

lumbia University, is a publication issued by The Columbia Press. It aims to provide an "open forum for the discussion of all problems concerning the origin and evolution of the earth's surface features." The hope is expressed that the journal "will do much to advance the scientific study of land-forms, that competent criticism and full exchange of views will serve

to perfect and codify the knowledge already gained in this field of earth study, and that publication of methods and results of geomorphic researches will aid the investigations of every worker in this growing science, and thus materially enlarge the sum of geomorphic knowledge." The journal will appear four times each year in February, April, October and December.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM LAWRENCE BRAGG, who recently resigned from the Langworthy professorship of physics at the University of Manchester to become director of the British National Physical Laboratory, has been appointed Cavendish professor of experimental physics and director of the Cavendish Laboratory of the University of Cambridge, to succeed the late Lord Rutherford of Nelson. Professor Bragg, with his father, Sir William Bragg, director of the Royal Institution, received a Nobel prize for work on x-rays and crystal structure.

THE Academic Senate of the University of Edinburgh, on the recommendation of the Faculty of Medicine, has awarded the Cameron Prize for 1938 to Dr. Karl Landsteiner, member of the Rockefeller Institute for Medical Research, New York, in recognition of his researches on iso-haemagglutinins and blood groups and for the influence of his discoveries on the practice of therapeutic blood transfusion.

THE fiftieth anniversary of the association of Dr. Witmer Stone, director emeritus of the museum, with the Academy of Natural Sciences of Philadelphia, of which he is now vice-president, occurred on February 27. For twenty-five years he was the editor of *The Auk* and served as chairman of the committee that compiled the check list of North American birds in 1931 for the American Ornithological Union.

DR. GEORGE HOYT WHIPPLE, dean of the School of Medicine and Dentistry of the University of Rochester, has been awarded the Charles Mickle Fellowship of the University of Toronto for his work on pigment metabolism and regeneration of hemoglobin.

A BRONZE bust of Sir Arthur Keith was presented to him on February 14 by his friends and old students. The presentation was made by Sir Cuthbert Wallace at the conclusion of a lecture on "The Prehistoric People of Mount Carmel," delivered by Dr. Keith at the Royal College of Surgeons. The bust is the work of Miss Kathleen Parbury.

THE Duddell Medal of the Physical Society, London, has been awarded to Dr. H. Geiger, professor of physics at the University of Tübingen.

THE Hanbury Medal for 1937 of the Pharmaceutical Society of Great Britain was presented on February 8 to Dr. A. B. Wasičky, professor of pharmacognosy in the Pharmaceutical Institute of the University of Vienna. The lecture given by Dr. Wasičky on this occasion was entitled "Modern Points of View and Methods in Pharmacognosy."

DR. PEYTON ROUS, of the Rockefeller Institute for Medical Research, New York, has been elected a corresponding member of the Academy of Medicine in Paris, in the Division of the Biological Sciences.

M. FRANÇOIS GRANDJEAN has been elected a member of the Academy of Sciences, Paris, in the section of mineralogy, in the place of the late M. H. Douville.

DR. EMIL ABDERHALDEN, professor of physiology at Halle, has been elected a member of the Radio Biological Society of Italy.

THE following officers were elected on February 11 at the meeting of the Royal Astronomical Society, London: *President*, Dr. H. Spencer Jones, Astronomer Royal; *Vice-presidents*, Professor S. Chapman, Professor H. Dingle, Sir Frank Dyson and Professor F. J. M. Stratton; *Treasurer*, J. H. Reynolds; *Secretaries*, Professor W. M. H. Greaves, Professor H. H. Platt; *Foreign Secretary*, Sir Arthur Eddington.

DR. PHILIP B. ARMSTRONG, for twelve years a member of the department of anatomy of Cornell University Medical School, has been appointed professor of anatomy in the College of Medicine, Syracuse University.

THE trustees of Tufts College have established a laboratory for research in sensory psychology and physiology, which will be under the direction of Dr. Leonard Carmichael, who was recently elected president of the college. Bertram Wellman, now research associate in psychology at the University of Rochester, an expert in the application of electrical techniques to psychological and physiological problems, will become assistant director of the laboratory.

PROFESSOR RENÉ LERICHE has been appointed to the

chair of medicine in the Collège de France, as successor of the late Professor Charles Nicolle.

THE title of professor emeritus was conferred by the University of Durham on Professor H. J. Hutchens on the occasion of his retirement from the Heath professorship of comparative pathology.

