

relations of the beds. Another most valuable portion is the series of tables of localities where the different formations may now be studied, showing no less than 154 places worthy of a geological visit within twenty miles of London. With regard to the general structure of the district, Mr. Whitaker is careful to refute the idea that the Tertiary beds were deposited in an eroded hollow of the chalk, as is often supposed; unfortunately, however, his section gives them rather the appearance of being so. We should also notice that although, on the evidence of fragments of Ammonites and Belemnites, he prefers to refer the red beds of the Kentish Town section to the Lower Greensand, none of this formation is represented in the section as lying beneath this part of London.

This convenient little publication, so full of valuable and condensed information, for so small a sum, will be of such great use to the members of the numerous field clubs, that we fear it will soon be out of print. What are 500 copies among so many who would wish to have it?

Snioland; or, Iceland, its Jökulls and Fjalls. By William Lord Watts. (London: Longmans and Co., 1875.)

In a recent number (vol. xii. p. 333) we published a letter from Mr. Watts announcing the important fact that he had succeeded in crossing the Vatna Jökull. So far as is known, this is the first time that this jökull (which means "glacier," and is probably cognate with the latter part of our word *ic-icle*) has been crossed, and the fact is creditable to Mr. Watts's determination and perseverance. The little book before us contains a narrative of an unsuccessful attempt to accomplish the same object, made by Mr. Watts in the summer of 1874. We regret to have to say that the narrative is a disappointing one. It is in the form of a rough diary, which seems to have been sent to the press in its crude form and published with little or no revision. A large portion of the book is occupied with a statement of the many difficulties, petty and serious, which Mr. Watts and his party encountered in the journey from Reykjavik, by the Geysers, Hekla, and the Myrdals Jökull to the Vatna Jökull, and there is really very little information about the region through which he passed. The entire narrative is extremely vague and unsatisfactory, and if Mr. Watts has any literary faculty, he certainly does not show it here; the reading of his narrative is a heavy task. Mr. Watts ought to know a great deal about the region with which this narrative is concerned, and especially about the jökulls in the south of Iceland, and we would advise him to put this information into a systematic form, make but little reference to the difficulties he encountered, obtain a few photographs on a much larger scale than the insignificant things which appear in the present work, and we have no doubt he would make a substantial contribution to our knowledge of Iceland. The party succeeded in getting only about half across the Vatna Jökull, when, from want of the necessary means to go further, they were compelled to turn back, after Mr. Watts had rather unnecessarily and sensationally planted the union jack at his furthest point. Mr. Watts's carelessness, to put it mildly, extends even to his use of language. The use of "laid" for "lay" might possibly be justified by eminent precedents; "peninsular of rock" may be a misprint, but "pulverent" is unjustifiable, and "mollusc" is shocking.

Perhaps the most tangible piece of information conveyed by Mr. Watts is contained in the following paragraph:—

"To sum up, this hitherto untrodden Vatna Jökull is a mountainous tract, surmounted by a rolling plateau, containing numerous volcanoes, one or more of which, upon the north, appear to be in a state of pretty constant activity, while numerous others in all probability are paroxysmal, most likely exhibiting all the phenomena characteristic of (if I may be allowed the term) *bottled up volcanoes*. This tract, together with the Odatha-hraun,

and the centre of Iceland with its numerous mountains, is a new volume of Nature, the first leaf of which has only just been cut, but whose secluded fastnesses will amply repay investigation."

In an appendix Mr. Watts gives some information as to equipment, which intending travellers in Iceland will find useful. The map at the end is on too small a scale to be of much use.

The main object of Mr. Watts's narrative is to attract attention to Iceland and induce travellers to co-operate in its exploration. We hope the work will serve this laudable object, as there is no doubt Iceland presents a handy and fertile field for explorers. Mr. Watts himself deserves great credit for what he has already achieved; we hope he will continue his work, and in a future publication add something of permanent value to our knowledge of the interesting island.

Report on the Neilgherry Lorantheaceous Parasitical Plants destructive to Exotic Forest and Fruit Trees.

By George Bidie, M.B., Madras. (Printed by E. Keys, at the Government Press, 1874.)

SURGEON-MAJOR BIDIE has in this volume presented to the Indian Government a report on the parasitical plants which prove destructive to forest and garden trees on the Neilgherries, and on the best mode of remedying the evil. The whole of these destructive parasites belong to one natural order, Lorantheaceæ, represented in this country by a single species, the Mistletoe, and to two genera, *Loranthus* and *Viscum*. The fruit of the Lorantheaceæ is characterised by the envelopment of the seed in a layer of a viscid substance, described by Dr. Bidie as intermediate in character between resin and india-rubber. Outside this viscid layer is a pulpy body which serves as food for birds and squirrels. After devouring this the seed is rejected, or, in the case of squirrels, passes un injured through the body, and then adheres to the bark of any tree on which it may be cast. If the immediate conditions are unfavourable, the seed will be preserved in a state capable of germination for a very considerable time beneath its viscid covering. With regard to the mode of germination, Dr. Bidie has nothing to add to the information already furnished by Mr. Griffith and Dr. Hooker. With reference to the mode of attachment between the parasite and the host, the author states that although very firmly attached, there is no actual interlacing of the tissues; and that in some instances, after maceration in water for a few days, the parasite could be separated from the host without much difficulty. It is noteworthy that native Indian trees and shrubs do not appear to suffer nearly so much from the attacks of the Lorantheaceæ as introduced, especially Australian, species. One foreigner, however, which appeared quite exempt from their ravages, was the "blue gum," the *Eucalyptus globulus*, which has already so many other useful qualities placed to its credit. Dr. Bidie asserts that the Lorantheaceæ derive their nutriment not from the descending elaborated, but from the crude ascending sap of the host; hence their need for green foliage containing chlorophyll and possessing stomata, in which other parasites are deficient. The volume is embellished by fifteen large lithographs representing the different species, and illustrating the structure of the fruit and the mode of parasitism of the order.

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.]

Personal Equation in the Tabulation of Thermograms, &c.

MR. PLUMMER, in his letter (NATURE, vol. xii. p. 395), has missed the point of the review of the work of the Meteorological