

cruise down the Sea of Aral, and up the Amú, and, as we have said, a journey across the dreary desert of Kizzel Koom. Major Wood conveys, we think, a clearer and more vivid idea of the region indicated, its aspects, and its inhabitants, their characteristics and habits, than any other author we know. The maps which accompany the volume are a great assistance. We may note that they give the present level of the Caspian as 85 feet below that of the ocean, Lake Aral being 158 feet above sea-level. This, we presume, may be taken as authoritative for the present, and it ought to be noted, as the statements on the point in various authorities differ in a most remarkable way.

Major Wood naturally speaks of the conduct of Russia in Asia with warm approval, and indicates several beneficial results which have followed her recent conquests. He believes that of all European powers she, partly from the simplicity of her Government, and partly on account of her ethnic affinities, is best suited to wean the wandering hordes of Central Asia to a settled and civilised life. We strongly recommend Major Wood's work as one of substantial value and great interest. But why has a work of such importance and so full of details, been allowed to go forth without an index. We hope this omission will be remedied at the first opportunity.

OUR BOOK SHELF

La Théorie des Plantes Carnivores et Irritables. Par Edouard Morren. (Bruxelles: F. Hayez, 1876.)

In this pamphlet, a report of an address given at the annual public meeting of the scientific section of the Royal Academy of Belgium, on Dec. 16, 1875, Prof. Morren gives an admirable *résumé* of the present state of our knowledge on these two branches of vegetable physiology. As regards the now well-known phenomena of carnivorous plants, he gives the most essential points of the observations of Darwin, Hooker, Lawson Tait, Reess and Will, the author himself, and others: and, in contrast to his relative, M. Charles Morren, he gives his full adhesion to the view that nitrogenous substances are actually digested by the leaves of *Drosera*, *Pinguicula*, and *Nepenthes*. He points out, indeed, that the theory is not a new one, having been promulgated by Burnett in 1829, as respects *Sarracenia*; and by Curtis in 1834, and Canby in 1868, as to *Dionaea*; and also, he might have added, by Dr. Lindley, in his "Ladies' Botany," published in 1834. In his introductory remarks Prof. Morren insists on the identity of the process of nutrition in the animal and vegetable kingdoms. The second portion of the discourse is devoted to the elucidation of the phenomena of "Motility" as exhibited in the irritability of the leaves of *Mimosa*, the stamens of *Berberis*, and other organs which exhibit similar peculiarities; the aggregation of protoplasm as seen in the "tentacles" of *Drosera*; the apparently spontaneous movements of zoospores, climbing plants, &c. Anyone desiring to obtain a general idea of what is at present known on these interesting subjects could not do better than consult Prof. Morren's lecture. It is pleasant to find a tribute to "la science Anglaise" in connection with vegetable physiology.

A. W. B.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

Supposed New Laurentian Fossil

WHEN a man finds that he has made a mistake, the best thing he can do is frankly to acknowledge and explicitly to correct it.

I lose no time, therefore, in making known to the readers of NATURE that the notice of a New Laurentian Fossil which I published in its columns three weeks since, was written under a complete misapprehension of the real nature of the body. So far from being calcareous, as I had been led to believe by the information I had received from the geologist who found the specimen, it proves to consist of alternating layers of felspar and quartz—the former simulating an organic structure like that of *Stromatopora*, and the latter occupying what had been supposed to be the cavities of that structure—together constituting what is known to petrologists as "graphic granite."

The conclusions I had drawn from a cursory examination of the sections first sent me by Mr. Thomson, instead of being confirmed by a more minute study of thinner sections, proved to be altogether untenable; what I had supposed to be piles of flattened chamberlets in the thickness of each lamella, turning out to be mere fissures in the felspar, arranged with extraordinary regularity; and what had seemed to be a vertical tubular structure, proving to be mere striation.

The examination of numerous sections of this body, and a comparison of them with sections of the "graphic granite" found in its neighbourhood, has now satisfied me that the former presents no other indication of organic origin, than is afforded by the *Stromatopora*-like disposition of its alternating lamellæ; and that this is so nearly approached in the latter, as to show that the agencies which produced the "graphic granite" were competent to have produced the supposed Harris fossil.

Whether these agencies were entirely inorganic, or whether the "graphic granite" itself may not be a metamorphic form of an ancient organic structure (metamorphoses nearly as strange having undoubtedly happened), is a question which is not at present to be decided by anyone's *ipse dixit*. When a petrologist shall have succeeded in making a graphic granite, he will be entitled to speak with assurance of its purely mineral nature.

It will doubtless be triumphantly urged by those who maintain *Eozoon* to be a "pseudomorph," that as I have had to confess myself completely mistaken in regard to the Harris specimen, I am just as likely to have been wrong in regard to the Canadian opicalcite. To this I have simply to reply that my mistake in the present case has arisen entirely from undue haste, and has been corrected by my own more careful study; which has satisfied me of the *entire absence*, in the Harris specimen, of those Foraminiferal characters which seem to me unmistakably recognisable in the Canadian *Eozoon*.

In the memorable discussion at which I was present in Paris, on the flint implements found associated with the Abbeville jaw, it was the *entire absence*, on the surface of those worked flints, of the staining, the dendrites, the patina, and the wearing of the edges, characteristic of the genuine implements, which satisfied the English experts of the factitious character of the former. But, so far from anyone being led by this discussion to call in question the fashioning of the genuine implements by men coeval with the river-gravels of the Somme, it only brought out more fully the strength of that case, by showing what complete reliance might be placed upon the characters of antiquity which they presented. And so, in the present instance, the striking contrast in the microscopic appearances presented by two bodies bearing a close resemblance in general structure, seems to me only to bring out the organic characters of the one more decidedly, by comparison with the purely mineral characters of the other.

WILLIAM B. CARPENTER

Theory of Electrical Induction

I WAS hoping someone of eminence would tell us what he thought of the arguments of Prof. Volpicelli, or whether no clearer view of induction had been arrived at. Prof. Clerk Maxwell's letter of last week brings back the subject to its natural point of view to one whose ideas are based upon potential, but at the same time it leaves some points doubtful which have a particular bearing on the whole theory. Might I therefore be allowed to ask information from him, by explaining the ideas which have been impressed upon me about this, by reading his book "Electricity and Magnetism," though they are removed *toto caelo* from the ideas expressed by the phraseology of Prof. Volpicelli, and that of the usual text-books.

We know nothing of electricity except as a force. We may speak of it as a fluid, and use a corresponding terminology, but it is always measured as force. A conductor is a body in which