

the Harvard College Observatory, and will put the lists of known maxima and minima in the convenient shape of tables. While the former catalogue will make a volume of about 500 pages (quarto size), the latter will only have one third of this bulk. Both catalogues will be a very valuable accession to our literature on this subject.

*Useful Work for a Small Equatorial—A Proposed Discussion.*

The discussion was opened by Professor Edward C. Pickering. He stated that measurements of wide double stars might be useful, but that the positions of stars much more than 5" apart could be better determined by photography, while closer stars required a large telescope. The brightness of stars can now be readily and inexpensively determined with a wedge photometer, and the relative light of the components of close doubles by a polarizing photometer. The Herschel-Argelander method could be usefully applied to faint stars, especially to the components of coarse clusters, and to *Durchmusterung* zones, inserting all stars brighter than a fixed magnitude. Variable stars of long period can be usefully followed by inexperienced observers, since the range is large. Observations of suspected variables, of Algol, and other short period variables, are likely to be of little value, except when made by observers having long experience. But little useful work could be done with spectroscopes attached to small telescopes. A search for new stars in the Milky Way, and an examination of known nebulae to see if they are gaseous, as was, perhaps, first done by Col. John Herschel, might prove of value. Observations of Jupiter's satellites, comets, sunspots and solar prominences were also mentioned as useful fields of work for instruments of this class.

FRANK B. LITTELL,  
For the Council.

SCIENTIFIC BOOKS.

*Die Moore der Schweiz, mit Berücksichtigung der gesamten Moorfrage.* Von Dr. J. FRÜH und Dr. C. SCHRÖTER. (Beiträge zur Geologie der Schweiz, herausgegeben von der geologischen Kommission der Schweiz, naturforschenden Gesellschaft, geotechnische Serie, III Lieferung.) Bern, 1904. 4°, pp. xviii + 751. 45 text-cuts, 4 plates and a map.

Probably every person seriously interested in peat-bogs (or, as we may better call them, peat-moors), whether it be from a geological, a phyto-ecological or an economic standpoint, has known that the present work was in preparation and has eagerly anticipated its appearance. The authors are well known as among the foremost authorities upon the subject, and their work now before us fully satisfies our high expectations. While primarily devoted to the study of the Swiss moors, the authors nevertheless discuss every question also from the general or world standpoint, so that the work as a whole is in reality a study of peat-moors based upon those of Switzerland as types. It is divided into two parts, a first devoted to Moor-questions in general (435 pages), and a second given to a systematic description of those of Switzerland (310 pages). Under the first part is discussed, the general nature and place of moors, peat-building plant-groups (a modern ecological study), peat and its nature, geology of moors, geographical distribution of moors, a geomorphological classification of the moors of the world, nomenclature in relation to physical features, agricultural conditions of the Swiss moors, post-glacial vegetation history and its reconstruction through moors. Every chapter is characterized by exhaustive but clear treatment, by copious citation of literature, including that of this country, and by appropriate illustration. Among the illustrations are many of those diagrammatic vegetation cuts now coming into vogue in ecological works, while the plates include two typical photographic moor-scenes, of which we could wish there were many more. It is impossible here to particularize farther, and it must suffice to say that this work is incomparably the

most exhaustive, authoritative and generally excellent treatise upon its subject which has yet appeared, and that it must form the foundation-work for all future studies upon matters connected with peat-moors.

W. F. GANONG.

#### SCIENTIFIC JOURNALS AND ARTICLES.

THE January number of the *Botanical Gazette* contains a paper by Rodney H. True and C. S. Oglevee giving the results of studies on the effect of such insoluble substances as sand, starch grains, filter paper, etc., upon the toxic action of electrolyte and non-electrolyte poisons in aqueous solution. It appears that the insoluble body adsorbs the poison solute, thus diminishing the effective concentration of the latter as though it were taken out of solution.—Burton E. Livingston describes the types of soil and of vegetation in the north-central part of the southern peninsula of Michigan (Roscommon and Crawford counties), and discusses the influence which the soil has in determining the distribution of the various plant societies. He concludes that the amount of soil moisture, determined largely by fineness of soil particles, is the main controlling factor here.—A. D. E. Elmer describes a number of new and noteworthy Californian plants.—Edgar W. Olive discusses the morphology of *Monascus purpureus*, taking up the accounts of Barker and Ikeno and giving certain results of his own observations.—B. M. Davis discusses fertilization in Saprolegniales based upon a recent paper by Trow; and also the sexual organs and sporophyte of Rhodophyceæ based upon a recent paper by Wolfe.

*The Journal of Nervous and Mental Disease* for January opens with a paper by Dr. F. X. Dercum, giving an exhaustive and careful report of three cases, one being illustrated, which bear upon the question of the relation of syphilis to spastic spinal paralysis and also indirectly upon the question of Erb's form of spinal syphilis. Dr. S. D. Ludlum contributes an article on the 'Possible Relationship of Neuro-fibrillar Changes to Insanity.' He summarizes the literature bearing on the subject, and reports a series of experiments con-

ducted at Friends' Asylum which leads to the hypothesis of a close relationship between fibrils and mental manifestations. An interesting case of tumor of the occipital lobe with an unusual clinical history is reported by Dr. Philip Zenner; also one of carcinoma of the spine following carcinoma of the breast, the spinal disease being characterized by a phenomenally long course, possibly due to removal of the ovaries some four years before the patient's death. The October meetings of the New York Neurological Society and the Boston Society of Psychiatry and Neurology are reported. The 'Periscope' for the month contains abstracts of the following journals: *Monatsschrift für Psychiatrie und Neurologie*, *Brain*, *Neurologisches Centralblatt*, *Revue de Psychiatrie et de Psychologie Expérimentale*, *Centralblatt für Nervenheilkunde und Psychiatrie*, *American Journal of Insanity*, *Journal de Neurologie*, *Archives de Neurologie*, and selected articles from miscellaneous periodicals. The books reviewed in this number are 'Epilepsy and its Treatment,' by Dr. W. P. Spratling; 'La Mimica del Pensiero Studio e Ricerche,' by Dr. Sante de Sanctis; two volumes of 'The Doctor's Recreation Series,' edited by C. W. Moulton; 'Manuel pour l'Etude des Maladies du Système Nerveux,' by Dr. Maurice de Fleury; 'A Manual of Psychology,' by G. F. Stout; 'Trattato delle Malattie Mentali,' by Professor E. Tanzi; 'Lehrbuch der Nervenkrankheiten für Aerzte und Studierende,' by Professor H. Oppenheim; 'Essentials of Nervous Diseases and Insanity,' by Dr. J. C. Shaw; 'Nietzsche,' by P. J. Möbius; 'Mental Defectives, their History, Treatment and Training,' by Dr. M. W. Barr, and 'The Physician's Visiting List for 1905-1906.' The issue closes with two pages of 'News and Notes.'

#### SOCIETIES AND ACADEMIES.

THE NEW YORK ACADEMY OF SCIENCES.

SECTION OF GEOLOGY AND MINERALOGY.

At the meeting of the section held on February 6 the following papers were read by title:

*Moissanite, a Carbon Silicide from the Cañon Diablo Meteorite:* GEORGE F. KUNZ.