

species of algæ this little manual of the New England species will prove a most welcome volume. They will find in the chapter on the structure and classification facts that were not known in Harvey's day, and which, here collected for them within a brief space, they would otherwise have to search for in the writings of Thuret, Bornet, Janczowski, Rostefinski, Pringsheim, or Reinke.

The Berries and Heaths of Rannoch. (London: G. Bell and Sons, 1881.)

THE berry-bearing plants here described and delineated are eight, viz. *Vaccinium oxycoccus*, *V. Myrtilus*, *V. uliginosum*, *V. vitis Idæa*, *Arctostaphylos uva-ursi*, *A. alpina*, *Empetrum nigrum*, and *Rubus chamaemorus*, all of which do not, strictly speaking, come within the geographical limitation of the title-page. The heaths are three only in number, viz. the common *Erica cinerea* and *Tetralix*, and *Calluna vulgaris*, to which are added two other nearly allied species not actually found within the district, *Andromeda polifolia* and *Loiseleuria (Azalea) procumbens*. In the letterpress it is not to be expected that anything new could be added to what is already known about these plants; but in an appendix is given a list of the Gaelic names of the various species supplied by the editor of the *Scottish Naturalist*. The coloured plates are exceedingly good and characteristic; but surely it should have been stated that they are taken from Sowerby's "English Botany." The volume is a pretty one to lie on the drawing-room table. A. W. B.

Lehrbuch der Mineralogie. Von Dr. G. Tschermak. I. Lieferung. (Wien: Alfred Hölder, 1881.)

IT is with great pleasure that we have received this instalment of Prof. Tschermak's work, and also learnt from the publisher's introductory note that the rest of the book may be expected during the course of a year. The work is sketched somewhat on the lines of Naumann's well-known "Elemente der Mineralogie," but follows Miller's Mineralogy in the wider scope given to mineral physics. The present number is introductory, and treats of descriptive crystallography, crystal-structure, general mineral physics, and includes a considerable portion of mineral optics. In the crystallography the Millerian notation and the stereographic projection are employed, and the systems are developed from the principle of symmetry in a clear and simple manner. Prof. Tschermak has adopted the four-plane axial system in the rhombohedral system, which is sometimes designated the Bravais-Miller system. Possibly this may appear to non-mathematical students simpler, and may to a certain extent be more easily mastered, but we feel sure that in its practical application to crystallographic problems it does not possess either the elegance or conciseness of the three-plane axial system selected by Prof. Miller. We feel also that it is most unfair to Prof. Miller's memory to attach his name, even in a double-barrelled way, to a system which he steadily refused to adopt. The theories and facts of twin and mimetic crystals are carefully expounded. These constitute a branch of mineralogy which has become of the utmost importance since the application of the microscope in the investigation of the optic properties of minerals. Other sections, which are especially good, are those on mineral inclusions, on the hardness and etching of crystal faces. These contain a large amount of information which is rarely to be found except by a laborious search through scientific periodicals. The book is divided into sections, each dealing with its separate subject, and at the end of each section is a list of the more important literature of the subject. The work so far is excellent, and if, as we have every reason to expect, it be carried through in an equally satisfactory manner, we shall possess a text-book in keeping with the reputation of its author and worthy of the school to which he belongs. W. J. LEWIS

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.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to ensure the appearance even of communications containing interesting and novel facts.]

Panizzi and the Royal Society

THE "Life of Panizzi" by his friend and colleague, Mr. Louis Fagan,¹ is marked by a tone of indiscriminate adulation which disfigures many specimens of modern biography. The hero is perfect, and they who think otherwise are dismissed with words of contempt, or are admonished to go and meditate on their wicked ways and then return in repentant mood to the community of hero-worshippers.

In the Royal Society's treatment of Panizzi, Mr. Fagan endeavours to justify another example of the wolf and the lamb, although it must be owned that in the pamphlets² from which the biographer quotes, the lamb's bleatings are sufficiently energetic to lead to the conclusion that he thought himself a match for the wicked wolf.

Mr. Fagan thinks it important "that Panizzi's stormy connection with the Royal Society should be fairly and impartially" stated; although how this can be done without hearing both sides he forgets to say; and yet he professes to give "the proper elucidation of the facts," "the whole circumstances of the case thoroughly weighed and dwelt upon"; how successfully he opposed "the force with which it was attempted to crush the evidence of his superior talent" (vol. i. p. 119), and although "thwarted and impeded at every step, Panizzi at last succeeded in once again proving that right can contend successfully with might" (vol. i. p. 130).

The reader will gain a very lop-sided idea of this quarrel if he trust to Mr. Fagan's account alone; and as in the reviews of this book no one has attempted to ascertain the truth of the matter (which indeed could not be done without access to the Royal Society's papers), I venture, as a member of the present Library Committee, to state the case from the other side, being naturally anxious to sustain the reputation, so unjustly assailed, of a former committee which contained the honoured names of Baily, Beaufort, Children, Greenough, Lubbock, Murchison, Peacock, Roget, and others.³

To make a long story short, it is sufficient to state that about the year 1832 the Royal Society wished to bring out a complete catalogue of the books, &c., in its library. As a preliminary step, a list of the mathematical books was compiled and set up in type as a specimen of the kind of work required. In the words of a Council minute, the sheets were "not designed for publication," they being "in a very rough and unfinished state."

In October, 1832, Dr. Roget meeting Mr. Panizzi at dinner, informed him of the Society's intention, and requested him to look over and revise the sheets in question, together with others that might afterwards be forthcoming. This was agreed to, and the first sheets were forwarded to Panizzi, who found so many errors in them that, as he informed Dr. Roget, "although I would never attempt to correct what had been already done, I was ready to undertake a new compilation."

Accordingly on October 16, 1832, the Library Committee resolved to recommend to the Council that Mr. Panizzi be engaged to make a new catalogue according to the mode to be agreed upon by the Committee, he to be paid 30*l.* for every thousand titles, the whole remuneration, however, not to exceed 500*l.*

¹ "The Life of Sir Anthony Panizzi, K.C.B." By Louis Fagan. Two vols., 8vo, 1880.

² "A Letter to H.R.H. the President of the Royal Society, on the New Catalogue of the Library of that Institution now in the Press." Pp. 56 and 3. Signed A. Panizzi, and dated January 28, 1837. The last three pages contain a postscript letter to the President, dated November 4, 1837, and a note in which it is stated that the pamphlet was not put into circulation until the latter date, in order that H.R.H. might have an opportunity of replying to it.

³ The President, not having availed himself of this opportunity, the second pamphlet was put forth. It is entitled "Observations on the Address by the President, and on the Statement by the Council to the Fellows of the Royal Society respecting Mr. Panizzi, read at the general meeting, November 30, 1837." Pp. 24. Dated December 22, 1837.

⁴ Strictly speaking there were three committees, namely, one for the catalogue, a second for the library, and a third for deciding in doubtful cases under what division a book should be placed in the new catalogue.