

tended an invitation to mechanical, civil, electrical and mining engineers to attend the autumn meeting at Spokane.

Twenty-eight papers are announced for presentation at thirteen simultaneous technical sessions to be held on Tuesday, September 3, and Thursday, September 5. Twelve of these papers will cover the design, construction, mechanical equipment and potential uses of the Grand Coulee Dam, the world's largest masonry structure. Other subjects to be discussed include hydraulic problems, deep-well pumps, wood-working, coal, kiln drying, wood-waste utilization and material handling in the lumber industry.

Two luncheons, one dinner and a banquet are part

of the program. At the luncheon on Tuesday, L. V. Murrow, Washington Toll Bridge Authority, speaks on the "Lake Washington Pontoon Bridge." At the dinner on Tuesday, Major S. E. Hutton and F. A. Banks discuss the "Columbia Basin Reclamation Project." Following the luncheon on Thursday, Sid Jenkins will describe "One Hundred Years of Logging in the White Pine Forests of Idaho." The speaker at the banquet on Thursday evening will be R. L. Neuberger, author of "Our Promised Land." Trips on Wednesday and Friday will be made to the Grand Coulee Dam, a lumber mill in Lewiston, Idaho, the Coeur d'Alene mining district and local plants of interest.

## SCIENTIFIC NOTES AND NEWS

IN recognition of "distinguished contributions to the science of genetics" two honorary degrees were conferred at commencement on Dr. George H. Shull, professor of botany and genetics at Princeton University. He received the degree of doctor of science from Lawrence College and the degree of doctor of laws from Antioch College, from which he graduated in 1901.

HONORARY fellowship of the Royal Society of Medicine, London, has been conferred upon Dr. Mervyn H. Gordon, Sir Leonard Rogers, C. H. Usher, Dr. Louis Martin, Paris; Professor Felix Nager, Zurich; Professor G. Roussy, Paris, and Dr. Ralph Pemberton, professor of medicine in the Graduate School of Medicine of the University of Pennsylvania.

DR. FRANK H. BETHELL, of the University of Michigan, has received one of the two annual Henry Russel awards for his "direction of field studies of anemias of pregnancy in Hillsdale County" in cooperation with the W. K. Kellogg Foundation.

THE Heberden Society has awarded the Heberden Medal for 1939 to Major W. S. C. Copeman for his paper entitled "Notes on Treatment of the Rheumatic Diseases in the British Expeditionary Forces."

DR. GEORGE W. CRILE, emeritus professor of clinical surgery at the Medical School of Western Reserve University, has been made an honorary member of the Academy of Medicine at Cleveland.

At the time of the annual meeting of the American Surgical Association at St. Louis, there was founded a new organization, designed particularly for the closer association of the younger surgeons of the Middle West and adjacent Canadian provinces. This is to be known as the Central Surgical Association. The officers elected at the organization meeting were: *President*, Dr. Roy D. McClure, of Detroit; *Presi-*

*dent-elect*, Dr. Grover C. Penberthy, of Detroit; *Secretary*, Dr. George M. Curtis, of Columbus; *Treasurer*, Dr. Max Zininger, of Cincinnati; *Recorder*, Dr. Henry K. Ransom, of Ann Arbor, and *Councillors*, Drs. Willis D. Gatch, of Indianapolis; Kellogg Speed, of Chicago, and Carl H. Lenhart, of Cleveland. The organization was further developed during the annual meeting of the American Medical Association in New York City. Its first regular meeting is to be held during the latter part of February next at the university hospital at Ann Arbor, Mich.

PROFESSOR H. H. NEWMAN, for twenty-nine years a member of the department of zoology of the University of Chicago, will become professor emeritus on October 1.

DR. ROGER B. CORBETT, dean and director of the College of Agriculture of the University of Connecticut, has been named director of the Agricultural Experiment Station of the University of Maryland to succeed Professor J. E. Metzger, who died last winter.

DR. CHARLOTTE HAYWOOD, associate professor of physiology at Mount Holyoke College, has been appointed chairman of the department of physiology, succeeding Dr. Abby Turner, who has retired.

DR. MARTIN SCHWARZSCHILD, of the Harvard College Observatory, has been appointed lecturer in astronomy at Columbia University.

J. C. CROCKER, senior lecturer, has been appointed head of the department of chemistry of the Chelsea Polytechnic, London, to succeed C. Dorée, who, after serving for sixteen years, will retire on August 31.

