

only. In addition, of the 29,080 deaths from automobile accidents in 1930 shown in the supplemental tabulation; 280 burns, 227 drownings and 934 falls contribute to the total deaths from accidental and unspecified external causes and are also shown under their respective titles in the regular table.

ITHACA MEETING OF THE AMERICAN PSYCHOLOGICAL ASSOCIATION

The American Psychological Association will meet at Cornell University, Ithaca, New York, on September 8, 9 and 10, under the presidency of Professor Walter R. Miles.

Reservations of rooms can be made in the dormitories. The sessions will be held in Goldwin Smith Hall and there will be an exhibit of apparatus in the Library of Psychology in Morrill Hall. In addition to the presidential address on Friday evening and the round table on radio education on Friday afternoon, with Dr. Paul S. Achilles as chairman, the scientific program will be given in seventeen sections.

The chairmen of the sections and the number of papers are as follows:

- General Papers, Walter R. Miles, seven papers.
- Personality and Character, H. L. Hollingworth, eight papers.
- Work and Efficiency, Walter Dill Scott, five papers.
- Sensory Phenomena, Madison Bentley, seven papers.
- Animal Psychology, Robert M. Yerkes, seven papers.
- Clinical Psychology, James Burt Miner, five papers.
- Child Psychology, John F. Dashiell, nine papers.
- Sensory Phenomena, J. McKeen Cattell, eight papers.
- Abnormal Psychology, Knight Dunlap, seven papers.
- Animal Psychology, Harvey A. Carr, eight papers.
- Clinical Psychology, Fred Kuhlmann, six papers.
- Applied Psychology, Clark L. Hull, five papers.
- Physiological Psychology, K. S. Lashley, eight papers.
- Learning, Raymond Dodge, eight papers.
- Mental Tests, Joseph Jastrow, four papers.
- Memory, Arnold Gesell, nine papers.
- Animal Psychology, Walter S. Hunter, seven papers.

THE JOHN SCOTT AWARDS

The John Scott awards, for inventions or discoveries of industry which "may add to the comfort,

welfare and happiness of mankind," presented annually by the Board of City Trusts, Philadelphia, were presented recently, according to *The Christian Science Monitor*, to Dr. Joseph Slepian, Mr. George H. Emerson, Mr. Edward G. Budd and Mr. William Le Roy.

Dr. Slepian, consulting engineer of the Westinghouse Electric and Manufacturing Company, was cited for his work in connection with gases and fundamental inventions involving these discoveries, the application of which has resulted in the production of an apparatus for arresting lightning charges and other electrical discharges of extremely high voltage.

Mr. Emerson, of Baltimore, was honored for his invention of the water tube fire box, which makes for greater efficiency and longer useful existence of the engine. Engines equipped with this type of fire box are capable of much longer runs than those with the ordinary type. Runs of 300,000 miles without substantial fire box repairs are frequent, and there is also less tendency to explosion with this box.

Mr. Budd, of the Budd Manufacturing Company, of Philadelphia, received the award for his process of shot-welding stainless steel which makes possible the use of this material for railroad cars and airplanes. This material gives the necessary stiffness, with far less weight per passenger than has been realized in any railroad car heretofore built. Lighter trains result in a reduction in cost of construction and operation of the cars. A greater speed is also attained.

Mr. William Le Roy, of the General Electric Company, Schenectady, New York, was named for his development of the mercury boiler, which is capable of higher ranges of temperature than are practicable with steam in turbines.

Established in 1816, through a bequest by John Scott, a chemist of Edinburgh, Scotland, these awards consist of a bronze medal, a certificate and \$1,000 each. The original fund amounted to only \$4,000, and the cash awards were each \$20. Increasing to what amounted to \$100,000 in 1910, the fund now permits the increase in the awards.

SCIENTIFIC NOTES AND NEWS

The honorary degree of doctor of science has been conferred by the University of Cambridge on Sir William Bragg, director of the Royal Institution.

The honorary degree of doctor of science was conferred by the University of Oxford, on June 22, on Sir John Russell, director of the Rothamsted Experimental Station, and on Dr. Willem de Sitter, professor of astronomy at the University of Leiden.

The University of Rochester conferred at com-

mencement the doctorate of science on Dr. Willis R. Whitney, vice-president of the General Electric Company, and on Dr. James Ewing, professor of pathology in the Cornell Medical School.

Dr. Charles V. Chapin, superintendent of health at Providence from 1884 until his recent retirement, received the degree of doctor of science at the commencement exercises of Rhode Island State College.

Mrs. Anna Johnson Pell-Wheeler, of Prince-

ton, New Jersey, the mathematician, received the honorary degree of doctor of science at the commencement exercises of New Jersey College for Women at New Brunswick on June 4.