PROFESSOR ALEXANDER MCKENZIE will retire at the end of the present session from the chair of chemistry at University College, Dundee, after serving for twenty-four years.

NOMINATIONS to the council of the American Association of Museums for the three-year term 1938-41 have been made by the council as follows: Hermon Carey Bumpus, trustee of the Children's Museum, Boston; George H. Edgell, director of the Museum of Fine Arts, Boston; Henry W. Kent, secretary of the Metropolitan Museum of Art, New York; Fiske Kimball, director of the Pennsylvania Museum of Art, Philadelphia; Luke Vincent Lockwood, trustee of the Brooklyn Museum, New York; Frederic B. Pratt, president of Pratt Institute, New York; Alexander G. Ruthven, president of the University of Michigan; Hardinge Scholle, director of the Museum of the City of New York; H. C. Shetrone, director of the Ohio State Museum, Columbus; Clark Wissler, curator of anthropology, American Museum of Natural History, New York.

THE *Journal* of the American Medical Association reports that Dr. Louis I. Dublin, vice-president of the Metropolitan Life Insurance Company, has been elected acting chairman of a group incorporated to establish an American Museum of Health. The park commissioner has set aside space on Ward's Island, New York City, which is now being developed for recreation purposes. It is believed that the buildings of the Manhattan State Hospital, now being vacated, can be used temporarily for the exhibits, for which the health and medical exhibits at the New York World's Fair, 1939, may be used as a nucleus. Other members of the group of incorporators are Drs. George Baehr, representing the New York Academy of Medicine; David J. Kaliski, chairman of the coordinating council of the five county medical societies in New York City, and Dr. John L. Rice, health commissioner, and Homer N. Calver, director of health exhibits at the fair.

THE Committee on Scientific Research of the American Medical Association has made the following grants: Lester R. Dragstedt and G. M. Dack, University of Chicago, relationship of *Bacterium necrophorum* to chronic ulcerative colitis; Charles G. Johnston, Wayne University, Detroit, intestinal obstruction; Solomon Strouse and B. O. Raulston, University of Southern California, sodium-potassium rela-

tionship in diabetes; George M. Curtis, Ohio State University, iodine and calcium metabolism in thyroid disease; Catharine Macfarlane, Woman's Medical College of Pennsylvania, value of periodic pelvic examination in detecting cancer of the uterus; Lincoln Oppen and Barnett Sure, University of Arkansas, vascular disease in rat avitaminosis; Samuel Soskin, Michael Reese Hospital, Chicago, chemical tests for endocrine dysfunction; Albert P. Krueger, University of California, bacteriophage; Henry Laurens, Tulane University, lowering of arterial pressure by carbon arc radiation; Robert W. Virtue, University of Denver, formation of bile acids; Moore A. Mills and Francis D. Gunn, Northwestern University, experimental pulmonary tuberculosis in dogs; Arthur H. Smith, Wayne University, Detroit, serum proteins in relation to blood volume.

N. K. JOHNSON has been appointed director of the British Meteorological Office, the appointment to take effect on the retirement next September of Sir George Simpson.

LEWELYN WILLIAMS, curator of economic botany at Field Museum of Natural History, Chicago, has sailed from New York to accept an appointment to engage in special work for the ministry of agriculture of Venezuela. He will go to Caracas, where he will assist Dr. Henry Pittier, the Swiss botanist, formerly of the U. S. Department of Agriculture, in a botanical survey and study of the forest resources of Venezuela.

DR. SIMON FLEXNER, George Eastman visiting professor at the University of Oxford, who retired as director of the laboratories of the Rockefeller Institute for Medical Research with the title emeritus in 1935, gave on February 21 at the department of physiology of the University of Cambridge a public lecture, entitled "Epidemic Poliomyelitis and Epidemic Encephalitis."

DR. CHARLES THOM, of the Bureau of Plant Industry, retiring president of the Washington Academy of Sciences, gave an illustrated address, entitled "A Microbiologist Digs in the Soil," before the academy on February 17.

DR. J. A. RYLE, Regius professor of physics at the University of Cambridge, delivered the Galton lecture at the Galton celebration dinner on February 17 of the Eugenics Society, London. He spoke on "Medicine and Eugenics."

SIR WILLIAM BRAGG, president of the Royal Society, on February 10 gave the first of a series of annual lectures founded by the Manchester Association of Engineers, at the College of Technology. The subject was "Crystallography and the Engineer."

