ciples of education and methods of teaching will be emphasized in all of the work. Lectures will be delivered by prominent speakers during the evening on topics of general interest to engineering educators. These will include a wide range of subjects of current importance. The program also includes a number of recreational features, since both Ithaca, New York, and Madison, Wisconsin, provide exceptional opportunities for pleasant diversions.

The summer schools are being conducted by the Society for the Promotion of Engineering Education under the general supervision of its Board of Investigation and Coordination, of which Professor Charles F. Scott, of Yale University, is chairman, and Dean F. L. Bishop, of the University of Pittsburgh, is secretary, and under the immediate direction of Dr. W. E. Wickenden, Director of the Society's general investigation of engineering education, and Professor H. P. Hammond, associate director of the investigation. The Engineering Foundation, of which Mr. Alfred D. Flinn is the director, is associated with the enterprise and is acting as treasurer for the holding of the special funds under which the present stage of the investigation is being prosecuted. The summer schools are financed by a special appropriation for the purpose made by the Carnegie Corporation of New York.

SCIENTIFIC EVENTS

THE LEEDS MEETING OF THE BRITISH ASSOCIATION[1]

THIS year's meeting of the British Association will be held at Leeds from August 31 to September 7, under the presidency of Sir Arthur Keith. In returning to the county of its origin—the first meeting was held at York in 1831—the association will be in the midst of a district of great scientific interest. Leeds, in fact, is a convenient center from which to visit places rich in archeological, geological and botanical material, and arrangements are being made to enable members to make excursions to the Yorkshire abbeys, the limestone country, and the moors.

The association has met at Leeds on two previous occasions. The first visit was in 1858, when the president was Sir Richard Owen. In these days, when direct speech by wireless across the Atlantic has been achieved, it is interesting to recall that at the Leeds meeting in 1858 the president announced that a telegraphic cable had been successfully laid between England and America, and the first messages of goodwill between the nations had passed only a few days before. The second meeting in Leeds was in 1890, and was presided over by Sir Frederick Abel.

[1]The London *Times*.

The preliminary program of this year's conference shows that the inaugural general meeting will take place on August 31, when Sir Arthur Keith will assume the presidency in succession to the Prince of Wales and will deliver an address on "Darwin's Theory of Man's Descent as it stands To-day." There is no alteration in the number of sections, which remains at thirteen. The sections, with their presidents, are as follows:

A.—Mathematical and Physical Sciences.—Professor E. T. Whittaker, F.R.S.
B.—Chemistry.—Dr. N. V. Sidgwick, F.R.S.
C.—Geology.—Dr. Herbert H. Thomas.
D.—Zoology.—Dr. G. P. Bidder.
E.—Geography.—Dr. R. N. Rudmose Brown.
F.—Economics.—Professor D. H. Macgregor.
G.—Engineering.—Professor Sir James B. Henderson.
H.—Anthropology.—Professor F. G. Parsons.
I.—Physiology.—Dr. C. G. Douglas, F.R.S.
J.—Psychology.—Dr. W. Brown.
K.—Botany.—Professor F. E. Fritsch.
L.—Education.—The Duchess of Atholl, M.P.
M.—Agriculture.—Mr. C. G. T. Morison.

Among the subjects of the sectional presidential addresses will be "The Broadening of the Outlook in Education," by the Duchess of Atholl; "The Englishman of the Future," by Professor F. G. Parsons; "Rationalization of Industry," by Professor D. H. Macgregor; and "Agriculture and National Education," by Mr. C. G. T. Morison. Two evening lectures to members have been arranged, one by Professor R. A. Millikan, of the United States, on "Cosmic Rays," and the second by Dr. F. A. E. Crew on "The Germplasm and its Architecture."

A feature of the meeting will be the extension of the principle of public lectures in Leeds and the neighboring towns. Leeds, as the center of a large number of other towns, gives the association an opportunity of arranging for lectures by leading scientists in towns where they may be desired, and some twenty such lectures will be provided. An innovation will be the inclusion in the program of the meeting of a number of communications on various scientific researches relating to the textile industries. The British Research Association for the Woolen and Worsted Industries, the Department of Textile Industries in the University of Leeds, and the Textile Institute of Manchester have cooperated with the British Association in the arrangement of this part of the program. The laboratories of the Research Association at Torridon and of the university department will be inspected and a special meeting room will be set apart for papers on textile subjects.

