and places other than those of the annual meetings of the association and arrangements are in hand for:

A meeting in London in May for papers and discussion on certain aspects of the work of the division, including a review of its first year's work, and a meeting in Manchester during the early summer, in collaboration with the Manchester Literary and Philosophical Society, at which the Alexander Pedler Memorial Lecture will be delivered by Professor H. Levy on methods of studying the social problems of science.

Two evening lectures will be given, taking the place of the customary evening discourses:

Sunday, September 3. The address by Sir Richard Gregory, Bart., on "Science and Social Ethics," announced above.

Tuesday, September 5. Address by Dr. Isaiah Bowman, president of the Johns Hopkins University, under the arrangement concluded last year with the American Association for the Advancement of Science, by which, in alternate years, a speaker from America will be invited by the British Association, and one from Britain by the American Association.

Public lectures will be given in Dundee and neighboring towns during the period of the meeting.

Two previous meetings of the British Association have been held in Dundee, in 1867 under the presidency of the Duke of Buccleuch, and in 1912 under that of Sir Edward Sharpey Schafer. The meeting in 1912 was the occasion of a splendid act of generosity by a citizen of Dundee, the late Sir James Caird, whose gift of £11,000 to the funds of the association enabled it to commemorate his name in the Caird Fund, which is devoted to scientific research.

THE FIFTIETH ANNIVERSARY OF THE JOHNS HOPKINS HOSPITAL

The fiftieth anniversary of the founding of the Johns Hopkins Hospital was celebrated on May 4, 5 and 6. The first exercises opened in Hurd Memorial Hall, when Dr. Winford H. Smith, superintendent of the hospital, made the welcoming address. The various programs for the reading of papers were presided over on May 4 by Dr. Edwards A. Park, Dr. Warfield T. Longcope and Dr. Nicholson J. Eastman; on May 5

by Dr. Warfield M. Firor, Dr. Thomas S. Cullen and Dr. William G. MacCallum, and on May 6 by Dr. A. C. Woods, Dr. Adolf Meyer and Dr. Eastman.

A public meeting was held in the afternoon of May 4, at which an address of welcome was made by Henry D. Harlan, president of the university's board of trustees. There were greetings to the hospital from Dr. Irvin Abell, president of the American Medical Association, conveyed by Dr. Thomas S. Cullen; greetings from Major Julia C. Stimson, U. S. A. (retired), president of the American Nurses' Association; from Dr. Fred Carter, president-elect of the American Hospital Association; from Dr. Howard Naffziger, president of the American College of Surgeons, and Dr. O. H. Perry Pepper, president of the American College of Physicians.

Dr. James B. Herrick, professor emeritus of medicine, Rush Medical College, delivered the principal address. He offered congratulations on the "glorious fifty years of service" of the Hopkins.

Later presentations to the hospital were made in the same hall, with Mr. Harlan presiding. Dr. Cullen presented a plaque in memory of Dr. Frank R. Smith; Dr. Warfield T. Longcope presented a portrait of Dr. Thomas B. Futcher, and Dr. Arthur Shipley presented a portrait of Dr. Thomas R. Boggs.

The program included the nurses' commencement exercises with an address by Miss Elsie M. Lawler, superintendent of nurses and principal of the Hopkins School of Nursing, whose address was entitled "Fifty Years in Retrospect." There were also demonstrations of the newer developments in the teaching of student nurses; a luncheon, a moving picture of Dr. Welch and of the work of the Johns Hopkins Hospital.

The anniversary banquet was held at the Emerson Hotel on the evening of May 5, with Dr. J. M. T. Finney as toastmaster. The speakers included Dr. Howard A. Kelly, Dr. Henri La Fleur, Dr. Lewellys F. Barker, Dr. William G. MacCallum and Miss Lawler.

A historical play in four scenes by Dr. Alan M. Chesney, entitled "The Flowering of an Idea," presented some of the early events in connection with the Johns Hopkins Hospital, which had an important bearing upon its subsequent development.

SCIENTIFIC NOTES AND NEWS

The Faraday Medal of the British Institution of Electrical Engineers was presented on May 4 to Dr. William D. Coolidge, director of the Research Laboratories of the General Electric Company at Schenectady. The ceremony took place at the northeastern convention of the American Institute of Engineering at Springfield, Mass. The presentation was made by

Dr. Gano Dunn, honorary secretary of the British organization in the United States.

