

Besides the three main sessions enumerated above, there will be a session devoted to a group of papers on various phases of electrochemistry. Stender and his associates (Leningrad, Russia) will discuss the Castner cell; Krause and Kahlenberg (University of Wisconsin), the palladium-hydrogen equilibrium; Lilienfeld, Nieh and Goldman (of Malden, Mass.), anodic layers on aluminum.

Dr. Colin G. Fink, Columbia University, New York City, is secretary of the society.

#### CHANGES AT THE FRANKLIN INSTITUTE

NATHAN HAYWARD, president of the Franklin Institute, Philadelphia, Pa., has announced the election of Henry Butler Allen, metallurgist of the Henry Disston Company, Philadelphia, and member of the Board of Managers of the Franklin Institute for several years, as director of the museum of the institute. He will take up his new work on October 1.

Dr. Howard McClenahan has been granted a year's leave of absence and plans to travel for a year, after which he will continue his services as secretary of the institute, a position that he accepted in 1925 when he retired as dean of the College of Princeton University. Under his leadership the Franklin Institute, together with the Benjamin Franklin Memorial, Inc., conducted a drive for funds for a new building. Work was begun in 1930 and the building completed and occu-

pled in the fall of 1933. Shortly after his acceptance of the secretaryship he proposed this expansion and was sent abroad by the officials of the institute to study the Deutsches Museum in Munich. As a result of his efforts the scientific and technological museum was sponsored by the institute. One of its best known features is the planetarium, the gift of Samuel S. Fels. In Dr. McClenahan's absence Dr. Alfred Rigling, librarian and assistant secretary, will carry on his work.

Mr. Allen's connection with the Franklin Institute began when he became a member in 1916. He has served as chairman of the Committee on Science and the Arts, and in 1932 was elected a member of the Board of Managers. He has been chairman of the Museum Committee for the past two years. Mr. Allen, who was born in Greenfield, Mass., attended New England schools and Amherst in the class of 1909. He received a degree of metallurgical engineer from the Columbia University School of Mines in 1911. For a short time thereafter he was United States Examiner of Iron and Steel for the Port of New York. In 1913 he became associated with Henry Disston Sons Company, of Philadelphia, and has continued with them ever since, being now chief metallurgist of the company. Mr. Allen returned recently from a six-week trip to Europe, where he visited museums as well as industrial plants.

### SCIENTIFIC NOTES AND NEWS

SIR JOSIAH STAMP was elected president of the British Association for the Advancement of Science at the recent meeting at Norwich. Sir Josiah is chairman of the London, Midland and Scottish Railway, director of the Bank of England and a member of the British Economic Advisory Council.

At the annual meeting of the American Astronomical Society, held at Toronto on September 10, 11 and 12, under the presidency of Dr. Henry Norris Russell, of Princeton University, the following officers were elected: Dr. Frederick Slocum, of the Van Vleck Observatory at Wesleyan University, *vice-president*; Dr. Annie Jump Cannon, of Harvard College Observatory; Dr. Robert H. Baker, of the University of Illinois, and Dr. Theodore Dunham, Jr., of the Mount Wilson Observatory, *councilors*; Dr. Robert G. Aitken, director emeritus of the Lick Observatory, was appointed the society's representative on the National Research Council. Dr. R. S. Dugan, of Princeton University, *secretary*, and Dr. F. C. Jordan, of Allegheny Observatory, *treasurer*, were reelected. Dr. Ejnar Hertzsprung, director of the Sterrewacht at Leiden, Holland, was elected to honorary membership to succeed the late Dr. Willem de Sitter.

A DINNER in honor of Dr. Gilbert N. Lewis, professor of physical chemistry and dean of the College of Chemistry of the University of California, was given by the American Chemical Society at the close of the San Francisco meeting.

PRESENTATION will be made of the Frederic Ives Medal for 1935 to Dr. George Ellery Hale, honorary director of the Mount Wilson Observatory of the Carnegie Institution, at the annual dinner of the Optical Society of America, which meets at the Franklin Institute, Philadelphia, from October 24 to 26. Dr. Charles G. Abbot, secretary of the Smithsonian Institution, will accept the medal on behalf of Dr. Hale.

THE Albert Medal for 1935 of the Royal Society of Arts, London, given annually "for distinguished merit in promoting arts, manufactures or commerce," has been awarded to Sir Robert Hadfield "for his researches in metallurgy and his services to the steel industry."