The excursions, which have been arranged, will include visits to Byland Abbey, Helmsley Castle, and Rievaulx, which will be conducted by Mr. C. R. Peers,

chief of the Ancient Monuments Inspectorate of H.M. Office of Works. The Yorkshire Ramblers Club is arranging for small parties of members to make the descent of Gaping Ghyll. Arrangements will also be made for visits to the principal works and factories in and near Leeds.

OHIO GEOLOGISTS' FIELD TRIP

THE annual field trip of the geological section of the Ohio Academy of Science was conducted by Wilbur Stout, of the Ohio Geological Survey, in the Portsmouth-Pomeroy region of southern Ohio on May 28, 29 and 30. With a registration of forty-five, the excursion was one of the most largely attended field trips in the recent years of the section's activity.

During the progress of the excursion, the party visited outcrops of the Waverly and Maxville Series of the upper Mississippian System and the Pottsville, Allegheny, Conemaugh and Monongahela Series of the Pennsylvanian, giving opportunity for both fossil collecting and stratigraphic study. The notable physiographic features of the region—the old Teays river valley, and other recently abandoned drainage systems, the upper peneplain level, and the evidence for intermediate erosion stages—were examined by members of the party. Clay pits and mines were visited at Sciotoville, Scioto Furnace, and Oak Hill; coal mines near Jackson and at Pomeroy; and salt works at Pomeroy. One of the most enjoyable features of the excursion was a starlight steamboat ride on the Ohio River at Pomeroy on the specially chartered "Champion III."

Among the institutions represented were: Antioch College, Cincinnati University, Marietta College, Miami University, Muskingum College, Ohio Geological Survey, Ohio State University, Ohio Wesleyan University, Toledo University, the East Ohio Gas Company and the Jackson Coal Company.

A. C. SWINNERTON
VICE-PRESIDENT FOR GEOLOGY,
OHIO ACADEMY OF SCIENCE

THE ARNOLD ARBORETUM

IN order that the Arnold Arboretum at Jamaica Plain, which contains the greatest collection of hardy trees and shrubs in the United States, may be perpetuated and enlarged, friends of the late Professor Charles Sprague Sargent are raising a fund to continue its work. The Boston committee formed to raise the Charles Sprague Sargent Memorial Fund for the endowment of the Arnold Arboretum announces that up to June 10 the sum of $460,820 has been received toward the $1,000,000 fund considered necessary to carry on this work.

In less than three months since Professer Sargent died on March 22 nearly half of the fund has been subscribed by those most deeply interested in the arboretum's future, principally by friends in Boston. A national committee and other local committees are now being formed throughout the country so that nature-lovers everywhere may have an opportunity of contributing to the garden, which contains more than 6,500 species and varieties of trees and shrubs.

Sargeant was Arnold professor of aboriculture at Harvard University and director of the arboretum for fifty-four years, and he planned and created it as an artist works out a picture, personally directing the planting of its trees and shrubs. Through an agreement made in 1872, the president and fellows of Harvard College became trustees of a bequest of $100,000 left by one James Arnold, a New Bedford merchant, which it was decided should be used for the development of trees. The Harvard trustees provided as a site for the garden some 125 acres of property in West Roxbury, bequeathed to Harvard by Benjamin Bussey.

Frederick Law Olmsted, Sr., when planning a park system for Boston, suggested that the arboretum's land become part of that system. The city agreed to build roads throughout the arboretum and maintain them and to protect it with its police, and the president and fellows agreed to keep the arboretum open every day in the year from sunrise to sundown. This arrangement has given to the arboretum all the advantages of perpetual ownership of the land it occupies and has relieved it of heavy financial burdens. Additions of land have been made until the arboretum now has an area of 250 acres. Professor Sargent built up a library at the arboretum to which, it is said, no similar collection outside the British Museum can be compared. He did this largely at his own expense, and made generous financial contributions through all the years of which there is no complete record. The arboretum's average expenditure during the last five years has been $80,000, with a tendency to rise, and its present income from endowment is not more than $60,000.

AWARDS FOR RESEARCH AT CORNELL UNIVERSITY

THIRTY-TWO members of the Cornell Faculty will receive awards from the Heckscher Fund to carry on scientific and scholarly research next year. This fund, established by August Heckscher, of New York, several years ago, amounts to $50,000 annually and is devoted to research work in various fields.

A faculty committee, of which Dean R. A. Emerson of the Graduate School is chairman, has agreed upon the awards and they will be ratified by the Board of