THE George M. Kober Medal "for outstanding service in medicine" was presented at the annual meeting of the Association of American Physicians at Atlantic City to Dr. George Hoyt Whipple, dean and professor of pathology at the School of Medicine

and Dentistry of the University of Rochester. Dr. Louis Hamman, of Baltimore, vice-president of the association, made the presentation.

THE Mendel Medal of Villanova College "for outstanding achievement in science" was presented on May 4 to the Rev. Dr. John M. Cooper, professor of anthropology at the Catholic University of America, Washington, D. C., in recognition of "his work on the American Indians, their social system and religion."

The annual Howard Taylor Ricketts Prize of the University of Chicago has been awarded to George Hartley, Jr., an assistant in the Zoller Memorial Dental Clinic and a student of Dr. Paul R. Cannon in the department of pathology. The Ricketts prize was established in 1913 in honor of Dr. Howard Taylor Ricketts, who discovered the typhus germ and died a martyr to his discovery in Mexico. Awarded annually on May 3, the anniversary of his death in 1910, the prize is given to a student in the departments of pathology or bacteriology for notable research.

A DINNER attended by two hundred and twenty-five colleagues and friends was given on April 29 in New York City at the Waldorf Astoria Hotel in honor of the sixtieth birthday of Dr. Alfred E. Cohn, of the Rockefeller Institute for Medical Research. At the dinner he was presented with a volume consisting of more than three hundred congratulatory letters.

Dr. Adolf Lorenz, emeritus professor of orthopedic surgery at Vienna, celebrated his eighty-fifth birthday on April 21.

Dr. Philipp Furtwängler, professor of mathematics and geodesy at the University of Vienna, celebrated his seventieth birthday on April 21.

Dr. G. B. Webb, of Colorado Springs, was elected president of the Association of American Physicians at the meeting at Atlantic City on May 3. Dr. Louis Hamman was elected vice-president; Dr. A. H. Gordon, of Montreal, councilor, and Dr. O. H. P. Pepper, of Philadelphia, delegate to the Congress of American Physicians and Surgeons.

At the annual meeting in Toronto of the American Society for Experimental Pathology the following officers were elected: *President*, Ernest W. Goodpasture, Nashville; *Vice-president*, Shields Warren, Boston; *Secretary-treasurer*, Paul R. Cannon, Chicago; *Incoming Member of Council*, Balduin Lucké, Philadelphia.

Professor Louis P. Hammett, of Columbia University, was elected chairman of the New York Section of the American Chemical Society at the recent annual meeting. Dr. Robert Calvert, consulting chemist and chemical patent attorney, was named to the newly

established post of chairman-elect, and William W. Winship, the present chairman of the section, becomes treasurer. Dr. Cornelia T. Snell was reelected secretary. Directors chosen in addition to the officers are Professor Ralph H. Müller, of New York University; Father Francis W. Power, of Fordham University, and Dr. Robert R. Williams, of the Bell Telephone Company.

AT the Massachusetts Institute of Technology, the title of emeritus professor has been conferred on Dean William Emerson, of the School of Architecture, and on Professor W. Spencer Hutchinson, head of the department of mining engineering. Professor Charles E. Locke has been appointed acting head of the department of mining engineering. He will succeed Professor Hutchinson upon his retirement in June.

Dr. George D. Birkhoff, of Harvard University, has been appointed to a Walker-Ames professorship of mathematics at the University of Washington for the summer quarter.

Professor Charles M. Dodd, of the Missouri School of Mines, has been appointed head of the department of ceramic engineering at the Iowa State College. He will succeed Professor Paul E. Cox, who will continue as professor of ceramic engineering; Dr. William G. Cochran, mathematician in the statistical department of Rothamsted Experimental Station, has been appointed professor of mathematical statistics.

Dr. Gustav A. Hedlund, associate professor of mathematics at Bryn Mawr College, has been appointed professor of mathematics at the University of Virginia.

Dr. ROGER B. FRIEND has been appointed Connecticut state entomologist and head of the department of entomology of the Agricultural Experiment Station at New Haven. He succeeds the late Dr. W. E. Britton, who was state entomologist from 1901, when the effice was established, until his death last February.

Dr. Charles W. Rees, of the zoological division of the U. S. Bureau of Animal Industry, has been appointed senior protozoologist in the National Institute of Health.

W. D. Appel, chief of the textile section of the National Bureau of Standards, has been appointed acting chairman of the research council of the U. S. Institute for Textile Research, and Edward R. Schwarz, professor of textile engineering of the Massachusetts Institute of Technology, has been made vice-chairman. They succeed, respectively, W. E. Emley, chief of the Organic and Fibrous Materials Division of the National Bureau of Standards, and

Dr. H. DeW. Smith, treasurer of the A. M. Tenney Associates.

