coequal of the Royal Society of London, is therefore especially grateful to him. Acting as his proxy I thank the members of the Academy for the distinction which they have by their votes conferred upon him.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The preliminary announcement of the 45th meeting, to be held in Buffalo, August 22d to August 29th, calls attention to the fact that the Association met at Buffalo in 1866, 1876 and 1886, and to the special advantages of Buffalo as a place of meeting. Most of the meetings will be held in the Buffalo High School buildings, and the Hotel Iroquois has been designated as headquar-The first meeting of the Council will be at noon on Saturday, August 22d, and the first General Session will be held on Monday morning, August 24th. will give Tuesday, Wednesday, Thursday and Friday as the four days entirely devoted to the reading of papers in the sections. Saturday will be given to excursions.

The meeting will be called to order by the retiring President, Prof. Edward W. Morley, Adelbert College, who will introduce the President-elect Prof. E. D. Cope, University of Pennsylvania. An Address of Welcome will be delivered by Edgar B. Jewett, Mayor of Buffalo, Chairman of the Local Committee, who will be replied to by President Cope. The address of the retiring President will be given in the evening, and in the afternoon the addresses of the Vice-Presidents, as follows:

President Carl Leo Mees, of the Rose Polytechnic Institute, before the Section of Physics, on 'Electrolysis and some outstanding problems in Molecular Dynamics.' Miss Alice C. Fletcher, Washington, before the Section of Anthropology, on the 'Emblematic Use of the Tree in the Dakotan Group.' Prof. B. K. Emerson, Amherst College,

before the Section of Geology and Geog-Prof. W. raphy, on 'Geological Myths.' E. Story, Clark University, before the Section of Mathematics and Astronomy, on 'Intuitive Methods in Mathematics.' Prof. William R. Lazenby, Ohio State University, before the Section of Social and Economic Science, on 'Horticulture and Health.' Dr. Theo. Gill, before the Section of Zoölogy, on 'Animals as Chronometers for Geology.' Prof. William A. Noves, before the Section of Chemistry, on 'The Achievements of Physical Chemistry.' Prof. N. L. Britton, before the Section of Botany, on 'Botanical Gardens.' Frank O. Marvin, University of Kansas, before the Section of Mechanical Science and Engineering, on 'The Artistic Element in Engineering.'

It being designed to make of the Buffalo meeting practically a week of solid work, the Local Committees must, as far as possible, arrange the entertainment so as not to break in upon the business of Sections. Probably upon the evening of the first working day, Monday, August 24th, will be given the reception by the ladies of Buffalo, and a gentlemen's reception is to be appointed for some evening at the Buffalo Club. On another evening there will be a carriage drive or a moonlight ride upon Lake Erie, and the public lectures will fill out the complement of entertainment prior to the special trip of the session, which will be a general complimentary excursion for the Association to Niagara Falls, on Saturday, August 29th.

In addition to the magnificent natural scenery and its scientific aspects the power house of the Cataract Construction Company will be visited.

Several special excursions will be undertaken by the separate sections, and during the week preceding the meeting, parties will be conducted through western New York under the auspices of the Geological Society of America. These excursions will be as follows:

Stratigraphy and Paleontology: Conductor, Prof. Charles S. Prosser, Union College. The purpose of this excursion will be to examine the several rock formations in western New York, with their characteristic fossils. The party will probably gather at Syracuse on Monday, August 17th, where the Salina, Helderberg, Oriskany and Onondaga strata are well shown. The Genesee ravine at Rochester, the streams entering the Genesee, and the gorge of the Genesee at Mt. Morris, will be especially studied.

Petrography: Conductors, Prof. James F. Kemp, Columbia University, and Prof. Charles H. Smyth, Jr., Hamilton College.

The party will meet at Port Henry on Lake Champlain, on Monday, August 17th, and spend two or three days under the guidance of Prof. Kemp, in the Lake Champlain valley and the eastern Adirondacks, visiting the quarries, iron mines, crystalline limestones, gabbros, anorthosites, bostonites and camptonites, and incidentally the Paleozoic exposures. will then go by stage through the mountains to Lake Placid, where they will proceed by rail to Gouverneur. Prof. Smyth will conduct them to the talc mines, red hematite mines, contacts of gabbro and limestone, gneiss and other rocks of this vicinity.

Economic Geology: Conductor, Dr. F. J. H. Merrill, State Museum.

The excursion will meet at Syracuse and Rochester on Monday or Tuesday, and spend the week in a study of the mineral resources of the western part of the State. The subjects of study will be as follows: The salt fields at Syracuse and either Le-Roy or Warsaw; the salt mines at Lehigh, Livonia or Retsof; the gypsum mines at Garbutt; the Medina sandstone quarries at Brockport, Albion or Medina; the 'marble' quarries at Lockport, the marl beds and

cement works at Wayland; the waterlime cement works at Akron or Buffalo.

