Section II, Biological Sciences, Chairman, Dr. Edwin G. Conklin, emeritus professor of zoology, Princeton University; Secretary, James A. G. Rehn, Academy of Natural Sciences, Philadelphia.

Section III, Geological Sciences, Chairman, Dr. T. Wayland Vaughan, president of the Geological Society of America, 1939; Secretary, Dr. Wendell P. Woodring, senior geologist, U. S. Geological Survey.

Section IV, Agriculture and Conservation, Chairman, Dr. Hugh H. Bennett, chief, Soil Conservation Service, Department of Agriculture; Secretary, Ernest G. Holt, head of the wildlife management section, U. S. Department of Agriculture.

Section V, Public Health and Medicine, Chairman, Dr. Thomas Parran, surgeon-general, United States Public Health Service; Secretary, Dr. A. M. Stimson, medical officer, United States Public Health Service.

Section VI, Physical and Chemical Sciences, Chairman, Dr. Lyman J. Briggs, director, National Bureau of Standards; Secretary, Eugene C. Crittenden, assistant director of research and testing of the National Bureau of Standards.

Section VII, Statistics, Chairman, Dr. Stuart A. Rice, chairman of the Central Statistical Board; Secretary, Dr. Halbert L. Dunn, chief statistician of vital statistics, U. S. Bureau of the Census.

Section VIII, History and Geography, Chairman, Dr. Clarence H. Haring, professor of Latin American history and economics, Harvard University; Secretary, Dr. Robert C. Smith.

Section IX, International Law, Public Law and Jurisprudence, Chairman, Dr. James Brown Scott, trustee and secretary, Carnegie Endowment for International Peace; Secretary, George A. Finch, assistant secretary, Division of International Law, Carnegie Endowment for International Peace.

Section X, Economics and Sociology, Chairman, Dr. Harold G. Moulton, president of the Brookings Institution; Secretary, Benjamin Colby, Brookings Institution.

Section XI, Education, Chairman, Dr. Nicholas Murray Butler, president, Columbia University; Vice-chairman, Dr. I. L. Kandel, professor of education, Teachers College, Columbia University.

SCIENTIFIC NOTES AND NEWS

THE Franklin Medals of the Franklin Institute, Philadelphia, will be awarded to Dr. Arthur H. Compton, professor of physics at the University of Chicago, in recognition "of his brilliant experiments on x-rays," and to Dr. Leo Hendrik Backeland, founder and former president of the Bakelite Corporation, New York, for his invention of bakelite. The presentation will be made on May 15.

At the recent meeting at Cleveland of the American College of Physicians the title of "Master" was conferred on Dr. James B. Herrick, emeritus professor of medicine at the Rush Medical College of the University of Chicago, and on Dr. William Gerry Morgan, emeritus dean of the School of Medicine of Georgetown University, Washington, D. C. It is eleven years since the title has been awarded. The presentation was made by Dr. Charles F. Martin, of Montreal, who is the only one living of six who previously had been so honored.

It is announced from Villanova College that the Mendel Medal, given annually to a distinguished man of science who is a Roman Catholic, has been awarded to Dr. Peter J. W. Debye, director of the Max Planck Institute at Berlin, who is now lecturing at Cornell University.

GROVER LOENING, inventor of the strut-braced monoplane and president of the Grover Loening Aircraft Co., Garden City, N. Y., has been awarded the 1940 Egleston Medal of the School of Engineering of Columbia University "for distinguished engineering achievement." The Egleston Medal was founded last year in memory of Professor Thomas Egleston, pioneer

in engineering education and a member of the Columbia faculty from 1863 until his death in 1900. It is awarded annually to an alumnus who has "distinguished himself either in the furtherance of his branch of the profession, in the development of processes or of technique, or in the application of engineering principles."

Dr. Frederick Fitzherbert Boyce, assistant professor of surgery in the Graduate School of Medicine of the Louisiana State University, has been awarded the 1940 Samuel D. Gross Prize for his research work on "The Role of the Liver in Surgery." The prize is offered every five years by the Philadelphia Academy of Surgery for original research work in the field of surgery. It is of the value of \$1,500. By the terms of the award the material is later published as a monograph.

Dr. Robert Lee Swain, of New York City, editor of *Drug Topics*, will receive the Remington Honor Medal for 1940 of the New York Branch of the American Pharmaceutical Association, in recognition of his services to the profession of pharmacy. He is the nineteenth recipient of this medal, which is awarded annually "to the individual who contributed most to pharmacy during the preceding year or whose contributions over a period of years have culminated during the year in results considered most important and advantageous to the profession."

