Smithsonian Institution, President Walcott presiding.

The scientific program which was printed in the last issue of SCIENCE included reports of important researches, summaries of war work connected with the National Research Council (a committee of the Academy), and the William Ellery Hale lectures on "The Beginning of Human History from the Geologic Record," by Dr. John C. Merriam, of the University of California.

At the annual dinner, held Tuesday evening at the Cosmos Club, the following medals and awards were presented:

The Comstock Prize of $1,500 for discoveries in magnetism and electricity was awarded to Samuel Jackson Barnett, Ohio State University, Columbus, Ohio.

The Draper Medal for discoveries in astronomical physics, to Walter Sydney Adams, Mount Wilson Solar Observatory, Pasadena, California.

The Daniel Giraud Elliot Medal and Honorarium, for work in paleontology and zoology, to Frank M. Chapman, American Museum, New York.

Members of the Council elected were W. H. Howell and C. G. Abbott.

The new members elected were:

Robert Grant Aitken, astronomer, Lick Observatory, California.

George Francis Atkinson, botanist, Cornell University, Ithaca, New York.

George David Birkhoff, mathematician, Harvard University, Cambridge, Mass.

Percy Williams Bridgman, physicist, Harvard University, Cambridge, Mass.

Stephen Alfred Forbes, zoologist, Urbana, Illinois.

Charles Elwood Mendenhall, physicist, University of Wisconsin, Madison, Wisconsin.

John Campbell Merriam, paleontologist, University of California, Berkeley, California.

Henry Norris Russell, astronomer, Princeton University, Princeton, New Jersey.

David Watson Taylor, engineer, Rear Admiral, and Chief of the Bureau of Construction and Repair, Department of the Navy, Washington, D. C.

John Ripley Freeman, engineer, Providence, Rhode Island.

Charles Judson Herrick, neurologist, University of Chicago, Chicago, Illinois.

Ludwig Hektoen, pathologist, University of Chicago, Chicago, Illinois.

Frank Baldwin Jewett, engineer, Western Electric Company, New York City.

Walter Jones, physiologist, Johns Hopkins University, Baltimore, Maryland.

Irving Langmuir, chemist, General Electric Company, Schenectady, New York.

SCIENTIFIC NOTES AND NEWS

THE Geological Society of France has awarded to Dr. Henry Fairfield Osborn the Gaudry Medal, which was established by the society in the year 1910 in honor of the distinguished French paleontologist, Albert Gaudry. Previous awards of the medal have been to the following paleontologists and geologists: Albert Gaudry, 1910; Marcellin Boule, 1911; Henri Douville, 1912; Eduard Suess, 1913; Emile Haug, 1914; Charles D. Walcott, 1917.

DR. LOUIS A. BAUER, director of the department of terrestrial magnetism, Carnegie Institution of Washington, has been elected a foreign correspondent member of the Royal Academy of Sciences of Netherlands India.

AT the last session of the Paris Academy of Medicine, an election was held to fill the places of Dr. Duguet and Professor Reclus in the section of internal pathology and external pathology, respectively. To the former Dr. Pierre Teissier was elected by 55 out of 62 votes, and to the latter, Dr. Felix de Lapersonne was elected by 49 out of 61 votes.

THE recalling of Dr. Allan J. McLaughlin to the United States Public Health Service to become assistant surgeon-general in charge of the Division of Interstate Quarantine, left a vacancy in the health commissionership of Massachusetts, which has been filled by the appointment of Dr. Eugene R. Kelley, who went into office on April 1. Dr. Kelley was formerly commissioner of health of Washington, and for three years past has been director of the department of communicable diseases in the Massachusetts organization.

MR. R. M. STEWART, who has been associated with the Dominion Astronomical Observatory at Ottawa since 1902, has been appointed assistant chief astronomer.

ATTENTION is called in the *American Museum Journal* to the fact that Dr. Frank M. Chapman, curator of ornithology, who is second in point of seniority on the scientific staff of the American Museum of Natural History, completed on March 1, 1918, his thirtieth year of connection with the institution. He joined as assistant curator of vertebrate zoology in 1888. "He has, from the first, devoted himself chiefly to ornithology, attaining preeminence in educational and scientific work in that branch. The effectiveness and high ecological value of the large series of habitat bird groups in the museum, which it is said by competent observers are second to no exhibits of birds in the world, are based on the careful observations made during his extensive field studies."

LIEUTENANT PETER K. OLITSKY, Medical Corps, U. S. A., and of the scientific staff of The Rockefeller Institute for Medical Research, upon permission granted him by the surgeon-general, sailed from Vancouver on April 11, for China, in response to a cabled request received by the institute from the colonial secretary at Hong Kong for assistance in a local outbreak of epidemic meningitis. Dr. Olitsky is to advise the Hong Kong government concerning the control of the disease, and especially in the preparation of an effective serum and the institution of other therapeutic and prophylactic measures.

AT the request of the South African Institute for Medical Research, The Rockefeller Institute for Medical Research has arranged with the Vermont State Department of Health to release Dr. Edward Taylor for temporary service in Johannesburg to advise the government there in respect to an epidemic of poliomyelitis prevailing in that region. Dr. Taylor sailed from New York on April 20.

DR. HERBERT J. SPINDEN, assistant curator in the department of anthropology at the American Museum, is on his way to Colombia, South America, to make a general archeological survey.