*Nature* states that the council of the Royal Society of Edinburgh has awarded the Makdougall-Brisbane Prize for the period 1932-34 to Dr. A. E. Cameron, lecturer in entomology at the University of Edinburgh, for his publications in entomology.

THE Vienna Academy of Sciences has awarded the Ignaz-L. Lieben prize to Dr. Armin Dadiou, professor of physical chemistry at Graz; the Haitinger prize to Dr. Josef Mattauch, privatdocent in physics at Vienna; the Rudolf-Wegscheider prize to Dr. Wolfgang Leithe, privatdocent in organic chemistry at Vienna, and the Fritz Pregl prize for micro-chemistry to Dr. Edgar Schally, of Graz.

AT the University of Virginia, Dr. Edward James McShane has been appointed professor of mathematics; Dr. Eller C. Howe, of New Mexico, associate professor of engineering, and Chapin Jones, associate professor of forestry.

LEWIS VAN CARPENTER, professor of sanitary engineering and head of the department of civil engineering at West Virginia University, has been appointed associate professor of sanitary engineering in the New York University College of Engineering, and John K. Vennard, of the Massachusetts Institute of Technology, has been appointed instructor in hydraulics.

AT the Iowa State College, Professor John Tipton Lonsdale, of the Texas Agricultural and Mechanical College, has been appointed head of the department of geology, and Professor Mervin S. Coover, of the University of Colorado, head of the department of electrical engineering; Dr. E. L. McMillen, formerly of the University of Minnesota and of Lehigh University, has been made assistant professor of chemical engineering, and Dr. A. M. Lucas has been appointed professor of zoology.

AT the School of Medicine of the University of Alabama, Dr. Cornelius S. Haggerty, of Rush Medical College, has been appointed assistant professor of pathology and bacteriology, replacing Dr. Gene H. Kistler, who has accepted a surgical appointment at the Lahey Clinic in Boston. Dr. Herbert K. Fidler, of Indiana, has been appointed instructor in pathology and bacteriology, and Dr. Snowden C. Hall, Jr., of Duke University School of Medicine, instructor in physiological chemistry and physical diagnosis. Dr. Hall replaces Dr. J. Lamar Callaway, who has accepted a fellowship in dermatology under Dr. John H. Stokes, of the University of Pennsylvania.

J. F. CRAIG, principal of the Veterinary College of Ireland, has been appointed to the William Prescott chair of the "Care of Animals—Causation and Prevention of Disease," at the University of Liverpool, in succession to the late Professor S. H. Gaiger.

THOMAS BERTRAND ABELL, professor of naval architecture and dean of the faculty of engineering of the University of Liverpool, has been appointed pro-vice-chancellor of the university for the year 1935-36.

DR. ALLEN D. KELLER, professor of physiology and

pharmacology at the School of Medicine of the University of Alabama, has received a grant of three thousand dollars from the Rockefeller Foundation, to be spent in carrying on a program of experimental work on the central nervous system on which he has been engaged for several years.

DR. A. S. HAZZARD has resigned his position as associate aquatic biologist in the U. S. Bureau of Fisheries, under which he has been in charge of research for the bureau in the Intermountain Region, to become director of the Institute for Fisheries Research, supported at the University of Michigan by the Michigan Department of Conservation.

DR. J. L. WEIMER, plant pathologist for the U. S. Department of Agriculture, who has been investigating the diseases of alfalfa in California for the past several years, has been transferred to the Georgia Experiment Station, Experiment, where he will study the diseases of green manure crops, paying special attention to Austrian winter peas and vetches.

COLONEL H. H. A. EMERSON, commandant and chief instructor at the British Army School of Hygiene, Aldershot, has been selected director of hygiene at the War Office, in succession to Major-General P. H. Henderson, who will retire on completion of four years' service as a major-general.

DR. E. D. ADRIAN, Foulerton professor of physiology of the Royal Society, succeeds Sir Charles Sherrington as a member of the Advisory Board of the Beit Memorial Trust. The trustees accepted with regret the resignation of Sir Charles, who had served for twenty-four years.

DR. JESSE D. FIGGINS, director of the Colorado Museum of Natural History, has been called in as consultant in the construction of a museum at Dallas, Texas, which is to be erected at a cost of \$200,000.

DR. WILLET F. WHITMORE, professor of chemical microscopy and organic chemistry at the Brooklyn Polytechnic Institute, has resigned as a member of the Amityville, L. I., Board of Education, on which he has served for eight years.

