

should minimise the value of a text-book to English students in schools, where the rest of the curriculum has to be kept in mind by the teacher.

(2) Prof. Noyes's text-book is particularly interesting and suggestive, and very well got up, with the exception of the illustrations. The treatment is in general more concise than in the other volume, but loses nothing in the way of clearness and accuracy. It should prove a useful book to teachers in the higher forms of schools who wish to add to the interest of their lessons. The summaries at the ends of the chapters will be found useful in revision, and there are numerous suggestive questions and exercises. The elements of organic chemistry, in so far as they concern daily life, are treated in a most interesting manner, and the book should prove serviceable to students of domestic science.

It may fairly be said of both books that they are of a higher order of interest and accuracy than is usual in English books of the same standard. There is too much tendency to follow stereotyped lines in most cases in English books, which no doubt results from a desire on the part of the writers to conform to what they imagine to be useful for examinational purposes. The American writers as a whole are free from this infirmity.

J. R. P.

### Our Bookshelf.

*Moses: The Founder of Preventive Medicine.*  
By Capt. Percival Wood. (Biblical Studies.)  
Pp. xi + 116. (London: S.P.C.K.; New York:  
The Macmillan Co., 1920.) Price 4s. net.

CAPT. PERCIVAL WOOD is, of course, not the first to recognise Moses as the founder of preventive medicine, but he has marshalled his evidence in an interesting and compelling manner in the light of modern research. Thus he ascribes the third plague that smote the Egyptians, that of lice, as the indirect result of the first plague of fouled water-supply, remarking that it does not take long in a warm climate to become infested with lice when personal hygiene is neglected. The frogs, similarly, were driven on to the land by the fouling of the water, and the myriads of dead frogs tended to breed the flies of the fourth plague. The lice and the flies and the rain, together with the destruction of their crops by locusts and hail, would likewise tend to engender epidemic disease among the famine-stricken Egyptians, and hence the culminating plague of all, that of death (the selection of the firstborn in the narrative is a dramatic detail added by a later hand).

The author passes in review the legislation on hygiene and on the control of infectious diseases, and the regulations regarding dietetics. Finally,

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the diet of the Israelites during their wanderings is considered. The nature of manna is problematical. There was evidently a lack of proper food, and the people probably suffered from deficiency diseases—dwarfs, "broken-footed," and "crook-backs" are mentioned, conditions that might result from rickets. As a popular and accurate description of an ancient system of hygiene this book can be cordially recommended.

R. T. H.

*Structural and Field Geology: For Students of Pure and Applied Science.* By Dr. James Geikie. Fourth edition, revised. Pp. xxiv + 454 + lxix plates. (Edinburgh: Oliver and Boyd; London: Gurney and Jackson, 1920.) Price 24s. net.

THE demand for a fourth edition of this handsome work is sufficient testimony to its educational value. The volume reflects the lucid teaching of its author, and the present editor, Dr. Robert Campbell, has found it desirable to make alterations only in definitions and in descriptions of minerals and rocks, in accordance with current usage. Chemical formulæ, which are so useful in suggesting alliances among rock-forming minerals, are still studiously avoided, except in the case of simple oxides. This is surely now unnecessary, when some knowledge of chemistry must be required of all students of a scientific subject. Though Dr. James Geikie expressly stated that he did not write for specialists, a very little more would have held the interest of the reader.

The great aim of the book, however, is the realisation that rocks are to be studied out of doors, and that structural geology is based upon what the earth itself reveals. The selection of full-page photographic illustrations, from those of mountain-crests like Goat Fell to those of rock-surfaces as they actually are seen in Nature, calls us urgently to the field. Contrast the majestic gloom of the Torridonian and Cambrian masses in Plate lxxviii with the sunlit and periwinkled rocks on the Arran shore in Plate xliii, and you perceive the artist in the field-surveyor. It is a compliment to the publishers, as well as to the memory of the author, to say that this is a gift-book of a high attraction.

G. A. J. C.

*Notes Pratiques sur l'Observation Visuelle des Etoiles Variables.* Par Maurice E. J. Gheury de Bray. Extrait de *Ciel et Terre*. (Published by the Author: 40 Westmount Road, Eltham, S.E.9.) Price 2s. 4d. post free.

THE careful and persistent observation of variable stars has risen from being the occasional hobby of a few observers to one of the most important branches of stellar physics, from which far-reaching deductions have been drawn concerning star-life, absolute magnitudes, and the structure of the universe. The number of variables is now so large that a considerable army of workers is required. The author's aim is to enlist recruits, and the field of work that he recommends is that