

phur, four hundred pounds to the acre; gather and burn all diseased roots at the time the crop is harvested; destroy all related weeds, avoid bruising the tubers; store in dry places at a temperature of about 70°; remove and burn diseased tubers as soon as they begin to decay. Surely the grower of the sweet potato must be alert to bring his crop to a successful issue.

CHARLES E. BESSEY.

UNIVERSITY OF NEBRASKA.

#### THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE preliminary announcement of the forty-eighth meeting of the American Association for the Advancement of Science has been issued by the local committee. It will be remembered that the meeting will be held at Columbus, Ohio, from the 21st to the 26th of August, under the presidency of Professor Edward Orton. The first general session will as usual be held on Monday morning, when the President elect will be introduced by the retiring President, Professor F. W. Putnam, and addresses of welcome will be made by the Governor of Ohio and the Mayor of Columbus. The addresses of the Vice-Presidents will be given on Monday afternoon, and the address of the retiring President in the evening. The several sections will meet as usual during the week, and Saturday will be devoted to an excursion, probably to the mounds at Fort Ancient, the coal mines in Hocking Valley and the natural-gas fields. Further information may be obtained from the Permanent Secretary of the Association, Dr. L. O. Howard, Cosmos Club, Washington, D. C., and from the Local Secretary, Professor B. F. Thomas, Ohio State University.

The societies meeting in affiliation with the Association are as follows:

*The American Forestry Association* will meet on Tuesday and Wednesday, August 22d and 23d, in Horticultural Hall. Hon. James Wilson, Washington, D. C., President; G. P. Whittlesey, Washington, D. C., Secretary.

*The Geological Society of America* will meet on Tuesday, August 22d, at the same time and place with Section E. B. K. Emerson, Amherst, Mass., President; H. L. Fairchild, Rochester, N. Y., Secretary.

*The American Chemical Society* will hold a general meeting on Monday and Tuesday, August 21st and 22d, and the remainder of the week will be given to Section C. Edward W. Morley, Cleveland, Ohio, President; Albert C. Hale, 551 Putnam Avenue, Brooklyn, N. Y., Secretary.

*The Society for the Promotion of Agricultural Science* will meet on Friday and Saturday, August 18th and 19th. B. D. Halsted, New Brunswick, N. J., President; C. S. Plumb, Lafayette, Ind., Secretary.

*The Association of Economic Entomologists* will hold its eleventh annual meeting on August 18th and 19th. C. L. Marlatt, Washington, D. C., President; A. H. Kirkland, Malden, Mass., Secretary.

*The American Mathematical Society* will meet on Friday and Saturday, August 25th and 26th. R. S. Woodward, Columbia University, New York, President; F. N. Cole, Columbia University, New York, Secretary.

*The Society for the Promotion of Engineering Education* will hold its meeting on August 17th, 18th and 19th. Albert Kingsbury, Durham, N. H., Secretary.

*The American Folk-Lore Society* will probably meet with Section H on Thursday, August 24th. W. W. Newell, Cambridge, Mass., Secretary.

*The Botanical Society of America* will meet on Friday and Saturday, August 18th and 19th. On Friday, at 4 p. m., business meeting; 8 p. m., address of retiring President; on Saturday, 9 a. m., business meeting; 9:30 a. m., and 2 p. m., sessions for reading papers. G. F. Atkinson, Ithaca, N. Y., Secretary.

*The American Microscopical Society* will meet August 16th, 17th and 18th. Henry B. Ward, Lincoln, Neb., Secretary.

#### THE CENTENARY OF THE ROYAL INSTITUTION.

THE celebration of the centenary of the foundation of the Royal Institution, London, took place in accordance with the plans we have already announced. Commemorative addresses were made by Lord Rayleigh and Professor Dewar, and at the banquet on June 5th

the Prince of Wales, the Duke of Cambridge and Professor Langley, of the Smithsonian Institution, made speeches.

As part of the celebration there was an exhibition of historical apparatus, regarding which we take the following from the *London Times*: Most of it belongs to the Institution's own collection, but a considerable number of articles are on loan, some memorials of Davy having been sent by Dr. Humphry Davy Rolleston, his grand-nephew, and some of Faraday by his niece, Miss Jane Barnard, and other members of the Barnard family. The founder, Count Rumford, is represented by some models—a grate, fireplace, chimneys, roaster and stew-pan, which may be taken as typical of the purposes which he conceived the Institution should serve. Of the first professor, Dr. Garnett, nothing seems to remain but his picture, and the objects that belonged to the second, Dr. Thomas Young, are not very numerous or striking.

Of Sir Humphry Davy, however, the relics are most interesting, for they carry the mind back to what are probably his two best-known achievements. In the first place there is a couple of the batteries or galvanic troughs with which he was able to effect the decomposition of the alkalis, and in the second a large collection of the lamps with which he experimented in the effort—finally, of course, successful—to find a form safe for use in dangerous coal mines. Other memorials of Davy include a portrait of him in court dress occupying the presidential chair of the Royal Society, the three medals he received at various times from that body, the Napoleon medal for the 'best experiment on the galvanic fluid' awarded him in 1807 by the French Institute, whose action raised a storm of indignation, because England and France were then at war, and many specimens of his correspondence, not the least interesting being some of the love letters he addressed to the charming Mrs. Apreece, his marriage with whom in 1812 terminated his connection with the Institution.

The articles associated with Faraday are still more numerous. There is the original apparatus with which he obtained the magneto-electric spark; the big electro-magnet with a copper

disc spinning between its poles, which formed the first machine for continuously generating an electric current by means of magnetism, and which is, therefore, the direct ancestor of the modern dynamo; early forms of galvanometers and electrical-influence machines; a series of delicate glass vessels filled with various gases, which he used in his determinations of magnetic and diamagnetic properties, together with the 'diamagnetic box' he presented to Tyndall; the apparatus employed in the first experiments on the liquefaction of gases, with some of the tubes filled by himself; many specimens of the heavy glass in which he did such memorable work; and a curious bit of apparatus, consisting apparently of a block of this glass, surrounded with a coil of fine wire, which he doubtless used in one of his numerous experiments to discover a connection between light and magnetism. The way in which the last is put together shows plainly the influence of the apprenticeship to a bookbinder which Faraday served in his early life, and another beautifully neat example of his expertness in this craft may be seen in a bound manuscript volume of Davy's lectures 'taken off from notes by M. Faraday,' which is particularly interesting as having led to his engagement as an assistant in the institution's laboratory.

Among the apparatus belonging to men more recently connected with the Royal Institution may be mentioned that used by Tyndall in his investigations on radiant heat and on germ life, the electrical instruments of Dr. Warren de la Rue, and last, but not least, the magnificent collection of physical apparatus that was the property of the late Mr. William Spottiswoode, successively Treasurer and Secretary of the Institution. This includes a splendid series of Nicol's prisms and other apparatus for experimenting in the polarization of light, a huge electro-magnet made by Ducretet, of Paris, and the famous induction coil containing 280 miles of wire in its secondary circuit and capable of giving a spark  $3\frac{1}{2}$  feet long. The whole has just been presented to the Institution by Mr. W. Hugh Spottiswoode, and it will form a most worthy memorial of the year in which that society completes its century of useful and honorable existence.