THREE of the five members of the faculty of Adelphi College, Garden City, Long Island, who were dismissed last spring, are bringing damage suits of \$20,000 each against the college administration. It is stated by the

authorities of the college that a general reorganization was made necessary at that time by a financial crisis in the institution. Those bringing suit are: William A. Colwell, head of the department of German for twenty-six years; Dr. Donna Fay Thompson, head of the department of sociology, who had been on the staff for sixteen years, and Dr. Edna Mosher, professor of biology since 1923, who had been head of the department for fifteen years.

THE newly elected president of the Chicago Museum of Science and Industry, Lenox R. Lohr, has made drastic changes in the staff, effective on August 15, by dropping heads of departments, some of whom had been with the museum ten years or longer. They are: Trent E. Sanford, architecture and civil engineering; C. Robert Moulton, chemistry; F. C. Brown, physics; J. A. Folse, power; R. B. May, transportation; Mary B. Day, library; Eric Fenger, staff engineer; E. C. Rauschenberg, superintendent of shops, and J. A. Maloney, public relations.

DR. BRUNO GEBHARD, formerly curator of the Museum of Hygiene in Dresden, has been appointed director of the Cleveland Museum of Health and Hygiene, which will open in October. Since 1937 Dr. Gebhard has been serving as technical consultant for the medicine and public health exhibits at the World's Fair in New York. Plans for the Cleveland Museum were initiated in 1939 when Mrs. Francis F. Prentiss gave the building and the Cleveland Academy of Medicine carried out a campaign for supporting memberships. In addition to exhibits for education in public health, the museum expects to have workshops for the creation of visual health aids for schools, colleges and other educational agencies.

DR. BERNARD WITLIN has resigned his positions as instructor of bacteriology at the Philadelphia College of Pharmacy and Science and as research bacteriologist at the Mulford Biological Laboratories of Sharp and Dohme, Inc., to become a member of the newly organized Barlin Laboratories at Philadelphia, Pa.

DR. R. RUGGLES GATES, professor of botany at the University of London, arrived in the United States on July 29. He is on leave of absence without salary for the duration of the war. Dr. Gates is working at the Marine Biological Laboratory at Woods Hole before going to Canada, where his address will be Middleton, Nova Scotia. He expects to be available for lectures during the coming academic year.

DR. EARL H. MYERS, who for the past two years has been working on a John Simon Guggenheim Foundation fellowship, has been awarded the Rhumphius fellowship from the Treub Laboratories of the Dutch East Indies. This fellowship has been granted to continue investigation of the life cycles and ecological

relationships of the Foraminifera. Dr. Myers plans to return to America in December.

DR. L. G. M. BAAS-BECKING, formerly of Stanford University and now director of the 's Lands Plantentuin te Buitenzorg, was called back to Holland in March, and was there when the low countries were invaded. A telegram has been received stating that he is alive and well.

THE National Research Council Committee on Human Heredity has at its disposal certain funds for use in furthering studies in human inheritance. Qualified persons are invited to submit requests for grants where needed to initiate or to continue research in this field. Requests should be sent as soon as possible to any member of the committee, and should include a clear statement of the problem, results already achieved, if any, the approximate time required to finish the problem, the amount of money needed and a statement as to how the money will be spent if granted. The committee consists of Halbert L. Dunn, Bureau of the Census, Washington, D. C.; L. C. Dunn, department of zoology, Columbia University; K. S. Lashley, department of psychology, Harvard University; George L. Streeter, bureau of embryology, Carnegie Institution of Washington, Baltimore, Maryland; Sewall Wright, department of zoology, University of Chicago, and Laurence H. Snyder, *chairman*, department of zoology, the Ohio State University.

THE second International Congress of Pure and Applied Science, which it was planned to hold at Columbia University in September, has been postponed. As soon as possible new arrangements will be made for the meeting.

DR. O. A. DRUMMOND, plant pathologist of the School of Higher Agriculture at Estado de Minas Gerais, Vicosia, Brazil, writes to the secretary of the American Association for the Advancement of Science that students or investigators from the United States, who may care to spend some time in that region, will be welcomed at the school.

THE University of Berne, Switzerland, has announced its annual prize for work on encephalitis lethargica which "signifies real progress in the diagnosis or treatment of the disease." Applications should be sent to the dean of the Medical Faculty.