Dr. J. Sam Guy, professor of chemistry at Emory University, Atlanta, has been named to receive the 1940 Herty Award, presented annually by the Chem-

istry Club of the Georgia State College for Women for "notable contributions to the field of chemistry." The presentation will be made on May 4 in connection with the annual Herty Day exercises.

Dr. Heinrich Ries, professor of geology, emeritus, of Cornell University, has been elected an honorary life member of the Canadian Institute of Mining and Metallurgy, "in recognition of his long and distinguished service as a geologist." Recently Dr. Ries lectured at the University of Toronto on "Problems of Engineering Geology."

The Journal of the American Medical Association reports that the Walter Jarvis Barlow Society of the History of Medicine has established a lectureship in honor of Dr. George Dock, since 1932 honorary professor of medicine at the School of Medicine of the University of Southern California at Los Angeles. Dr. Dock gave the first lecture at a dinner given in honor of his eightieth birthday on April 2. His subject was "A Dictionary of Medical Biography."

According to the London *Times* the Messel Medal of the Society of Chemical Industry, London, given in alternate years for "meritorious distinction in science, literature, industry or public affairs and to one who is prominently concerned with the welfare of the society," has been awarded to Lord Samuel. The presentation will be made at the annual meeting, which will be held in London on July 9, when Lord Samuel will deliver an address.

Professor Walter S. Hunter, chairman of the department of psychology of Brown University, has been elected president of the Eastern Psychological Association. He was president of the American Psychological Association in 1931.

JOHN CRAIG, chairman and managing director of Colvilles, Ltd., has been elected president of the British Iron and Steel Institute. He will succeed the retiring president, Lord Dudley, at the annual meeting on May 2.

LIONEL S. MARKS, Gordon McKay professor of mechanical engineering at Harvard University, a member of the staff since 1894, will retire from active teaching next September, with the title of professor emeritus.

Dr. Kurt Goldstein, clinical professor of neurology at the Psychiatric Institute of Columbia University, has been appointed a member of the faculty of the Medical School of Tufts College.

Nature states that at the election meeting of the Royal Irish Academy in Dublin, it was announced that Dr. Erwin Schrödinger had been appointed professor of theoretical physics in the academy as from April 1.

The funds for the professorship are being supplied to the academy by the Irish Government. Professor Schrödinger has been giving a course of lectures on wave mechanics at University College, Dublin, since November last. This course has had a large attendance from members of the two Dublin colleges. It will be continued now in the Royal Irish Academy. It is believed that the institution of this professorship is intended as a temporary measure, pending the setting up of an institute for theoretical physics in Dublin, in which Professor Schrödinger will have a permanent appointment.

Philip H. Elwoop, head of the department of landscape architecture of the Iowa State College at Ames, has been appointed regional chairman for the National Resources Planning Board in charge of Region 6, which comprises the states of Iowa, Kansas, Minnesota, Nebraska and North and South Dakota. Mr. Elwood has been counselor and consultant for the region for the last six years.

THE Board of Directors of the John and Mary R. Markle Foundation has awarded to Dr. Cecil J. Watson, associate professor and director of the division of internal medicine of the Medical School of the University of Minnesota, a grant-in-aid of \$3,600, in support of his studies on the significance of the excretion of various porphyrins.

THE Committee on Scientific Research of the American Medical Association has made a second grant to Dr. Fritz Schiff, of the department of bacteriology and serology of Beth Israel Hospital, New York City, to be applied toward his work on the serological classification of Salmonella.

A FELLOWSHIP in the medical sciences of the National Research Council has been awarded to Dr. Earl H. Wood, of the department of physiology of the University of Minnesota, to enable him to work with Professor A. N. Richards at the University of Pennsylvania.

Dr. Harry H. Love, professor of plant breeding at Cornell University, has left for Puerto Rico, where he will serve as a special adviser to the Puerto Rican Agricultural Experiment Station. He spent some time last summer making a study of the research work of the station.

Dr. Archibald V. Hill, Foulerton professor of the Royal Society, whose visit to the United States has been recorded in Science, has been appointed assistant air attaché in Washington for special scientific liaison duties.