DR. ROBERT FRANKLIN MEHL, director of the Metals Research Laboratory and head of the department of metallurgy at the Carnegie Institute of Technology, will deliver the twelfth annual series of Priestley Lectures at the Pennsylvania State College from March 21 to 25. His subject will be "Reactions in Solid Alloys." The Priestley Lectures were established in 1926 by members of the department of chemistry of the Pennsylvania State College as a memorial to Joseph Priestley, the English-American physical chemist. His house at Northumberland, Pa., has been maintained since 1919 as a museum by the department of chemistry of the Pennsylvania State College. The Priestley Lectures, since 1931, have been a cooperative effort of the School of Chemistry and Physics and the local chapter of Phi Lambda Upsilon, national honorary chemical fraternity. The lectures deal each year with the border-line between physical chemistry and some other branch of science.

Nature gives the following program of lectures on science and industry arranged by the Association of Scientific Workers and given during February and March at University College, London: Sir Richard Gregory, "Science and Industry"; Sir John Russell, "The Application of Science to Food Production"; Major F. A. Freeth, "Science and the Chemical Industry"; Dr. E. A. Rudge, "Training for Industry," and Dr. F. S. Sinnatt, "The Fuel Research Survey."

THE second meeting of the Physics Association of Upper New York State will hold a one-day session at Union College on Saturday, April 2. The program committee, under the chairmanship of Dr. C. W. Hewlett, of the General Electric Company, announces the following invited speakers: R. P. Johnson, Research Laboratory, General Electric Company, "Electron Optics"; Caryl P. Haskins, Union College, "Biological Effects of Cathode Ray Irradiation"; H. P. Gage, Corning Glass Works, "Recent Developments in Glass Manufacture"; Paul E. Hemke, Rensselaer Polytechnic Institute, "Physics in Aeronautical Science"; E. H. B. Bartelink, General Engineering Laboratory, General Electric Company, "Problems in Television." All who are interested in organizing a physics association for upper New York state are invited to attend. An important item of business will be the continuation of the organization steps taken at the meeting at Cornell University last November.

THE first annual Anthracite Conference at Lehigh University will be held on April 29 and 30. Professor Howard Eckfeldt is chairman of the committee on arrangements. Six general subjects dealing with the scientific and technical phases of anthracite will be considered during the conference. These include the inherent characteristics of anthracite, the combustion

characteristics of anthracite, combustion and operation of anthracite-burning equipment, some aspects of commercial application, merchandising and civic values and civic values as affected by the use of fuel. Eighteen papers on the various phases of these subjects are scheduled for presentation. Among institutions to be represented on the program are the U. S. Bureau of Mines, Pennsylvania State Geological Survey, Mellon Institute, Anthracite Institute, Anthracite Industries, Inc., and the departments of economics, mechanical engineering and mining engineering of Lehigh University. Honorary chairman of the conference are President C. C. Williams, of Lehigh University; F. W. Earnest, Alan C. Dodson and S. D. Warriner.

Nature reports that an Association for Physical Medicine was inaugurated in London on January 27, with Dr. P. Dalton in the chair. The aims of the society are: (1) To coordinate the various branches of physical medicine under one control; (2) to cooperate with manufacturers in the production of suitable appliances for medical and surgical use, and to prevent their sale to unsuitable persons; (3) to secure a national register of those practicing the science and to affiliate all appropriate bodies; (4) to institute a chair of physical medicine in one or more of the universities and to establish a postgraduate school; (5) to establish contact with the general practitioner and to keep him informed of the changes in the subject; (6) to establish a technical board to act in an advisory capacity.

THE following grants-in-aid were recommended by the National Advisory Cancer Council at its last meeting, February 14: American Registry of Pathology (Army Medical Museum), \$3,000; Jackson Memorial Laboratory, Bar Harbor, Maine, for the work of John J. Bittner on the relation of nursing to breast cancer in mice, \$3,200; *American Journal of Cancer*, \$8,500.

THE chancellor of the University of Cambridge has received from the Rockefeller Foundation a letter stating that action has been taken to provide for the University of Cambridge up to £8,000 towards support of research in its department of experimental medicine for the five-year period dating from January 1, 1938, to December 31, 1942, the amount available in any one year of the grant not to exceed £1,600. It is intended that these funds shall be used for the salaries of a pathologist and a psychiatrist, and for supplementing the amount which the radiologist receives from Addenbrooke's Hospital.