Dr. J. M. Stagg has been appointed superintendent of Kew Observatory, England, in succession to Dr. F. J. W. Whipple, who retired on March 31.

Dr. E. W. R. Steacie, associate professor of chemistry at McGill University, has been appointed director of the Division of Chemistry of the National Research Council of Canada, in succession to Dr. G. S. Whitby, who recently resigned to accept the post of director of Chemical Laboratories of the Department of Scientific and Industrial Research in Great Britain. It is expected that Dr. Steacie will assume his new work early in July.

Dr. ALEXANDER LURIA, head of the department of psychology of the Medico-Genetic Institute of Moscow, has been elected Salmon Memorial Lecturer of the New York Academy of Medicine for 1940. On April 12, 19 and 26 he spoke on "The Psychological Approach to Brain Pathology." He will give a fourth lecture at a city to be selected later.

Dr. Albert Szent-Györgyi, professor of medical chemistry at the University of Szeged, Hungary, will deliver the eighth Harvey Society lecture of the current series at the New York Academy of Medicine on May 18. He will speak on "Biological Oxidation and Vitamins." On May 26 he will speak before the Institute of Medicine of Chicago, where his lecture will be entitled "The Mechanism of Biological Oxidation."

Dr. Charles F. Poe, professor of chemistry at the University of Colorado, gave the principal address at the recent installation of the Utah Alpha Chapter of Alpha Epsilon Delta, national honorary premedical fraternity, at the Utah State Agricultural College and at the installation of the Wyoming Alpha Chapter at the University of Wyoming.

Dr. Douglas Johnson, professor of physiography at Columbia University, addressed the faculty and students of Vassar College on April 14 on the "Geologic Basis of Landscapes—a Study in the Conservation and Utilization of Scenery." On March 30 he gave the convocation address at the University of West Virginia, on the occasion of the installation of a new chapter of Sigma Xi, where he discussed "The Mysterious Craters of the Carolina Coast."

Dr. Nevin M. Fenneman, professor of geology at the University of Cincinnati, gave a series of lectures to the faculty and students of the department of geology at the University of Kansas during the week of April 17. The lectures were arranged on an exchange basis with the department of geology at the University of Cincinnati. Dr. Kenneth K. Landes will give a similar series of lectures in Cincinnati next autumn.

Dr. K. Linderstrøm-Lang, director of the chemical division of the Carlsberg Laboratory, Copenhagen, on March 27 addressed a joint meeting of the Duke University Hospital Medical Society and the Duke University Chapter of Sigma Xi on "Recent Histochemical Studies on Enzymes." On April 17, Dr. E. Fullerton Cook, chairman of the U. S. Pharmacopeia Revision Committee, lectured on "The Physician and the Pharmacopeia."

Dr. J. A. Becker, of the technical staff of the Bell Telephone Laboratories, has completed a tour of the Midwest, at which time he presented a lecture on "Electron Microscopes and Some of Their Uses" to groups at the Chicago Physics Club, the State University of Iowa, the Iowa State College, the University of Kansas, the Kansas State College, the University of Missouri, Washington University and the Ohio State University. Dr. Becker demonstrated one type of microscope having a magnification of 500,000.

THE Rutherford Memorial Lecture of the Royal Institution, London, was given early in April by Sir Henry Tizard. The lecture was entitled "Lord Rutherford, His Life and Influence on Chemistry."

THE six hundredth anniversary celebration of the University of Grenoble will be held from May 13 to 15.

The international committee has voted to hold the next meeting of the International Congress of Psychology at Edinburgh in the summer of 1940.

The annual meeting of the Field Conference of Pennsylvania Geologists will be held at Morgantown, W. Va., at the invitation of the West Virginia Geological Survey, from May 27 to 30. Those interested are requested to address Dr. Paul H. Price, state geologist, Morgantown, or M. N. Shaffner, secretary-treasurer, care of Pennsylvania Topographic and Geologic Survey, Harrisburg.

The Association of Southeastern Biologists held its third annual meeting at Duke University on April 14 and 15. Thirty-three papers in the fields of zoology and botany were presented. The guest lecture was given by Dr. Harden Taylor, president of Atlantic Coast Fisheries Company, who spoke on "Biology and the Great Fisheries." There were a hundred biologists from seven southeastern states in attendance. The following officers were elected: President, Dr. H. L. Blomquist, Duke University; Vice-president, Dr. J. Speed Rogers, University of Florida; Secretary-treasurer, Dr. Donald C. Boughton, University of Georgia, and Members of the executive committee, Dr. R. O. Christenson, Alabama Polytechnic Institute, and Dr. E. E. Reinke, Vanderbilt University.

