

return, we feel that those who receive the collections should pay the expenses of cataloguing, assembling, packing and shipping. The smaller collections will require several days to prepare and ship, the larger ones one or two weeks. The cost of clerical and other assistance will range from \$65 to \$200, depending on the size of the collection.

W. K. MOOREHEAD,
Curator

ANDOVER, MASS.

PUBLICATIONS OF THE VIENNA MUSEUM

DR. VICTOR PIETSCHMANN, as successor of the late Dr. Steindachner, writes of the sad plight of the museum of Vienna in having no means for publication, and no means of disposing of two works already printed. One of these is a Monograph of the Genus *Tenthredo*, the other a Monograph of the *Siphonæ Verticillatæ* from the Carboniferous to the Cretaceous with plates, by Dr. J. Pia. This great work on fossil plants is said to be of especial value, and Dr. Pietschmann has great hopes that some one in America may take fifty copies at \$5.00 each. The price is not great and the crisis is pressing. I suggest that any one willing to help this great center of scientific work to rise to its feet, may (as I have done) send a check for the equivalent in Kroner of five dollars to Dr. Pietschmann, Mechelgasse 2, Vienna 111.3.

DAVID STARR JORDAN

QUOTATIONS

THE PROTECTION OF BRITISH OPTICAL INDUSTRIES

THERE are two main objects which the Bill to be introduced should secure and reconcile. On the one hand, if the industry is to be saved, the manufacturers must be protected from foreign competition aggravated by the state of the exchange; and, on the other, the users of scientific instruments must not be prejudiced or hampered, either by being unable to obtain the best instruments or by having to pay an extravagant price for them. These apparently conflicting interests are not merely recon-

cilable; they are interdependent. If the British optical industry should dwindle and die, the scientific users of instruments will be at the mercy of foreign manufacturers, they will have to pay a heavy price for such dependence, and they will be handicapped as compared with scientific workers in foreign countries possessing a flourishing scientific instrument industry. Similarly, if the scientific users can not obtain the best instruments for their work, or if they have to pay an exorbitant price for them, their work will be hampered, their demand for instruments will decrease, and the manufacturers will ultimately suffer.

The industries, through the British Optical Instrument Manufacturers' Association, ask shortly for the following measures of protection:

1. No optical glass or scientific instruments to be imported into this country for a period of, say, seven years, except under license.

2. Such licenses only to be granted in respect of goods which are not being made in Great Britain in the required quantities or of the required quality.

3. An expert licensing committee to be set up.

4. The optical instrument manufacturers are prepared, in order to guarantee reasonable prices, to submit to a control of profits.

The manufacturers are satisfied and confident that, under such conditions for a limited period, they would be able to establish the optical glass and optical instrument industries on a sound and stable basis, and also be able at the end of the period to meet any foreign competition in the open market. On the other hand, unless they secure this limited protection, it is more than probable—indeed, it is almost certain—that the manufacture of optical glass in this country will cease, and that, in consequence, some of the largest British manufacturers of optical instruments will greatly curtail their production. The proposed measures seem to protect adequately the interests of the scientific users. Moreover,

such a system of control of imports for a limited period seems preferable to anything in the nature of a permanent tariff. It is not likely to have on the industry the emasculating effect of a protective tariff; provided that the period be limited, and that the licensing committee adopt an enlightened policy, prohibition of imports, except under license, is rather calculated to act as a stimulus on the development of the industry.

There is, finally, one point not dealt with in the proposals outlined above. In return for this shield from danger during a limited period, the country may well ask: What guarantee is there that the manufacturers are taking due measure to promote and prosecute the scientific research and scientific methods on which alone ultimately these, or any other, industries can be made efficient and able to stand against foreign competition? The leading manufacturers have combined to form a scientific instrument research association, and in addition many of them are engaged continuously in scientific research. But it is not clear that all the manufacturers who are demanding the legislative measures outlined above are contributing in either or both of these ways to the advancement of the industry. It is worth considering whether the proposed licensing committee should not take this factor into consideration in any specific case in which it is asked to grant or to refuse a license.—*Nature*.

SCIENTIFIC BOOKS

Mineralogy: An Introduction to the Study of Minerals and Crystals. By EDWARD H. KRAUS AND WALTER F. HUNT. McGraw-Hill Book Co., New York. 1920. 561 pages, about 700 figures.

When a new book enters a field supposed to be already rather thoroughly covered, the first thing that will be inquired about it is, wherein does it differ from previous books? A hasty glance through the present volume yields one answer: in the character and quality of the illustrations. The usual line-drawings of crystals are abundantly supplemented

by half-tone views of crystal models, which enable the reader to gain an unusually good idea of the shapes of the crystals described. Then there are portraits of leaders in mineralogy and allied sciences, both past and present, and representing various nationalities. And, finally, there are numerous photographs of mineral specimens, bringing out typical features of the 150 mineral species covered.

Other noteworthy features are a readable chapter on the polarizing microscope, one on gems and precious stones, and one in which the minerals are classified according to elements present, and their uses are discussed. The last 150 pages of the book are devoted to an elaborate determinative table, based on physical properties. Every effort has been made to bring out the practical side of the subject, to show wherein the facts given bear on the everyday experiences of the reader, and to make the subject matter interesting as well as informing.

In certain respects, moreover, the book is more up-to-date than is usual in an introductory text. For instance, in the definition of a mineral, allowance is made for recent discoveries as to variability in composition, and for the occurrence of colloid minerals, thus: "A mineral is a substance occurring in nature with a *characteristic* chemical composition, and *usually* possessing a definite crystalline structure. . . ." Further, a table is furnished for the use of the Merwin color screen in identifying elements by flame tests; and special tests to distinguish calcite from aragonite and from dolomite are given. Modernized formulas are listed for pyrrhotite, limonite, and bornite.

The make-up of the book is on the whole good. The crystal models would have shown up better if they had been coated with ammonium chloride before photographing. There are a number of places in which the type has evidently become pied after the last proof was corrected, but these can be readily set right on reprinting. Through a change in the vowel in the last syllable, the birthplace of scientific mineralogy appears as a castle, rather than the more appropriate mountain; microcosmic