the work. A goodly treatise on each drug is found, embracing references to its origin; discussions of its gross structure, microscopic structure and features recognizable in its powder; and mention of constituent substances present.

Although no attempt is made to include all the drugs, yet few important ones will be missed by the student looking for information.

Excellent original illustrations accompany a large number of the descriptions. It is to be regretted that these are in some cases replaced by inferior mechanical reproductions of plates in larger works.

The discussions are in the main botanically correct and the style is fairly clear. The treatment of *Polygala senega* leaves something to be desired from the standpoint of anatomical accuracy. One wonders a little, too, at such expressions as 'Therefore the cork cambium of the wood bark produces an apparently abundant periderm,' and 'the nucleus of the young plant,' in speaking of the structure of seeds.

Imperfections aside, however, it is well within the truth to say that this volume is the nearest approach which has yet appeared towards filling the need of the day in this country.

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SCIENTIFIC JOURNALS AND ARTICLES.

THE January-February number of The Journal of Geology, which is the first one of Vol. XIII., contains a paper by Professor Albrecht Penck, of the University of Vienna, on 'Glacial Features in the Surface of the He concludes that "The actual surface features of the Alps do not at all correspond to those of a water-worn mountain Their conformation is mostly due to ice-action." Mr. E. B. Branson contributes a systematic paper on fish teeth, entitled 'Notes on Some Carboniferous Cochliodonts, with Descriptions of Seven New Species,' which is illustrated by two plates. Dr. Charles P. Berkey describes the 'Laminated Clays of Grantsburg, Wis. (with Chronological Deductions),' which is illustrated by a map showing the glacial deposits of that region. ward M. Shepard gives an interesting account of 'The New Madrid Earthquake,' accompanied by five figures, and states that 'the elevation and depression of the land in the New Madrid region * * * were due to the great artesian pressure from below.' Dr. Charles R. Keyes contributes a paper, with five figures, on the 'Structure of Basin Ranges' as found in New Mexico. Professor Stuart Weller contributes a valuable article on 'The Classification of the Upper Cretaceous Formations and Faunas of New Jersey.' It contains a valuable chart showing the equivalence of the classifications of Cook, 1868; Clark, 1892-1904; Knapp-Kümmel, 1898–1904; and Weller, 1905.

The American Geologist for February contains, as the leading article, a paper by Dr. Alfred C. Lane on 'The Coarseness of Igneous Rocks and its Meaning,' illustrated by a plate showing the 'Luster-mottling in Drill-cores of Ophites.' Professor L. C. Glenn contributes a biographical sketch, with portrait, of 'Gerard Troost,' the first state geologist of Tennessee. 'Notes on Some Rocks and Minerals from North Greenland and Frobisher Bay,' illustrated by a plate showing the banded limestone of Frobisher Bay, is published by Professor B. K. Emerson. The 'Montana Gypsum Deposits' are described by Professor Jesse P. Rowe. The deposits are divided into the North Field, concerning which little is known; the Middle Field, given as of Carboniferous age; and the South Field, which is regarded as in the same formation as the gypsum beds of Wyoming and as of Permian or Triassic age. The paper is illustrated by three plates giving six views of the gypsum deposits and a map showing their distribution.

The Museum News for April, published in the interest of the museums of the Brooklyn Institute is issued in place of the Children's Museum News and will deal with matters relating to both the Central and Childrens' Museums. Its object will be to keep the public advised of changes in and additions to the collections, and to note the general work of the

museums and advantages offered in the way of lectures and material. Among other things it notes the formal turning over of the Central Section of the Museum Building on Eastern Parkway to the Institute, and the opening of the Ethnological Hall.

Bird Lore for March-April contains articles on 'The Cormorants of Great Lake,' by T. Gilbert Pearson; 'Mark Catesby,' by Witmer Stone: 'The Chimney Swift,' by Guy A. There is a list of 'Bird Lore's Advisory Councilors' and the ninth paper on the 'Migration of Warblers,' by W. W. Cooke, a note on 'The Warbler Book' and a sketch of 'The Worm-eating Warbler,' by Frank L. There are important book reviews and important matter in the section devoted to 'Audubon Societies.' In connection with the 'Educational Leaflet' devoted to the ostrich it would be interesting to know if any of the North African Struthio camelus are to be found in captivity. All the eggs for sale are those of the South African species S. australis.

The Museums Journal of Great Britain for March is a specially interesting number and opens with an article by John MacLauchlan on 'Government Aid to Country Museums,' which shows what has been done in Great Britain. It is interesting to note in connection with the proposed establishment of a 'Welsh National Library and Museum' that various cities have offered very substantial inducements in order to have the institution located in that particular place. There is a notice of David Murray's three volume work, entitled 'Museums, their History and their Use,' and the balance of the number is given over to notes of many museums, including a notice of the recent appointment of Sir Purdon Clarke to the directorship of the Metropolitan Museum of Art. The very full directory of British museums has advanced as far as Portsmouth.

SOCIETIES AND ACADEMIES.

THE SAN FRANCISCO SECTION OF THE AMERICAN MATHEMATICAL SOCIETY.

The seventh regular meeting of the San Francisco Section of the American Mathe-

matical Society was held at Stanford University on February 25, 1905. Fourteen members of the society were present. A number of other teachers of mathematics living in or near San Francisco attended both of the sessions. The following papers were read:

PROFESSOR H. F. BLICHFELDT: 'On a theorem due to C. Jordan.'

Professor H. F. BLICHFELDT: 'On the order of the collineation-groups in five variables.'

PROFESSOR A. W. WHITNEY: 'A theorem in the theory of probabilities, and its application to insurance.'

Professor R. E. Moritz: 'A general theorem on local probability.'

PROFESSOR E. J. WILCZYNSKI: 'Projective differential geometry of plane curves.'

Dr. W. A. Manning: 'On the primitive groups of class ten.'

PROFESSOR G. A. MILLER: 'Invariant sub-groups of prime index.'

Professor Irving Stringham: 'A geometrical construction for quaternion products.'

PROFESSOR A. O. LEUSCHNER: 'On the general applicability of the short method of determining orbits from three observations.'

Professor T. J. J. See: 'On the physical state of the matter of the earth's interior, with considerations on terrestrial geology, and on the comparative geology of the other planets.'

In the absence of their authors the papers by Professors Moritz and Wilczynski were read by Professors Leuschner and Haskell, respectively. The paper by Dr. Manning was presented by Professor H. C. Moreno. The next meeting of the section will be held at the University of California on September 30, 1905.

G. A. MILLER,

Secretary of the Section.

THE PHILOSOPHICAL SOCIETY OF WASHINGTON.

The 598th meeting was held March 18, 1905. Mr. F. B. Littell, of the Naval Observatory, read a paper on the 'Progress of the Eros Solar Parallax Campaign.' He told in detail of the elaborate plans of work, of the numerous astronomers cooperating in it and of the results thus far obtained. Twenty-eight observatories furnished 6,600 visual observations and thirteen furnished photographic plates; of these, 835 have been measured, reduced and