At the commencement ceremonies honorary degrees were conferred by the University of Michigan on eleven alumni. These included an honorary doctorate of laws conferred on Dr. Douglas Houghton Campbell. The citation by, Professor John G. Winter, follows: "Douglas Houghton Campbell, a graduate in the class of 1882, doctor of philosophy in 1886, professor emeritus of botany at Leland Stanford University. His skill and proficiency in research have contributed greatly to American scholarship; his profound studies in the development and relationship of plants, notably of liverworts, ferns and mosses, have won for him recognition and honor from learned societies at home and abroad. A scientist whose microscope reveals the infinitely small to a mind whose vision extends to the broad horizons of the living world."

DR. FRANK T. SHUTT has been elected an honorary retired fellow of the Canadian Institute of Chemistry. The citation, signed by A. Cameron, president, and L. E. Westman, secretary, is as follows: "For forty-five years Frank T. Shutt has devoted his life to the advancement of chemistry in Canada. He has contributed, in a most outstanding manner, to the progress of agricultural science, and to our knowledge of soils, crop growth and the utilization of agricultural products. As Dominion chemist and assistant director, Experimental Farms, Ottawa, he has established facilities for research which have placed Canada in a position of prominence. It is the wish of this institute to acclaim the scientific merit and usefulness of his professional achievements."

Nature reports the election of associates of the Royal Astronomical Society as follows: Professor Giorgio Abetti, director of the Royal Astrophysical Observatory at Arcetri, Florence, who is known for his observations on the chromosphere and on solar prominences; Professor R. Emden, professor of physics, Technical High School, Munich, and author of "Gaskugeln" (1907), which consolidated and extended earlier work on the internal constitution of the stars, and has been the foundation of more recent work on this subject; M. Ernest Esclançon, director of the observatories at Paris and Meudon, who in addition to astronomical work has carried out a gravity survey in southwestern France; Professor H. Ludendorff, director of the Potsdam Observatory, and in 1920-30 secretary of the Astronomische Gesellschaft, distinguished for his work on stellar spectroscopy; Professor P. J. van Rhijn, director of the Kapteyn

Astronomical Laboratory, Groningen, Holland, author of numerous papers on the proper motions and distribution of the stars.

DR. PETER H. BUCK (Te Rangi Hiroa), ethnologist on the staff of Bernice P. Bishop Museum, Honolulu, has been awarded the Hector bronze medal for his contributions to Maori ethnology. This medal is awarded annually by the Board of Governors of the New Zealand Institute for the outstanding contribution to botany, chemistry, ethnology, geology, physics (including mathematics and astronomy), or zoology, in New Zealand, the six sciences being considered in rotation. The medal carries with it the income from a fund established in memory of Sir James Hector, formerly president of the institute, which this year amounts to sixty pounds. Dr. Buck will be the Bishop Museum traveling professor in anthropology at Yale University this year.

DR. STEPHEN J. MAHER, chairman of the Connecticut Tuberculosis Commission, has been presented with the Laetare Medal, annually awarded by Notre Dame University "to the member of the Roman Catholic laity who has made the most outstanding achievement of merit during the year." The Reverend M. A. Mulcaire, vice-president of Notre Dame, presented the medal at ceremonies held on the lawn of Albertus Magnus College. Governor William L. Cross, of Connecticut, attended the ceremony.

THE Jacob F. Schoellkopf Gold Medal for 1932 has been awarded by the Western New York Section of the American Chemical Society to William Hale Charch, of the Du Pont Cellophane Company, because of his successful solution of the problem of moisture-proofing cellophane and for his contributions to the chemistry of cellulose.

THE Hillebrand prize of the Washington section of the American Chemical Society has been awarded to Dr. G. E. F. Lundell, of the Bureau of Standards, in recognition of the outstanding merit of his book on analytical chemistry.

DR. ARTHUR EDWIN KENNELLY, professor emeritus of electrical engineering at Harvard University, was elected on July 6 vice-president of the International Electrical Congress which is meeting in Paris.

THE officers of the Chicago Academy of Criminology for the coming year are: *President*, Dr. Edwin H. Sutherland, department of sociology, University of Chicago; *Vice-presidents*, Dr. Ludwig Hektoen, director, John McCormick Institute for Infectious Diseases; Dr. Paul L. Schroeder, director, Institute for Juvenile Research, and Dr. Arthur J. Todd, department of sociology, Northwestern University, and

Secretary, Dr. Meyer Solomon, department of neurology, Northwestern University Medical School.

DR. GEORGE PLIMPTON ADAMS, chairman of the department of philosophy at the University of California, will fill the Mills professorship of intellectual and moral philosophy, left vacant since the death of Professor George H. Howison in 1916.

DR. M. E. HOLMES, formerly head of the department of ceramic engineering in the School of Mines and Metallurgy in the University of Missouri, has been appointed head of the New York State College of Ceramics at Alfred University. The new building, erected at a cost of \$175,000, is nearing completion. It includes the first college technological laboratory in glass in the United States. The building was provided for by the legislature in 1930. The state has provided \$40,000 more for the purchase of furniture and laboratory equipment.

