observes: "Anyone who has had occasion to verify citations must know that the amount of inaccuracy and misrepresentation in current synonymies, even the most authoritative and elaborate, is simply astounding. They abound with names which do not even exist in the works cited, with those which do not correspond with the originals in orthography, with others that have no use or meaning whatever, being evidently culled from indices without reference to what their status may be on the pages indicated."

In matters of nomenclature the author has followed the American Ornithologists' Union 'Code of Nomenclature,' which has 'been strictly adhered to in all respects.' He has, however, reached different conclusions, in a few cases, regarding the status of certain forms, from those of the A. O. U. Committee. Considering the large amount of time he has been able to give to such points, aided by access to all of the available material, the benefit of the doubt may be safely permitted to rest with Mr. Ridgway, till some equally competent expert, with superior resources, reverses his conclusions.

The 20 plates give outline figures of the bill, feet, tail and wings of each genus treated, and are thus a valuable aid to the student. The work in all its details shows the author's characteristic and well-known thoroughness of treatment, and ornithologists the world over will wish him health and strength to complete the enormous undertaking involved in the preparation of the 'Birds of North and Middle America.'

J. A. A.

## SCIENTIFIC JOURNALS AND ARTICLES.

The American Naturalist for January begins with an article on 'Prehistoric Hafted Flint Knives,' by Charles C. Willoughby, describing various forms of these implements; Douglas H. Campbell discusses 'The Affinities of Certain Anomalous Dicotyledons' and J. H. Comstock and Chujiro Kochi present a long and careful study of 'The Skeleton of the Head of Insects,' using the known facts of embryology to give a clearer idea of the structure of the head, attention being mainly given

to representatives of the more generalized orders of insects. The article is well illustrated and a long list of references is appended. R. W. Shufeldt contributes a paper 'On the Habits of the Kangaroo Rats in Captivity,' and under the title 'A Contribution to Museum Technique' S. E. Meek describes the method of mounting fishes for exhibition in flat jars, the specimens being hardened in alcohol, then painted with water-colors and then replaced in alcohol.

The Plant World for December, 1901, contains 'Farther Notes on Trees of Cuba,' by Valery Havard, with a fine plate of the silk cotton tree; 'Notes on the Pan-American, Exposition,' by Pauline Kaufman, in which we are sorry to see an account of a 'petrified body'; 'The Flora of Snow Cañon, California,' by S. B. Parish, besides the customary Briefer Articles, Notes and Reviews. In the Supplement Charles L. Pollard continues the description of the families of the order Parietales.

The Museums Journal, of Great Britain, contains a brief biographical sketch of Dr. Henry Woodward, who has just retired from the keepership of the department of geology in the British Museum. J. G. Goodchild describes, under 'Astronomical Models in Museums,' a practical orrery on a rather large scale devised by him for the Edinburgh Museum of Science and Art, and D. P. H. discusses 'Hygiene as a Subject for Museum Illustration,' giving an outline of the method and objects of such an exhibit. There are a few short articles and numerous notes on Museums in various parts of the world.

The American Museum Journal for November-December continues L. P. Gratacap's paper on 'The Development of the American Museum of Natural History,' and deals with the department of vertebrate palæontology. Other articles deal with recent work of the Museum, and the number has a well-illustrated supplement on 'The Saginaw Valley Collection,' by Harlan I. Smith, which is to serve as a visitors' handbook.

Following the death of Dr. Charles Henry Brown, the former proprietor of the *Journal*.

of Nervous and Mental Diseases, Dr. Smith Ely Jelliffe of New York has become the responsible editor. Dr. William Osler, Dr. Frederick Peterson and Dr. Wharton Sinkler have joined the advisory board. Dr. William G. Spiller of Philadelphia will continue to be acting editor.

## SOCIETIES AND ACADEMIES. THE AMERICAN PHYSICAL SOCIETY.

THE Annual Meeting of the Physical Society was held at Columbia University on Dec. 27, 1901. From some points of view the date was an unfortunate one, coming as it did so soon after Christmas day. But in spite of this fact the attendance was unusually good, while the program included a larger list of papers than that of any previous meeting except the one held in connection with the New York meeting of the American Association in 1900.

Officers were elected for the year 1902 as follows:

President, Albert A. Michelson; Vice-President, Arthur G. Webster; Secretary, Ernest Merritt; Treasurer, William Hallock.

Messrs. Carl Barus, D. B. Brace and A. L. Kimball were elected members of the Council of the Society.

The following papers were read:

- 'A Suspected Case of the Production of Color by the Selective Electrical Resonance for Light Waves of Very Minute Metallic Spheres': R. W. Woop.
  - 'Report on Electrostriction': Louis T. More.
- 'Further Experiments on Electrostriction': J. S. Shearer.
- 'The Transmission of Excited Radioactivity': E. RUTHERFORD.
- 'Excited Radioactivity and Ionization of Atmospheric Air': E. RUTHERFORD and S. J. ALLEN.
- 'Note on Drude's Elektronentheorie': E. H. HALL.
- 'The Disturbances of a Plumb-bob suspended on a Steel Wire': Wm. HALLOCK.
- 'A Thermograph for Earth Temperatures': Wm. Hallock.
- "The Viscosity of Water determined by the Aid of Capillary Ripples": F. R. WATSON.
- 'Magnetization of Steel at Liquid Air Temperatures': C. C. TROWBRIDGE.
  - 'The Pfanndler Calorimeter': W. F. MAGIE.

- 'Standards of High Electrical Resistance': H. C. PARKER.
- 'Variation of Contact Resistances with Change of E. M. F.': H. C. PABKER.

'On a Ruling Engine for Diffraction Gratings': A. A. MICHELSON. (Read in abstract by the Secretary.)

The next meeting of the Society will be on Feb. 22, at 10:30 o'clock A. M., in Fayerweather Hall, Columbia University.

ERNEST MERRITT,
Secretary.

## OHIO STATE ACADEMY OF SCIENCE.

The eleventh annual meeting was held at Columbus, November 29 and 30. This was a month earlier than the usual time but the attendance was as good as usual, about thirty-five. The policy of holding a summer field meeting every year the Academy decided to abandon. Some of these meetings have proved very successful, but of late the attendance of members living at a distance has been small, except when held in connection with the meeting of some other organization. Hereafter the executive committee each year may or may not call a summer meeting.

The following resolution was passed: "That the Academy, through its secretary, respectfully represent to the postal authorities that the present provisions and rulings of the postal department regarding transmission of natural history specimens are inconsistent and a serious hindrance to exchange of scientific material and urge that better provisions be afforded."

The secretary read obituary notices of Edward W. Claypole, first president of the Academy, and of Mrs. Claypole, and a committee was appointed to draft a suitable memorial.

A letter was read from Emerson E. Mc-Millin, again placing \$250 at the Academy's disposal. Eighteen persons were elected to membership.

The topographic survey of Ohio by the U.S. Geological Survey in cooperation with the State was begun in 1901 as a result of determined efforts put forth by the Academy of Science beginning in 1896, when Albert A.