

ties, even the characters of families and genera, are almost entirely omitted, but the amount of practical information is nearly as great as that to be found in the more bulky work of Mr. Barrett, who dealt with about 100 species in each volume. No popular book, of course, can compete with the huge encyclopædic work of Mr. Tutt; but then he often devotes 40 or 50 pages of very closely printed but large 8vo. pages to a single species, and his work is only slightly illustrated. Mr. South, however, gives us a profusion of admirable illustrations, and much bulk is saved by an arrangement by which the plates (except the frontispiece) are on opposite sides of the same leaf, in most cases coloured figures of moths occupying one side and plain figures of transformations the other. The introduction is good, and includes useful figures of antennæ and wing-markings, &c., and also remarks on collecting.

The general arrangement followed is that of Staudinger's catalogue of 1901. One point of interest in successive works on British Lepidoptera is the shifting of localities for species, combined with the actual extinction of some, and the discovery or naturalisation of others. The comparison of a series of successive works like those of Petiver, Haworth, Stephens, Westwood and Humphreys, Stainton, and Barrett would bring this out very strongly. Most of the best localities of the older London entomologists has been built over or otherwise destroyed; the best locality for "blues," &c., near Brighton, is now turned into allotments; and several species of butterflies and moths common in many parts of England only fifty years ago are now on the verge of extinction as British species.

We must not omit to mention that Mr. South does not share Stainton's prejudice against English names. In Stainton's time it might have been necessary to discourage their use as against that of Latin names; but at present the latter are so familiar that it is no longer necessary. One suggestion we should like to make. The index is good, but we think a table of contents would also be useful; and if restricted to headings and families, it need not occupy more than a single page. W. F. K.

*Physiologie und Anatomie des Menschen mit ausblicken auf den ganzen Kreis der Wirbeltiere.* By Dr. Felix Kienitz-Gerloff. Pp. vi+130. (Leipzig: B. G. Teubner, 1907.) Price 3 marks.

THIS is a small elementary text-book with a scope similar to that of Huxley's "Elementary Lessons in Physiology." It presents clearly and accurately the main facts of physiology and anatomy from a general educational point of view. While the skeleton, muscles and joints are dismissed with appropriate brevity, the central nervous system, sense organs, excretory organs, and the alimentary, respiratory, and circulatory systems are treated in some detail. As opportunity offers, matters pertaining to general health find suitable mention. The text is lightened by frequent and interesting references to comparative anatomy. The illustrations are taken from standard text-books of anatomy, and are both numerous and well chosen. Although the book is primarily intended for students in a school of agriculture, it ought to have a wide and general circulation. W. W.

*The Elements of Geography.* By J. H. N. Stephenson. Part i., General Geography. Pp. xiii+160; with illustrations and maps. (London: Edward Stanford, 1908.) Price 3s. 6d.

WHAT Mr. Stephenson describes as "general" is more commonly known among teachers as "physical" geography; but since an understanding

of the broad principles with which he deals in this attractive book must precede a study of the geography of special areas, his title sufficiently describes the character of his chapters. The section styled "organic" geography will prove especially useful to teachers as indicating the way in which man's development has been modified by his surroundings, and the manner in which man in his turn has influenced the character and distribution of life on the globe. The book is exceptionally rich in well-executed maps which will increase greatly its usefulness as a class-manual. The volume may be recommended to the careful attention of teachers of geography.

*Lehrbuch der Chemie und Mineralogie für die vierte Klasse der Realschulen.* By Franz von Hemmelmayr and Dr. Karl Brunner (the Mineralogical Portion by Heinrich Leitenberger). Third edition. Pp. 180; with two coloured plates. (Vienna: F. Tempsky, 1906.) Price 2kr. 10hbl.

THIS is an elementary class-book for use in the fourth class in the Austrian State schools, that is, for boys of about twelve or thirteen years of age. It covers much the same ground as the usual elementary class-books on chemistry. In the longest portion of the book, that on inorganic chemistry, however, there are added brief descriptions of the more important minerals which yield the elements under discussion; the pupil is thus at the same time told how chemical compounds and elements occur in nature. Figures are given of crystals of these minerals, but several of them have been placed upside down in the text. There is a short section on organic chemistry, in which prominence is given to compounds of everyday use. The book is very well and clearly printed on good paper.

#### 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 intended for this or any other part of NATURE. No notice is taken of anonymous communications.]

#### The Cotton Plant.

THE full acknowledgment Sir George Watt has given to the slight assistance which I was able to afford him—in those portions of his book which deal with Egyptian cotton—renders criticism difficult, but there are a few points arising from Lieut.-Colonel Prain's recent letter (February 6, p. 318) which seem to call for comment.

While not possessing any general knowledge of the genus *Gossypium*, I have had occasion during the last three years to grow, and to examine in some detail, a number of pedigree cultures of Egyptian cotton—as well as of Uplands and others—in researches on Mendel's law. One result of this work is that I can fully endorse your reviewer's argument that the cotton plant can be studied successfully for systematic purposes in living material only. The herbarium method has many limitations, the most conspicuous of which is perhaps the tendency to take the extreme form of some character which has a large range of fluctuation as the differentiating mark of a variety or species.

Colonel Prain affirms that the ideas of your reviewer as to the meaning of the terms "species" and "variety" do not accord with accepted usage. My general position is the reverse of Colonel Prain's, in that I am unable to obtain any idea as to the nature of species in the genus *Gossypium* by studying the names accorded by Watt to certain plants with which I am acquainted. A particular case is that of the Sudanese tree cottons from Senaar, referred to in the "Wild and Cultivated Cottons of the World" by my numbers 213-1 and 213-2 (pp. 113 and 138). These were supplied to me by Mr. A. G. Braun, of the Woods and Forests Department, Khartoum, in a