W. W. YOTHERS, Orlando, Fla., entomologist of the U. S. Department of Agriculture, has retired after thirty years of service. He will engage in commercial work, supervising pest control for individuals, firms, associations and corporations. He will also act as referee in cases of dispute in all matters pertaining to citrus fruit production.

DR. JOHN E. YOUNGER, professor of mechanical engineering in the University of California, has been granted a year's leave of absence, as special investigator for the army to conduct research in the Research

and Development Laboratory of the United States Air Corps, Dayton, Ohio.

DR. W. H. ADOLPH, professor of biochemistry at Yenching University, Peiping, China, has been granted leave of absence for the academic year 1935-36, and will be engaged in research work at Yale University.

DR. ROBERT S. PLATT, of the department of geography of the University of Chicago, left on September 9 for a six-months airplane field trip through northern South America. He expected to start on September 12 from Miami for British Guiana and to continue along the east coast of Brazil, then by boat up the Amazon River. The Andes will be surveyed from the plane, and the trip will be finished by a study of Peru, Ecuador and Panama.

DR. OTTO SAVISON has been appointed Tweedie fellow of the University of Edinburgh for two years. This fellowship is awarded to enable the holder to carry out exploration and research in the less known regions of Asia and northern Africa. Dr. Savison was formerly head of the East Asiatic Section of the Ethnographical Museum in Hamburg, holding the post until 1933. In 1931 and 1932 he traveled in China to collect ethnographical specimens for the museum. He will study the extent and direction of the influences of China upon India and *vice versa*, planning to live in villages near the borders of India.

A PARTY of naturalists, led by Professor J. W. Heslop Harrison, professor of botany at Armstrong College, University of Durham, recently returned to Newcastle after making a survey of the flora and insect life of four small Hebridean Islands. Much of the ground had not previously been covered, and as a result of their work the known range of British plants has been increased. Numerous specimens of plant and animal life on the islands were collected.

THE Division of Medical Sciences of the National Research Council will hold a special meeting in November for the consideration of applications for grants in this field. Applications must be on file with the secretary of the Committee on Grants-in-Aid, Dr. Clarence J. West, not later than October 1. Applications received after October 1 and prior to February 15, 1936, will be acted upon at the next regular meeting of the Committee on Grants-in-Aid in March, 1936.

AT the San Francisco meeting of the American Chemical Society it was voted to accept the invitation of the section at Rochester, N. Y., to hold there the autumn meeting in 1937, when the twenty-fifth anniversary of the founding of the section will be celebrated. On the recommendation of the Committee on Policy of the Council it was voted to hold the autumn meeting of 1938 in the region of Wisconsin and Minne-

sota. The spring meeting of that year will be held in the region of Oklahoma and Texas.

THE eighth annual meeting of the Committee on Electrical Insulation, Division of Engineering and Industrial Research, National Research Council, will be held at Pittsfield, Mass., on October 17, 18 and 19, with the General Electric Company as host. The technical program is in three sessions in which twenty papers in the field of dielectric research and its applications to the problems of electrical insulation will be presented. Dr. J. B. Whitehead, of the Johns Hopkins University, Baltimore, Md., is chairman of the committee, and W. F. Davidson, of the Brooklyn Edison Company, Brooklyn, N. Y., is secretary.

ACCORDING to *The Museum News*, the Museums Association of China was organized at a meeting held last May at the Palace Museum, Peiping. More than sixty museum workers attended. Ma Heng, director of the Palace Museum, was elected chairman and T. L. Yuan, director of the National Library, secretary-treasurer. Headquarters have been established at 3 Chih Shan Men Ta Chieh, Peiping. The association is sponsoring an exhibition illustrating museum architecture and equipment in Europe and America, which was shown at the Jade Buddha Pavilion in May and will be circuited to other cities in China. The program of the association includes the publication of a directory of Chinese museums and a bi-monthly bulletin. Also a reference library will be maintained as a center of information about museums and museum technique. In order to introduce western methods into Chinese museums the Museums Association of China is endeavoring to increase as rapidly as possible its collection of books, pamphlets and periodicals dealing with museum work in all its phases, including especially material from American sources.

AN appropriation of \$5,000,000 for the Graduate School of the University of Michigan has been made by the Horace H. Rackham and Mary A. Rackham Fund of Detroit. The grant supplements many anonymous gifts which Mr. Rackham made to the institution during his lifetime. One million dollars will be used to construct an independent building for the Graduate School, on an area a block square, while the balance will become a perpetual endowment for the school.