Pleistocene Geology. Conductors, Mr. G. K. Gilbert, United States Geological Survey, Mr. Frank Leverett, United States Geological Survey, and Prof. H. L. Fairchild, University of Rochester.

The area of western New York is an exceptionally interesting field for the study of glacial and glacio-lacustrine phenomena. The party will gather at Rochester on Monday, August 17th, and spend two days in that neighborhood in observation of the drumloids, kames and moraines, and the lacustrine phenomena of the glacial lakes Warren and Iroquois. Southwest of Batavia, Mr. Leverett will take the party over the Warren beaches and their correlating The study of Niagara gorge moraines. and related features will be left until the close of the Association meeting, when Mr. Gilbert will take charge of the party.

The affiliated societies meeting at Buffalo are as follows:

The Geological Society of America will hold its eighth summer meeting on Saturday evening, August 22d, at 8 o'clock, in the Lecture Hall of the Buffalo Society of Natural Sciences, basement of the Library Building. This meeting will be for administrative business and reading of papers by title. The papers will be presented and discussed in Section E during the following week. Joseph LeConte, Berkeley, Cal., President; H. L. Fairchild, Rochester, N. Y., Secretary.

The American Mathematical Society will hold its summer meeting in the Lecture Hall of the Society of Natural Sciences, Buffalo, on August 31st and September 1st. F. N. Cole, Columbia University, New York, Secretary.

The American Chemical Society will hold its thirteenth general meeting in Buffalo, on Friday and Saturday, August 21st and 22d, in room on the first floor of the High School. Dr. Charles B. Dudley Altoona, Pa., President; Dr. Albert C. Hale, Brooklyn, N. Y., Secretary.

The Society for the Promotion of Agricultural Science will hold its meetings in the Library Building, August 21st and 22d. Prof. Wm. R. Lazenby, Columbus, Ohio, President; F. M. Webster, Wooster, Ohio, and Herbert Osborne, Ames, Iowa, Vice-Presidents; Prof. Charles S. Plumb, Lafayette, Indiana, Secretary.

The Association of Economic Entomologists will hold its eighth annual meeting in the Library Building, August 21st and 22d. C. H. Fernald, Amherst, Mass., President; C. L. Marlatt, Washington, D. C., Secretary.

The Botanical Society of America will hold its second annual meeting in Buffalo High School, on Friday and Saturday, August 21st and 22d.

The Society will be called to order by the retiring President, William Trelease, of St. Louis, on Friday, at 3 P. M. The President-elect, Charles E. Bessey, of Lincoln, will then take the chair. The afternoon session will be devoted to business. At 8 P. M. the retiring President will deliver an address in the High School chapel; subject, 'Botanical Opportunity.' The sessions of the Society for the reading of papers will be held on Saturday, at 10 A. M. and 2 P. M., in room 16, High School. Prof. C. R. Barnes, Madison, Wisconsin, Secretary.

The Botanical Club of the Association will meet at 9 o'clock, Tuesday morning, August 25th, in the rooms assigned for the use of Section G (Botany). Frederick V. Coville, President; Prof. Conway MacMillan, Vice-President; J. F. Cowell, Sec'y. and Treas.

The Society for the Promotion of Engineering Education will meet in the rooms of the Lugineers' Society of Western New York, Library Building, on Thursday, Friday and Saturday, August 20th, 21st, 22d. Prof. Mansfield Merriman, Lehigh University, President; Prof. C. Frank Allen, Massachusetts Institute of Technology, Treasurer.

CURRENT NOTES ON ANTHROPOLOGY.
THE BULL-ROARER, OR BUZZ.

THE value of the study of games and gaming implements to ethnology is well illustrated by a monograph which is printed in the last (ninth) volume of the Transactions of the 'Verein für naturw. Unterhaltung,' of Hamburg, by Prof. J. D. E. Schmeltz, the genial editor of the 'International. Archiv. für Ethnographie.' His subject is the familiar humming toy called by our boys the buzz (German, Schwirrholz or Waldteufel). Taking it up in the true scientific spirit, he sets about to study the various forms in which it has been made, the materials selected for its construction, the geographical localities in which its use has been reported, and the purposes for which it has been employed by various peoples. A plate is appended showing the various shapes which have been devised for it by different tribes. The result is that which is practically invariable when we examine with entire thoroughness any of these survivals from remote ancestral conditions: "We discover that one and the same implement was manufactured and connected with the same associations among tribes of the most widely different races. Does not this add another to the remarkable proofs that whether men have straight or crumpled hair, white or black skins, they are mentally so allied that their thoughts and even their follies are over and over again identically repeated?"

GEOGRAPHICAL MARKINGS ON NATIVE UTENSILS.

The Brazilian explorer, Dr. Karl von den Steinen, calls attention in the Ethnologisches Notizblatt, No. 3, to a series of figures burned or scratched on the gourds used by the Lenguas Indians on the Paraguay river. They represent a number of circles connected by crooked lines. Their meaning would scarcely be guessed by an observer,