

and in tireless energy, patience and talent, stand out preeminent in their respective groups.

ALBERT MANN

QUOTATIONS

THE BRITISH NATURAL HISTORY MUSEUM

WE learn that there are at present vacancies in the entomological, zoological and geological departments of the Natural History Museum which have been open for several months, and that more vacancies are expected in the immediate future. The museum is one of the great national instruments for the collection, classification, and preservation of specimens of the animal and plants, the rocks and minerals, of the world. For the adequate performance of its duties, it must have a full staff of able and devoted specialists. It should require no defense on utilitarian grounds, for the advancement of natural knowledge of the kind to which it is devoted is recognized as a privilege by every civilized state. But there are plenty of utilitarian arguments. Take entomology alone: the number of living species of insects is estimated at over 2,000,000. The preserver of insect life on human life is continuous. As household pests, as carriers of disease, as enemies of stores or crops, they are every day being found to have an unexpected economic importance. It is to the experts and the collections of the Natural History Museum that we have to turn for the requisite information, and unless the museum has an adequate staff we turn in vain. The difficulty in filling posts with suitable men is partly financial. The present rate of pay for assistants in the second class is from £150 to £300, and in the first class from £300 to £500 a year, with a temporary war bonus. These salaries—the “despair” of Professor Stanley Gardiner, whose cogent letter we publish in another column—are no longer sufficient to attract or to retain men of the right attainments, unless they happen to have private means. The smallness of the staff and its inevitable division into water-tight compartments makes promotion slow and capricious. These disadvantages are increased by an

antique privilege of the principal trustee, who nominates candidates for vacancies instead of advertising for them. It has frequently happened in the past that middle-aged mediocrities have been brought in and placed over the heads of the existing staff because of their acquaintance with a group in which some of the trustees are interested. The fact is that the mode of governance of the Natural History Museum is medieval. It should be separated from Bloomsbury and placed under a body of trustees selected not because they make a hobby of collecting bugs or butterflies, but because they have a wide knowledge of the scientific purposes which it is the business of the museum to subserve.—*The London Times*.

SCIENTIFIC BOOKS

Geodesy, including Astronomic Observations, Gravity Measurements and Method of Least Squares. By GEORGE L. HOSMER. John Wiley and Sons. First edition, 1919, 377 pages, 6 × 9, 115 cuts.

This book is especially to be commended for the skill shown in the selection of illustrations, both photographs and drawings, and for the excellence of arrangement and printing of the text and tabular matter. These things contribute substantially to the satisfaction and comfort of the user.

Still more is the book to be commended for its positive qualities, which make it a distinct and valuable addition to that part of the literature of geodesy which serves to carry information and understanding from the extreme specialists who are developing the methods and extending the knowledge in these fields, to the students and the practising engineers who desire to get a well-balanced view of the whole field of geodesy quickly. The old well-known matters are restated well in effective grouping. The ideas, formulæ and tables most needed by the student and the practising engineer are selected from the great mass of available material with rare skill. The recent developments in geodesy are shown in true perspective with respect to old things, to a quite unusual extent for a text-book.