FOR the academic year 1940-41, the Abbott Laboratories have established fellowships in several universities. The fellowships, carrying stipends of \$650 per year, will be available to graduate students in the last or next to last years of graduate work leading to the doctorate degree. The recipients, who are to be selected by the universities in which their work is

being done, are not limited as to the subjects on which they will work. Grants will be made in organic chemistry at Cornell, Harvard, Illinois, Michigan and Northwestern Universities; in biochemistry at California, Columbia and Cornell Universities.

ACCORDING to *The Collecting Net*, the number of investigators in each academic rank registered this summer at the Marine Biological Laboratory at Woods Hole, Mass., is: Professors, 63; associate professors, 19; assistant professors, 60; instructors, 46; research associates, 10; assistants, 71; fellows, 22; graduate students (not listed elsewhere), 27; medical students, 8; undergraduate students, 7; preparatory students, 3; miscellaneous, 22. The four institutions leading in providing investigators for the laboratory are: Pennsylvania, 34; Columbia, 20; New York University, 16; and Chicago, 11.

FOSSIL camels from South Dakota have been collected by an expedition of the Field Museum of Natural History. The camels lived in that state during the Miocene age, about 18,000,000 years ago. They form part of a collection which gives promise of being one of the best representations of fossil animals from the Rosebud Beds in South Dakota, according to Paul O. McGrew, of the paleontological staff, who is the leader of the expedition. Other specimens include a large number of skeletons and skulls of the extinct ungulates known as oreodonts, extinct peccaries and horses. Also included is an especially fine representation of extinct species of rodents, some of which are believed to be of kinds hitherto unknown to science. Nearly all the material obtained represents mammals not previously represented in the collections of the museum.

*Nature* states that the British Minister of Labor and National Service has made an order for the compulsory registration of professional engineers. It refers to those who are normally engaged in a technical or su-

pervisory capacity in aeronautical, automobile, chemical, civil, structural and municipal, electrical, gas, locomotive or mechanical engineering; and those normally engaged on research work in the engineering sciences at a university or in research and development work in any industry or as a teacher of engineering science. Men whose names are already on the Central Register are not to register again. There are 22,000 names in the engineering categories of the register, of whom about 800 are not in employment, and it is estimated that 30,000 more names will be added.

THE *London Times* announces that Lord Perry, chairman of the Ford Motor Company, with the approval of the British Ministry of Agriculture, the Henry Ford Institute of Agricultural Engineering, at Boreham, near Chelmsford, is offering 40 free scholarships for the training of British boys for careers in agriculture. The scholarships comprise 10 that are tenable for three years, 10 for two years and 20 for one year. Each is valued approximately at £175 a year, which includes cost of tuition; board and residence during terms at Boreham House, near the Fordson estates; laundry; pocket money during terms and holidays; special clothing and boots. The cost, estimated at £7,000 a year, is to be defrayed by Henry Ford. The intention is to provide theoretical and practical instruction in the latest methods of every branch of farming, with classroom tuition and field work in alternate months, in order to train the boys to become key men in British agriculture. The estates attached to the institute cover 4,000 acres, and are devoted to corn crops, intensive market gardening, glasshouse culture, a fruit section with gas storage and the care of 2,000 pigs, 700 sheep and 200 dairy cattle. Applicants for scholarships will be required to attend the institute for a probationary period of one month, during which the final selections will be made of the prospective recipients.

## DISCUSSION

### INSECT CULTURES INBRED FOR 200 GENERATIONS

IN our insect-rearing laboratory at the Ohio State University we now have cultures of the blowflies *Lucilia sericata* and *Phormia regina* which have been inbred for ten years or approximately 200 generations. These cultures have lost nothing in vigor and are well adapted to laboratory rearing and uses.

In 1930 the Division of Insects Affecting Man and Animals of the U. S. Bureau of Entomology decided to make a study of blowfly maggots which were useful in the treatment of certain types of infections, especially osteomyelitis. In June of that year I was

invited to Washington, D. C., to begin the first steps of this work. Cultures of blowflies were being maintained at that time at the Naval Hospital in Washington and at Children's Hospital School in Baltimore, where the treatment had originated under Dr. Wm. S. Baer. These cultures consisted of a mixture of species of flesh flies obtained by placing bait out of doors and collecting eggs. Consequently, one of the first necessary steps was to establish pure cultures of known species of flies.

At that time cultures of three species were started. One was the species *Calliphora erythrocephala*, which was later discarded because it was found to be less satisfactory for clinical use. The other two species