BRINGING an appeal for a doctor by Vilhjalmur Stefanson, the Arctic explorer, who lies dangerously ill on Herschel Island, a messenger reached Fort Yukon, Alaska, on April 25, after a record-breaking trip from the north. In a message carried by the courier Stefansson told of being ill fifty days, after being stricken with typhoid and pneumonia, followed by complications. A Northwest mounted policeman and two Eskimos have died of typhoid, while several others are ill. A doctor already is on his way to Herschel Island.

DR. H. C. COWLES, of the department of botany of the University of Chicago, visited the Iowa State College on April 12 and gave the annual address for the national honorary societies Phi Kappa Phi and Gamma Sigma Delta.

PROFESSOR S. W. PARR, professor of chemical engineering at the University of Illinois, recently gave an address at the Iowa State College before the Ames Section of the American Chemical Society.

THE annual oration of the Medical Society of London will be delivered by Dr. T. S. Hyslop on May 13, upon the subject of "Degeneration in Art, Science and Medicine."

A KNOLL on the University of Wisconsin campus on which John Muir, the naturalist and explorer, received his first lesson in botany under a locust tree while a student at the university, is to be officially dedicated and named "Muir Knoll." The ceremony will be held on alumni day, June 18, during commencement week.

THE deaths are announced of R. S. Trevor, lecturer on pathology and dean of St. George's Medical School, London, aged forty-six years and of G. A. Petrone, lecturer in pathology and pediatrics at the University of Naples, aged forty-four years.

CHARLES KEENE DODGE, of Port Huron, Michigan, died at Ann Arbor on March 22, in his seventy-fourth year. A correspondent writes: "For forty years he had been interested in the botany of eastern Michigan and adjacent portions of Canada, and for the last decade was unquestionably the foremost student of higher plants in these regions. He published many regional lists of plants. His

death will be deplored by all systematic botanists, as well as by all who knew his genial personality."

DR. FERDINAND BRAUN, of Germany, who shared the Nobel Prize in 1905 with Guglielmo Marconi, for distinguished achievements in the invention of improved methods of wireless telegraphy, died on April 14 at a Brooklyn hospital. Death was caused by a heart attack induced by an overdose of morphine, which Dr. Braun is alleged to have taken before arriving at the hospital, to ease pain from an intestinal disorder from which he had been suffering for three years. Dr. Braun was born in Fulda, Germany, in 1850. He came to this country in 1914 as a witness in litigation between the Marconi Wireless Company and the German company which built and operated the wireless station at Sayville, L. I.

MR. H. J. HELM, formerly deputy-principal chemist of the British Government Laboratory, has died at the age of seventy-nine years.

UNIVERSITY AND EDUCATIONAL NEWS

MR. J. C. LINCOLN has presented to Oberlin College the Mary McKenzie Lincoln Scholarship Fund, to be used in paying the term bill of some young woman, a student in Oberlin, who desires to continue her studies at the summer school of the Marine Biological Laboratory at Woods Hole.

THROUGH the will of the late Henry Janeway Hardenbergh, of New York, Rutgers College has received Mr. Hardenbergh's library in architecture and the sum of $20,000. Mr. Hardenbergh designed and erected Geological Hall and the Kirkpatrick Chapel, and two years ago carried out the remodelling of the chapel.

ANNOUNCEMENT has been made that President Wilson has directed the War Department to establish an infantry unit, senior division, of the Reserve Officers' Training Corps at Columbia University.

AT the University of Buffalo medical school, Dr. Edward W. Koch has been appointed professor of pharmacology and Dr. Wayne J. Atwell, professor of anatomy, both on a full-time teaching and research basis.

MISS PHYLLIS M. BORTHWICK, lecturer in physics at the Ladies' College, Cheltenham, has been appointed assistant-professor of physics and chemistry at the Lady Hardinge Medical College for Women, Delhi.

DISCUSSION AND CORRESPONDENCE

NOTE ON A REVERSE CONCENTRATION CELL

IN the Nernst theory of the concentration cell the solution tension of both electrodes is assumed to be the same, but the electrode in the more concentrated part of the electrolyte is supposed to have its rate of solution retarded by the back "osmotic pressure" of its own ions.

Another possible way of regarding the phenomenon is to suppose that the electrode in the solution of higher specific inductive capacity always goes into solution faster than the other, and hence becomes the anode. From this point of view, the solution of metallic salts in water lowers the specific inductive capacity of the water, and hence the electrode in the more concentrated solution of the concentration cell becomes the cathode.

A concentration cell for demonstration purposes is often made by pouring water carefully upon a concentrated solution of stannous chloride, so that the two liquids do not mix, and placing a rod of tin in the two solutions. The tin will rapidly dissolve in the dilute solution at the top, and crystals of tin will be deposited from the concentrated solution at the bottom.

If, instead of pouring water upon the concentrated solution, a solution of stannous chloride in ether be poured upon it and the two solutions be shaken together, most of the salt in solution will go into the water and only a little will remain in the ether and water at the top. Thus the tin ions are highly concentrated in the water and are very dilute in the ether, and their "osmotic pressure" is correspondingly greater in the water than in the ether. Notwithstanding this difference of concentration, if the tin rod be placed in the two solutions, ions will dissolve off it in the