have eaten back many miles of the eastern side of the Severn valley so as to leave the great Cotswold escarpment.

D. MACKINTOSH.

P.S.—I see that the number of the Quart. Journ. Geol. Soc. for the present month (Nov.) contains several important articles in favour of marine denudation.

RESEARCHES IN BRITISH MINERALOGY.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—Mr. David Forbes in a paper in the November number of the *London and Edinburgh Philosophical Magazine*, under the title of “Researches in British Mineralogy,” gives the results of an analysis made by himself of a silver-fahlerz from the Fox-dale silver-lead mine, in the Isle of Man, and in the introductory paragraph he says, “Although the cupriferous tetrahedrite (occasionally containing traces of silver) has been found in small quantities at various localities in both England, Scotland, Ireland, and Wales, there is no analysis of true silver-fahlerz or polytelite, or even occurrence of the mineral itself recorded, as far as the author has been enabled to ascertain.” From this I infer that Mr. Forbes will be surprised to learn that silver-fahlerz has already been found in quantity in this country and mined for the silver it contains. For several years past it has been raised and sold as a silver and copper ore at the Silver-vein Mine, near Lostwithiel, Cornwall. Indeed this mine is, and has been worked solely for the silver-fahlerz, no other ore being found in any useful quantity. The lode (for it is not found in “pockets” only) runs about 43 degrees east of north and west of south. Its width appears to have varied considerably, but at the present time it is about four feet wide. It traverses the “Killas” or clay-slate of the district and, so far, the ore has become richer in silver as the depth increases. I know of no accurate analysis having been made of this ore, so that Mr. Forbes would be doing further good service to British Mineralogy if he would take such a work in hand. From eight assays made by Messrs. Johnson and Johnson and others, some years since, the average yield of silver was 68½

ounces to the ton of ore, but the ferruginous gossan at that time contained much silver also, in what form I know not; and I cannot ascertain whether the gossans were assayed only, or the compact silver-fahlerz likewise. In one instance the proportion of silver to the ton of ore was 214 ounces! The last sample sold contained $36\frac{1}{2}$ ounces to the ton. Unlike the position of this mineral in the Fox-dale mine, there is no granite within a distance of two or three miles. This mine affords the only known instance in this country of a continuous lode of silver-fahlerz, and, as I have before stated, no other ore is found in sufficient quantity to be of any commercial value. The associated minerals are quartz (which in some parts of the lode is much mixed up with the tetrahedrite) chalybite, and iron-pyrites. Under the name of Wheal Fortescue, Silver-vein was formerly worked for the rich deposits of silver it contained; I suppose in the state of sulphide, but was abandoned for want of capital. If Mr. Forbes should be sufficiently interested in the fact as well as in the mode of occurrence of silver-fahlerz in this locality as to visit it, I can assure him that he will meet with very willing assistance from my friend, Mr. Talling, of Lostwithiel, who knows every part of the mine well, and who I have to thank for many of the above particulars which I had nearly forgotten, as it is now three years since I descended it in his company.

I am, Sir, yours very truly,

BRITISH MUSEUM.

THOS. DAVIES.

THE BELGIAN TERTIARIES.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—I am desirous to correct a mistake which I unintentionally made in my paper on the Belgian Tertiaries, contained in the GEOLOGICAL MAGAZINE of November 1st. I have there stated (p. 504) that Mr. Searles Wood had remonstrated against certain views explained by Mr. Godwin-Austen in his paper, "On the Kainozoic Formations of Belgium." I now learn from Mr. Searles Wood that he has not published any paper relating to this subject, but that the opinions which he had expressed with regard to certain of Mr. Godwin-Austen's views were communicated to me in letters which we exchanged on that subject. I trust to be excused for this error on the ground that my paper was written at a time when I had none of my books at hand to refer to, as already stated (p. 506).
—Yours truly,

A. VON KOENEN.

UNIVERSITY OF MARBURG,
November 18th, 1867.

MISCELLANEOUS.

We are informed that the collection of M. Deshayes' Eocene Shells, from the Paris Basin, forming the types of his great work, "Description des Coquilles Fossiles des Environs de Paris," which has occupied so many years in publication, has just been purchased by the French Government, for the Museum of the Jardin des Plantes, Paris, for the sum of 100,000 florins.