APPLICATIONS must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than September 30 for an open competitive examination for the position of senior safety engineer for the Division of Labor Standards, Department of Labor, at a salary of \$4,600 a year. Applications must also be on file for the positions of physiotherapy aide and pupil aide at salaries, respectively, of \$1,800 and \$1,440, annually.

FIVE members of the Andes-Amazon expedition, 1935-1936, sponsored by the Museum of the American Indian (Heye Foundation), sailed on August 10 for Ecuador, under the leadership of Captain Eric Erskine Loch. Others will meet them in Ecuador. The expedition, whose chief purpose is to study the Ssabela Indians in the Upper Amazon Valley and bring back ethnological specimens to the museum, will remain in the field a year.

To promote the study and work in the field of theoretical biology a foundation for theoretical biology of animal and man has been founded at the University of Leiden. In memory of the late professor of zoology Van der Hoeven (1801-1868), the author of the "*Philosophia zoologica*," it is called "Professor Dr. Jan van der Hoeven Stichting voor theoretische biologie van dier en mensch." The chief objects of the foundation are: (1) to arrange for lectures at the University of Leiden; (2) to bring the Leiden biologists who are interested in theoretical biology into contact with their colleagues in Holland and abroad; to bring about a contact for scientific purposes and organizations between theoretical biologists all over the world, for instance, by arranging international symposia on theoretical biology; (3) to publish articles on theoretical biology; (4) to found a library on this subject. Directors of this foundation are: Dr. C. J. van der Klaauw, professor of general zoology, and Dr. J. A. J. Barge, professor of medical anatomy, both at Leiden, and Dr. Adolf Meyer, professor of theoretical biology at Hamburg.

THE *Journal* of the American Medical Association states that Dr. Desfosses, editor of the *Presse médi-*

*cale*, has published statistics on a subject that has caused agitation in France. In 1935 there are 10,148 French and 3,021 foreign students in the various medical schools; hence more than a fourth of the total number of 13,169 are foreigners. Ten thousand French students are far more than are necessary to fill the needs for medical men in France and its colonies. Some foreign countries, like Poland, now refuse to allow students to return to their native land to practise, and the same will soon be true of other countries that will not recognize a French diploma. The only method to decrease the plethora in the medical profession lies in the Portmann law, which aims to eliminate students during the first two years who can not attain a certain grade in their examinations and who have not had sufficient preliminary training.

A WAR DEPARTMENT request for \$2,000,000 to map areas along the coasts and borders "which will become of high strategic importance in war" was announced recently by the works applications division. The army mapping project would include about 37,440 square miles of new maps and revised maps for about 38,320 square miles of territory. It would call for reproduction of defense maps and be coordinated with work by the Geological Survey and the Coast and Geodetic Survey. The services of the Air Corps and army engineers would be utilized. The proposed mapping would be done in Arizona, California, Connecticut, Delaware, District of Columbia, Florida, Mississippi, Maine, Maryland, Massachusetts, Michigan, Montana, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, South Carolina, Texas, Vermont, Wyoming and Wisconsin.

## DISCUSSION

### THE CIRCULATION OF HUDSON BAY WATER AS INDICATED BY DRIFT BOTTLES<sup>1</sup>

THE Hudson Bay Fisheries Expedition of 1930<sup>2</sup> released five hundred drift bottles in Hudson Bay in the hope that returns from these bottles would throw some light on the general circulation of the surface layer of the waters of the bay.

The drift bottle used consisted of an ordinary catsup bottle, to which was attached a metal drag. The metal drag, suspended by about three feet of galvanized wire, was intended to serve two purposes as follows: (1) To keep the bottle upright and almost wholly submerged, and (2) to cause the bottle to follow

the movement of the upper three feet of water, rather than the movement of the immediate surface water. Postcards, asking information from the finders of the bottles, were placed within the bottles. Bits of red cloth were placed in the necks of the bottles as a means of attracting attention if, and when, the bottles were seen lying on the shore. The bottles were then sealed with waxed corks.

Five years have passed since these bottles were released, and to date (July, 1935) twenty-six cards have been returned, a surprisingly good return from

TABLE 1

Lot	Date of release	Number released	Number returned	Percentage returned
1 . . . .	Aug. 6/30	102	none	0.0
2 . . . .	Aug. 7/30	145	17	11.3
3 . . . .	Aug. 19/30	154	5	3.4
4 . . . .	Sept. 5/30	99	4	4.0

<sup>1</sup> Published with the permission of the Biological Board of Canada.

<sup>2</sup> H. B. Hachey, *Contr. Canad. Biol. and Fish.*, 6, 23: 465-471, 1931.