

of a people who had no contact with Europeans, but who were undoubtedly pre-Columbian. Nor does the evidence of the American origin of the pumpkin solely rest upon the seeds discovered. A whole fruit with the stem intact is incorporated in the collection. Beside the fruit, we have the strongly ribbed stems of the fruit used by the cliff dwellers as stoppers for bottles. According to the distinction made by Naudin, the stem of *C. maxima* is smooth; that of *C. Pepo* is strongly fluted and roughly corrugated. So much for botanical evidence.

That the pumpkin is indigenous is shown also by the descriptions of the early explorers and settlers, and by the fact that gourds and pumpkins were used for a great many different purposes in America. This argues for an American origin, because it takes time for a people to learn new uses of a plant, which formerly may have served only one or two purposes. For example, among the cliff-dwelling Indians gourds, using the word in a general sense, were used for bottles, as receptacles to hold feathers and cotton down used in spinning. The stems were preserved and used as stoppers. The narrow neck of the gourd dipper, if accidentally broken off, was saved and used to hold the ceremonial pollen of maize or of the tule. The larger fruits were first dried, the interior cleaned out, and were then used as water pails or as receptacles in which to store corn (*Zea mays*), beans (*Phaseolus vulgaris*) and grass seeds. Mr. Cushing describes\* the gourd water bucket of the Zuni as supported by wicker work composed of fibrous yucca leaves. These are a few of the many uses to which gourds were put before the advent of the white man.

J. W. HARSHBERGER.

UNIVERSITY OF PENNSYLVANIA.

\* 1882-83, CUSHING, *Report Bureau of Ethnology*, p. 483.

#### AWARD AND PRESENTATION OF THE RUMFORD PREMIUM.

IN conformity with the terms of the gift of Benjamin, Count Rumford, granting a certain fund to the American Academy of Arts and Sciences, the Academy is empowered to make, at any annual meeting, an award of a gold and silver medal, being together of the intrinsic value of three hundred dollars, as a premium to the author of an important discovery or useful improvement in light or in heat, which shall have been made and published by printing, or in any way made known to the public, in any part of the continent of America, or any of the American Islands: preference being always given to such discoveries as shall, in the opinion of the Academy, tend most to promote the good of mankind.

At the annual meeting of 1895 the Academy awarded the premium to Thomas Alva Edison for his investigations in electric lighting, and the presentation of the medals took place at the meeting of the 13th of May, 1896.

Vice-President Goodale, in presenting the medals, made the following remarks:

It would be highly presumptuous for one whose knowledge of physics is of the most elementary character to occupy the time of the Academy by any statement of his own in conveying these medals. Happily such a course is unnecessary. The Chairman of the Rumford Committee has placed at our command a brief statement which makes clear the ground of the award:

"The Rumford Committee voted, June 22, 1893, that it is desirable to award the Rumford medal to Thomas Alva Edison in recognition of his investigation in the field of electric lighting, and they confirmed this vote on October 9, 1893, in the following words: 'Voted for the second time to recommend to the Academy that the Rumford medal be awarded to Thomas Alva

Edison for his investigations in electric lighting.'

"The Committee reached the conclusion expressed by these votes after long deliberation and after careful sifting of all the evidence which was at their disposal in regard to Mr. Edison's claim for priority in the construction of the incandescent lamp, the conception of the central lighting station, together with the multitude of devices, such as the three-wire circuit, the disposition of the electric current feeders, and the necessary methods for maintaining the electric potential constant.

"The Committee felt that they could not decide upon Mr. Edison's claims for priority in any particular invention in this new industry. Indeed, courts of law after prolonged litigation have found it difficult to decide how far Mr. Edison was in advance of contemporary workers. The task given to the Rumford Committee to decide who is the most worthy of the Rumford medal, especially in the field of the application of electricity for the production of light and heat, is not an easy one. The number of investigators is now so large that it is no longer possible in general for one man to claim to be the first to apply electricity to a new field. The successful application is the result of many minds working on the same problem. Although the Committee did not feel justified in expressing the opinion that Mr. Edison invented the incandescent carbon filament lamp, or that he was the first to arrange such lamp in multiple on the circuit, thus producing what is popularly termed a subdivision of the electric light, or that the Edison dynamo had greater merits than the machine of Gramme and Siemens and others; still they are convinced that Mr. Edison gave a great impulse to the new industry and that he was the first to successfully install a central electric lighting plant with the multitude of practical devices which are

necessary. They believe that this impulse was due to his indefatigable application, to his remarkable instinct in whatever relates to the practical application of electric circuits, and to his inventive genius. They, therefore, have unanimously recommended to the Academy to bestow the Rumford medals upon him, feeling that the work of Mr. Edison would especially appeal to the great founder of the medals, Count Rumford, if he were living."

The Academy has accepted the report of the Rumford Committee and has voted to confer the gold and the silver medal upon Mr. Edison. The recipient finds it impossible to be present at this meeting of the Academy and has requested Prof. Trowbridge to act as his proxy and to receive the medals for him.

In the name of the Academy I beg you, Prof. Trowbridge, to accept the charge of conveying these medals to Mr. Edison's hands. It would be most ungracious for us who are assembled in this room, which is flooded by this steady and brilliant electric light, to withhold our personal thanks for what Mr. Edison's investigations and practical activities have done for us all. And, hence, I may venture to say that our thanks and all good wishes are to be conveyed with the Rumford medals.

Prof. Trowbridge replied as follows:

*Mr. President and Gentlemen of the Academy:* I accept the medals for Mr. Edison, and at his request I wish to express his deep sense of the great honor the Academy has conferred upon him. His work in the field of electric lighting has been the subject of prolonged litigation and at times he has had doubts in reading the opinions of learned experts whether this work has been original or whether he had really contributed anything to the world's progress. The recognition of his labors by the American Academy of Arts and Sciences, regarded by Count Rumford in his gifts as the

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 headquarters. 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. This 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 Geography, on 'Geological Myths.' Prof. W. 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. Noyes, before the Section of Chemistry, on 'The Achievements of Physical Chemistry.' Prof. N. L. Britton, before the Section of Botany, on 'Botanical Gardens.' Prof. 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