

of the mode in which man becomes infected with malaria by means of mosquito bites. It is the clearest and most simple account of a complex and puzzling phenomenon which we have had occasion to read. Neither are domesticated animals left out; and in this section it may be mentioned that the author follows Prof. Keller in regarding humped cattle as descended from the bantian of the Malay countries. On pp. 270-1 Hainan is misprinted Hainau, and *cygnoides* rendered *cygmoides*, while an altogether misleading figure of a lamb is made to serve as the representative of the handsome wild sheep of Transcaspiæ. A brief account of fossil animals, or rather fossil vertebrates, concludes this section of the work, which is followed by the aforesaid chapters from the pen of Miss McCracken.

Chapters on the relation of micro-organisms and sanitation, on ancient and modern man, the struggle for existence, communal life, &c., conclude a very readable book on a very technical subject. R. L.

*How to Enamel: being a Treatise on the Practical Enamelling of Jewellery with Hard Enamels.* By H. M. Chapin. Pp. xii+70. (New York: J. Wiley and Sons; London: Chapman and Hall, Ltd., 1911.) Price 4s. 6d. net.

THIS is an unpretentious little book written by a practising enameller. It describes in plain language the simplest methods of enamelling on metals, and has the merit of avoiding all air of mystery pertaining to the craft. The writing has no claims to literary finish, and the Americanisms scattered up and down the pages will come upon an English reader with something of a shock. But the writer's gift for expressing his meaning plainly, and his practical hints as to helps and hindrances in the work, obviously the result of direct personal experience, will earn the gratitude of the reader who goes to him for instruction.

In so small a compass, of course, no more than the elements of the subject are treated, and the beginner is very properly warned that only experience can teach him his craft. By omitting some not very helpful pages on transferring photographs to enamel, room might have been found for illustrating and commenting on a few fine examples of enameller's work of former ages; or, perhaps more stimulating to craftsmen, some specimens of the handiwork of such modern masters as Lalique, Thesmar, Du Suau de la Croix, Fisher, and Dawson, would have set before the beginner something to remind him that the result of all his efforts will be worth nothing unless quickened by the breath of art.

*History of Geology.* By H. B. Woodward, F.R.S. Pp. vi+154. (The History of Science Series.) (London: Watts and Co., 1911.) Price 1s. net.

No more appropriate writer could have been found for this condensed history of geology than the author of the recently published "History of the Geological Society of London." The personal touches which abounded in that volume have of necessity been curtailed in the treatment of a wider theme; but we meet here pleasantly with Mary Anning (p. 63) and Etheldred Benett (p. 126), side by side with Humboldt and James Hall. The book is clear and interesting in all its chapters. Stratigraphy naturally assumes most importance, since it includes the succession of organisms on the earth, and this is the aspect of geology that appeals most directly to the mind of man. Perhaps there are almost too few references to the difficulty experienced by the early geologists in making headway in countries where adherence to a Jewish system of cosmogony was held to be an act of public morals. Those who begin with Mr. Woodward's present book

may well pass on, guided by his fourth chapter, to the opening pages of Lyell's "Principles of Geology."

Petrology is treated less systematically, and few will agree with the statement (p. 143) that "the petrology of the Igneous rocks has the advantage of being a more exact science than that of Palæontology."

The pertinacity of Romé de l'Isle and the self-sacrificing life of Haüy receive only slight mention on p. 43. We should have liked some reference to the successful stand made by English-speaking geologists against the view that igneous rocks assumed a new facies with the passing of Mesozoic forms of life, and of the part played by Jull in this matter—since other living workers are mentioned—and in the development of the teaching of geology. The heading "Early Geological Maps" (p. 50) does not include William Smith or Macculloch, the maps of the former being described on p. 34, while Macculloch's Scotland has to wait until p. 80. "Progress in British Geology" occurs twice as a heading in chapter iii. These are small points of arrangement and are easy to correct. The portraits of geologists have been selected from good and thoroughly interesting originals. We feel that we must mention specially the early Lyell, the William Buckland expounding the tooth of a hippopotamus, and the thoughtful von Buch resting so naturally in the open air. G. A. J. C.

*A Treatise on Wireless Telegraphy and Wireless Telephony.* By Prof. T. Mizuno. Pp. ix+563+x+208 Figs. Written in Chinese characters. (Tokyo: The Maruzen-Kabushiki-Kaisha, 1911.) Price 4.50 yen, or 9s.

SEVEN years ago Prof. Toshinojo Mizuno, of the Imperial University of Kyoto, published a popular work on wireless telegraphy and telephony. At that time it was difficult to transmit messages more than two hundred miles. The present volume is in the main a theoretical consideration of the same subject, and is intended for the use of students at the university. With the exception of the numerous formulæ and equations which suggest a treatise on higher mathematics, the fact that the text is in Chinese idiographs, places this work beyond the reach of European students. The references to Maxwell and Hertz in the early chapters indicate that the author has started on good foundations. Following these, references are made to the work of many investigators in England, Germany, Italy, and other European countries.

The description of instruments, which are illustrated diagrammatically, concludes with a reference to the telephonic relay of Mr. S. Brown, which shows that the writer is well up to date in regard to modern inventions. The author says but little about his own work, or the contributions to improvements in practical wireless telegraphy made in his own country, but these exist. The whole work may be compared to a play of Shakespeare with actors in Eastern costume, but it also suggests that Japan is abreast with the abstruse researches of the West in connection with which she has made advances.

*Les Machines à écrire.* By J. Rousset. Pp. 177. "Encyclopédie Scientifique des Aide-Mémoire." (Paris: Gauthier-Villars and Masson et Cie., n.d.) Price 2.50 francs.

IN this little book the author dissects the typewriter of commerce, and in a series of chapters shows how in different machines each function is performed. There are fifty-eight figures. The descriptions and figures are clear, and the book should fulfil its purpose. It is a little difficult, however, to see what this purpose is, for ingenious as the mechanism of