Dr. J. BJERKNES, of Bergen, Norway, who, with his father, V. Bjerknes, originated the Polar Front Theory of meteorology, is now on the Pacific Coast

working under a temporary appointment for the U. S. Weather Bureau. His assignment is part of the Weather Bureau training program. He will spend one month each at airport stations in Burbank and Oakland, Calif., and Seattle, Wash., during April, May and June.

The Journal of the American Medical Association states that Dr. José A. Pérez, associate professor at the University of Córdoba and director of a hospital, has leave of absence to continue his research principally on tuberculosis, in the United States at the State Health Department of New York, the Henry Phipps Institute in Philadelphia and the National Institute of Tuberculosis in Minneapolis.

Dr. H. H. Sheldon, of the American Institute of the City of New York, was the representative of the American Association for the Advancement of Science at a meeting of the Iowa Academy of Science, which was held at Mt. Vernon, Iowa, on April 19 and 20.

Dr. ESMOND R. LONG, director of the Henry Phipps Institute of the University of Pennsylvania, delivered the thirteenth annual William Snow Miller Lecture at the University of Wisconsin on March 25, under the auspices of Phi Beta Pi. He spoke on "The Decline of Tuberculosis with Special Reference to Its Generalized Form."

Dr. John A. Bartrum, professor of geology at Auckland University College, New Zealand, who with Mrs. Bartrum is making a short visit to the United States, recently addressed students and faculty of the University of Wisconsin. His subject was "The Geology of New Zealand and Shoreline Phenomena."

Supreme Court Justice John E. McGeehan, of New York, has signed the formal decree voiding the appointment of Bertrand Russell as professor of philosophy at the College of the City of New York. At a meeting of the Board of Higher Education, disregarding advice to the contrary by the corporation counsel and by Mayor La Guardia, it was decided by a vote of 11 to 6 to appeal the decision. The board has obtained the services of Emory R. Buckner and John M. Harlan as special counsel.

APPLICATIONS must be on file with the United States Civil Service Commission at Washington, D. C., not later than May 13 for the positions of associate metallurgist and of assistant metallurgist at salaries of \$3,200 and \$2,600 a year, respectively.

The sixth International Congress for Experimental Cytology, which was to have been held in Stockholm from July 25 to August 1, has been postponed indefinitely.

THE American Institute of Chemical Engineers will

hold its thirty-second semi-annual meeting at the Hotel Statler in Buffalo from May 13 to 15.

The Detroit meeting of the American Association of Museums will be held on May 22, 23 and 24 and will be shared by four localities. Those who attend will be guests of the Ford Motor Company for the trips by automobile from hotel headquarters to the different meeting places. The convention will open at the Detroit Institute of Arts. There will be a general session at the institute on the first morning, luncheon as guests of the Arts Commission and sectional sessions in the afternoon followed by a trip to the Alger House branch of the institute and tea at the Grosse Pointe home of Mr. and Mrs. Edsel B. Ford. The second day will be spent at the Edison Institute and Greenfield Village in Dearborn, where Henry Ford and Edsel B. Ford will entertain for luncheon at the Clinton Inn. In the afternoon the group will be taken to Bloomfield Hills to see the Cranbrook Academy of Art and the Cranbrook Institute of Science. The third day will be spent at the University of Michigan, Ann Arbor, where the university will entertain for luncheon. The meeting will close with a dinner celebrating the twentieth anniversary of the Detroit Institute of Arts under the Arts Commission.

THE University of Rochester will hold, on May 7, 8 and 9, a conference under the general topic, "New Frontiers in American Life," as viewed by selected leaders of industrial and allied fields. This clinic is sponsored by a special committee of university trustees, and by an advisory council, of which Owen D. Young is chairman. Luncheon and afternoon sessions on each of the three days of the conference will be held at the College for Men and the College for Women, with students, faculty, alumni and guest consultants as participants. Each evening a more formal and general session will be held in the Eastman Theater of the University of Rochester. These evening sessions will be open not only to special guests, but to the public to the limit of the capacity of the theater. Some of these sessions will be of especial interest to chemists, physicists and engineers; others to business men, journalists, educators and patrons of the liberal arts.

