

The book is a safe and valuable guide and should prove very useful to health officers, physicians and all intelligent persons who desire to understand the principles of disinfection. There is only one important statement that I take exception to, and here the error is on the side of safety. It is stated that disinfection with the fumes of burning sulphur requires eighteen to twenty-four hours, and that the injurious effect on fabrics of this disinfectant contracts its use to narrow limits.

In places where each family occupies an entire house it may be possible to require people to vacate rooms for eighteen hours, but in tenements such as occur in cities this is impossible. We have found, however, that when a room is tightly sealed and four pounds of sulphur are burned to each 1,000 cubic feet, disinfection is practically complete in eight hours, when penetration is not required and the microorganisms to be killed are not more resistant than those met with in diphtheria and small-pox. Its cheapness, ease of use and its value as an insecticide cause us to use sulphur rather than formaldehyde in the rooms requiring disinfection in the tenements of New York city.

WM. H. PARK.

Mineralogy. By H. A. MIERS. The Macmillan Co., 8vo. Pp. 584.

Mr. Miers, for a long time connected with the mineralogical department of the British Museum and now professor of mineralogy in the University of Oxford, has had unusual facilities for the study of mineral specimens, and his book is the result of many years of labor. As stated by the author in his preface, the volume is not an exhaustive system of mineralogy, but is intended rather as a treatise in which students will find all that is required for an elementary acquaintance with the subject. The difficult subjects of mathematical crystallography and the physical properties of crystals are treated carefully and with much detail, and the chapter on the optical properties of crystals is especially helpful and suggestive. In the part treating of descriptive mineralogy, comprising about one half of the volume, essentially the same clas-

sification as adopted by Dana is followed. In the description of species the crystallographic characteristics are given with much detail, and the text is illustrated not only by the usual outline figures of crystals, but also by numerous carefully executed and effective shaded drawings, many of them of characteristic specimens in the British Museum. At the close of the volume there are given tables of minerals arranged according to the chemical classification, optical properties and specific gravity.

The book is one which advanced students will find useful in the study and comparison of specimens, but it is scarcely elementary enough to serve as a text-book for beginners. The volume is handsomely gotten up, and in this respect may serve as a model for books of its kind.

S. L. PENFIELD.

SCIENTIFIC JOURNALS AND ARTICLES.

The American Naturalist for February opens with an important paper on 'The Structure and Relationships of the American Pelycosauria,' by E. C. Case. The author concludes that all known reptiles from the American Permian possessed two temporal arches and that the Pelycosauria followed a line of development here that led to extinction, the persistent line of development being followed elsewhere. These points are dwelt on in a description of the cranial features of various species. V. Sterki presents some 'Notes on the Unionidæ and their Classification,' and gives a scheme of classification, differing somewhat from that of Simpson, based largely on the structure of the hinge, shape of the embryonic and adult shells, and condition of the marsupia. E. L. Mark describes 'A Paraffine Bath Heated by Electricity,' intended to do away with the danger of explosion that attends the use of gas. The number contains the Quarterly Record of Gifts, Appointments, Retirements and Deaths.

THE February number of the *Botanical Gazette* contains the first half of a paper by Dr. E. B. Copeland on 'Chemical Stimula-