THE New York State Association of Applied Psychologists met at Cornell University on April 29, with

seventy members in attendance. Symposia were devoted to "The Training of Psychological Counselors" and "The Work of the School Psychologist." Addresses were given by Dr. F. H. Allport on "Methods of Personality Study"; by Dr. Ethel Waring on "Generalizing Abilities of Preschool Children"; and by Dr. W. V. Bingham, president of the association, on "Vocational Guidance in New York State." Fordham University was selected as the place of the next annual meeting.

THE Royal Society, London, is preparing for the Ministry of Labor a register of scientific research workers whose services could be used for the nation in the event of war. Professor Archibald V. Hill, Foulerton research professor and joint honorary secretary, is chairman of a subcommittee for scientific research attached to the Central Register Advisory Council of the Ministry of Labor. Sir Walter Moberley, chairman of the Advisory Council, is reported to have stated that "The general scheme includes the registration of technicians, engineers, architects, and others. This work is being dealt with by their appropriate professional institutions. So far as the scientists are concerned, we felt that the Royal Society was the natural body to undertake the work and that Professor Hill, as one of its secretaries, was the right man to act as chairman."

THE spring meeting of the Indiana Academy of

Science was held on May 12 and 13 at New Harmony, which was an early center of science in the West, being the home at one time of William Maclure, Charles Alexander LeSueur, Thomas Say, David Dale Owen, Robert Dale Owen and Richard Owen, and being visited once by Sir Charles Lyell. The program was devoted in part to lectures on the early scientific history of New Harmony as well as to the more recent studies in the geology, flora and fauna of the area. There were also conducted tours among the sites of historic and scientific interest.

THE twenty-eighth annual report of the Brooklyn Botanic Garden for the year 1938 records a total attendance for the year of more than 1,628,000, with a record week-end attendance from noon, April 30, to 5 P.M., Sunday, May 1, of 56,145, or at the rate of about 155 every two minutes. Two new gates were constructed during the year, financed by a bequest of \$10,000, and a beautiful memorial approach, consisting of stone seats, water basins, fountain and monumental columns, just inside the main entrance, was made possible by a gift of \$32,000. Private funds contributed, in addition to income from endowment, were in excess of \$54,000. About 56 per cent. of the total maintenance budget was met from private funds, and about 43 per cent. from the tax budget of New York City. A new garden of medicinal and culinary herbs was opened to the public in September. About twenty pages of the report are devoted to summaries of the research work in progress during the year.

DISCUSSION

WILL IODINE COME TO BE CONSIDERED AN ESSENTIAL PLANT NUTRIENT?

INFLUENCE of iodine has been studied in water and soil cultures at Oregon Agricultural Experiment Station beginning in 1929. Crop indicators used in experiments include alfalfa, clover, peas, corn, lettuce, tomatoes and sunflowers.

Mathematically significant increases in yield have been obtained, especially with alfalfa, clover and lettuce, while germination has been stimulated with corn. Iodine seems to promote development of chlorophyll or green pigment in plants. Soil micro-organisms appear to be affected, particularly nitrogen-fixing legume root bacteria. Yeasts are known to be stimulated by iodine.

Favorable concentration in flowing culture solutions is found to be one fourth to one half part per million. Flowing solutions were connected in series by Waldo Carlson, graduate assistant, who found the age of solutions affected stimulation and older solutions were more beneficial. The iodine may change to organic

form before it is effective. With alfalfa in "sterile" culture this concentration was inhibitive, an indirect effect is indicated. James C. Lewis, graduate assistant, found stimulation from iodine in soil cultures using a soil well supplied as to total iodine. Two to four pounds of iodine as potassium iodide were found to be significantly stimulating in soil cultures with Aiken and Deschutes soil series. Other soils have given negative results. Even where increase in yield was small the iodine content of the plants has been increased manyfold according to analyses by Mr. Lewis.

Comparison of methods for iodine determination has been made in the laboratory of Dr. J. R. Haag, nutrition chemist. Some improvement has been made in adapting the Harvey procedure for analysis of soils and plant materials.

Oregon soils, waters and plants are frequently low in iodine, yet certain deep wells, lakes and soils are found to be well supplied. Iodine in Oregon soils may run from ½ part to 15 parts per million. The iodine content of Oregon waters is from .01 to 20 parts per