The Harvard Chapter of the Gamma Alpha Graduate Scientific Fraternity presented its annual symposium for the general public on the evening of April 17. Each year several speakers are invited to present special aspects of some recent scientific discovery or development, usually with emphasis placed on the varied fields of its application or on the controversial opinions concerning its importance. The subject this year, "Modern Alchemy," was concerned with radioactivity and how it may be induced and utilized. The opening speaker was Dr. J. Livingood, of the de-

partment of physics of Harvard University, who discussed "Atomic Nuclei and Radio-activity." Professor K. T. Bainbridge, also of the department of physics, spoke on "The Cyclofron and Induced Radio-activity." The concluding address, "Medicine and Induced Radio-activity," was given by Dr. Shields Warren, pathologist of the New England Deaconess Hospital, Boston. Later, the audience adjourned to the Gordon McKay Laboratory of Engineering, where the recently completed cyclotron was demonstrated in action.

The seventh annual meeting of the Pennsylvania Junior Academy of Science was held recently at Washington and Jefferson College, Washington, Pa., with nearly two hundred and fifty boys and girls in attendance. Twenty-seven member clubs from every part of the state were represented. Caroline Emerson, Science Club of Lawrence Park High School, Erie, who spoke on "Harmful Patent Medicines," and Richard Jones, Science Club of the Johnstown Central High School, who demonstrated his Geiger-Mueller cosmic ray counter, were nominated to receive the honorary junior membership award for 1940 of the American Association for the Advancement of Science. Dr. Karl F. Oerlein, of the State Teachers College, at California, Pa., is the general chairman of the Junior Academy in Pennsylvania.

The American Medical Association has entrusted the Committee on Therapeutic Research of the Council on Pharmacy and Chemistry with a modest fund to be expended in the promotion of investigations that may have therapeutic interest. The committee invites applications for grants in this general field, which should be in the hands of the secretary of the council, Dr. Paul Nicholas Leech, 535 North Dearborn Street, Chicago, Ill., by May 1, and which are limited to the purchase of materials or special apparatus.

THE Illinois State Academy of Science announces that it is still entertaining applications for research grants, and that awards will be announced at the annual meeting of the academy on May 3. Applicants should file their applications immediately with C. H. Behre, Jr., chairman of the Research Committee, care of the department of geology, Northwestern University, Evanston, Ill. Preference will be given to small grants intended for purchase of permanent equipment or material, and to applicants working in smaller institutions, in the State of Illinois, not liberally provided with research funds.

The New York Academy of Sciences announces three prizes offered by A. Cressy Morrison, to be known as the A. Cressy Morrison Prizes I, II and III, which will be awarded in December, 1940. Prize I, of \$500, will be awarded for the best paper on solar and stellar energy. Prizes II and III will be awarded for the best papers on a scientific subject included within the field of the academy and its affiliated societies. The competition for Prize I is open to all. Prizes II and III each of the value of \$200 are limited to members, but non-members may become eligible by joining one of these organizations before the closing date.

Sixty-six Canadian university students will take training in research in Canadian institutions under the National Research Council Scholarships during 1940-41. While the majority of these students will be engaged in chemical and physical investigations, such biological studies as genetics, plant pathology, physiology and zoology will each have a quota of students. Two special scholarships of \$1,000 each will be held in the Division of Chemistry of the National Research Council Laboratories at Ottawa, by R. L. Cunningham and R. B. Harvey, of McGill University. Four fellowships of the value of \$750 each, and thirtyseven studentships of the value of \$650 each will be held at various universities directly under the auspices of the council. With the cooperation of Canadian universities, the council is also awarding twenty-three bursaries of \$250 each. The bursaries are available to students of high attainments who have just graduated and are ready to take their preliminary training in research.

DISCUSSION

THE QUESTION OF THE CELL THEORY

In the article "The Case Against the Cell Theory" which appeared in the March 15 issue of Science, the ciliate *Diplodinium* was cited as an organism that has developed systems which perform the vital functions without the "intervention" of cells. This is presented as evidence against the cell theory, yet the ciliates were stated to be monocellular organisms. If the claim had been made, as Dobell² and others have, that

ciliates are non-cellular, there would have been clearer evidence, perhaps, to support the statement. But the simple fact that ciliates are provided with organelles that perform certain vital functions seems to be no better evidence against the cell theory than is the fact that tracheal epithelium is provided with cilia, muscle cells with myofibrils or nerve cells with axons and dendrites.

While the protozoon is a complete organism and may be compared to a higher animal as a functional being, its structure is admittedly that of a cell and

¹ B. J. Luyet, Science, 91: 252, 1940.

² C. Dobell, Arch. f. Protistenk., 23: 269, 1911.