UNDER the terms of the will of the late Virginia Purdy Bacon, of New York, the Smithsonian Institution some years since was bequeathed a fund to establish a traveling scholarship as a memorial to her hus-

band, Walter Rathbone Bacon, for the study of the fauna of countries other than the United States. The amount available is the interest on the capital invested (about \$3,000 a year), the incumbent to hold the scholarship not less than two years. Applications for this scholarship, addressed to the secretary of the Smithsonian Institution, should be submitted not later than March 15. The application should contain a detailed plan for the proposed study, including a statement as to the faunal problems involved; the reasons why it should be undertaken; the benefits that are expected to accrue; the length of time considered necessary for the carrying out of the project; the estimated cost, and the scientific and physical qualifications of the applicant to undertake the project.

THE Council of Child Neurology Research announces that applications for grants will be considered at the meetings to be held in April and October of each year.

The purpose of the council is to encourage original research on the definite problems coming within the scope of child neurology and allied fields. Applications must be in the hands of the director, Dr. Bernard Sachs, 116 West 59th Street, New York City, before April 1 and September 15. The applicant must state distinctly the problem under investigation and the methods to be pursued.

THE Committee of the House of Representatives on Coinage, Weights and Measures has reported a bill which would fix the length of the inch and weight of the pound. The bill proposes to establish the inch at exactly 25.4 millimeters. This would shorten it by two millionths of an inch. It is now 25.40005 millimeters, as against 25.39996 in Great Britain. Dr. Lyman J. Briggs, director of the Bureau of Standards, spoke before the committee in support of the bill.

DISCUSSION

THAT WORD "EMULSOID"

SHAKESPEARE wrote, "What's in a name?"; but then, he had never heard of "emulsoids." No word has caused more confusion in the colloid-chemical thinking of physiologists than "emulsoid." Biologists continue to take it at its etymological value, while most chemists have long ceased to regard it in this, its original sense. The term was coined by Wolfgang Ostwald in the early years of the present century, when colloid chemistry was still in its infancy, as sciences go. Originally "emulsoids" included coagula, jellies and emulsions, the term being based on the assumption that jellies are fine emulsions. Ostwald's only evidence for assuming that jellies are "emulsion-like" was that both they and emulsions increase in viscosity with increase in concentration of the dispersed phase, while "suspensoids," or solid colloidal suspensions, do not do so. The evidence on which the term was based is correct, but it tells a very small part of the whole story and is entirely misleading. To this day, the concept that jellies are fine emulsions clings, in spite of repeated and substantial proof to the contrary.

My own interest in this matter rests on the mischievous influence of the word "emulsoid" on interpretations of protoplasmic structure. All agree that protoplasm is an "emulsoid," but those biologists who know of the word only from the reading of old and standard texts conclude that protoplasm must be a liquid-liquid system, for that is what the word "emulsoid" means, *i.e.*, "emulsion-like," and emulsions are liquid-liquid systems. Other workers, knowing the historical background of colloid chemistry, realize that

the word "emulsoid" has long since lost its original meaning, for no chemist well grounded in his knowledge of the colloidal state believes jellies to be like emulsions, except in that one property which Ostwald selected for the basis of his classification. In every other respect, dispersions of gel-forming substances are quite distinct from emulsions. Whatever their structure, jellies are not liquid-liquid systems.

Though there are some interesting experiments which indicate that protoplasm behaves like an emulsion, many physiologists regard the similarity as purely incidental and superficial. The emulsion hypothesis of protoplasmic structure satisfies but few conditions, and is wholly contrary to many of the most significant properties of living matter. Among speculations on the emulsion nature of protoplasm, there is one that has recently come to my attention, namely, that the human brain is an emulsion; not only this, but it is said to reverse from oil-in-water to water-in-oil. While I know little about the histology of the brain, I am convinced that the hypothesis is based on the keen sense of humor of its author, for a brain that is an emulsion of water dispersed in a continuous phase of oil is a brain through which little can penetrate. Perhaps the author of the theory has some colleague in mind!—The brain consists of cells, or so-called cell-bodies, with their fibrous axons and dendrites, interwoven by a supporting framework of neuroglia, the whole bathed in fluid: this is not an emulsion.

It is not, however, my purpose here to discuss the "emulsoid" hypothesis of protoplasmic structure, but rather to plead with physiologists to give up ideas on