DR. PAUL H. M.-P. BRINTON, who has recently been engaged in chemical research at Pasadena, has been appointed to the chair of chemistry in the University of Southern California, vacant by the death of the late Wilfred W. Scott.

DR. WILLIAM C. ANDERSON, dean of the Brooklyn College of Pharmacy of Long Island University for the last twenty-eight years, has been appointed a member of the Board of Pharmacy of New York State. Dr. Anderson, who has been a member of the faculty of the Brooklyn college since its inception in 1891, is past-president of the House of Delegates of the American Pharmaceutical Association.

DR. WM. CHARLES WHITE has been appointed by President Hoover as delegate on the part of the United States to the eighth conference of the International Union against Tuberculosis which will be held at Amsterdam and The Hague from September 6 to 9, and has been designated chairman of the delegation. Dr. White sailed in July to deliver an address before the tuberculosis division of the centenary meeting of the British Medical Association on "The Influence of Robert Koch on Preventive Medicine."

THE United States Government having been invited through the British Embassy to participate in an International Congress on Prehistoric and Protohistoric Sciences, which will be held in London from August 1 to 6, the invitation has been accepted and the following anthropologists have been designated as delegates on the part of the United States: Dr. Herbert Joseph Spinden, chairman, curator of ethnology, Brooklyn Museum, Brooklyn, N. Y.; Dr. Roland Bursage Dixon, Peabody Museum, Harvard University; Dr. Carl Eugen Guthe, University of Michigan; Dr. Alfred Vincent Kidder, Carnegie Institution, Washington, D. C.; Dr. George Grant MacCurdy, Peabody

Museum, Yale University, and Nels Christian Nelson, curator of prehistoric archeology, American Museum of Natural History.

DR. MARY LOUISE FOSTER, associate professor of chemistry in Smith College, is sailing shortly for Santiago, Chile, where she will spend a sabbatical leave of absence in equipping the laboratories of chemistry and physics in Santiago College. This college, founded in 1880 by Americans in Santiago, has recently received a large increase in endowment and a charter as junior college from the University of the State of New York. Dr. Foster will inaugurate the new courses in chemistry and physics.

Nature reports that Sir William Bragg, director of the Royal Institution, left England on June 25 for a lecture tour in South America under the auspices of the Ibero-American Institute of Great Britain, of which the Prince of Wales is president. Sir William planned to reach Buenos Aires on July 15 and leave there on August 1, when he expects to go to Rio de Janeiro. At both places he will be the guest of the British Ambassador and will deliver lectures on recent work on x-rays and crystal analysis. Sir William is expected back in England about August 29.

DUE to the unexpected inability of Professor G. Gamow to leave Leningrad this summer, his place in the Theoretical Symposium at the University of Michigan has been taken by Dr. Gregory Breit, professor of physics at New York University, who is lecturing on the quantum theory of radiation and dispersion.

THE thirty-eighth summer meeting of the American Mathematical Society, together with the sixteenth colloquium of the society, will be held at the University of California at Los Angeles, beginning on Tuesday, August 30. Dr. Earle R. Hedrick, past president of the society, is chairman of the committee on arrangements for the meeting. There has been planned a series of five colloquium lectures by Professor J. F. Ritt, of Columbia University. Professor D. N. Lehmer, of the University of California, and Professor Tibor Rado, of Ohio State University, will deliver addresses; Professor Lehmer's subject being, "The Continued Fraction Representing Cubic and Higher Irrationalities," and Professor Rado speaking on "Recent Work in the Problem of Plateau." Accommodations for members and their guests have been provided on the campus of the university. Provision has also been made for an excursion on Thursday afternoon for a visit to Mount Wilson Observatory, and to the various colleges and universities in Los Angeles and near-by cities.

BY the provisions of the economy bill recently passed by the Congress and signed by the President

on June 30, the Smithsonian Institution loses, through enforced retirement, a number of its staff, most of whom have served the Institution for many years. The list of those retired follows: Richard A. Allen, B. A. Bean, C. A. Carlsson, De Lancey Gill, W. H. Holmes, Lewis Jones, William Jones, W. H. Lanham, James S. Peyton, W. de C. Ravenel, Albert Strong, H. C. Taylor, J. G. Traylor (retired as appointment clerk), B. C. Tuckson, C. S. Washington and A. L. Young. The following who would have been retired under the provisions of this act have been continued by the President for various reasons: W. H. Blackburne, Frank H. Cole, J. N. B. Hewitt, Walter Hough, C. W. Shoemaker and Leonhard Stejneger. Owing to vacancies resulting from the enforced retirements, the following administrative changes have been made: R. P. Tolman has been appointed acting director of the National Gallery of Art. J. E. Graf is serving in the capacity of director of arts and industries. The division of fishes is under the direct charge of Dr. Leonhard Stejneger.

NATURE reports that the British Medical Research Council announces that, on behalf of the Rockefeller Foundation, it has made the following awards of traveling fellowships for the academic year 1932-33; these fellowships are awarded to graduates who have had some training in research work either in the primary sciences of medicine or in clinical medicine or surgery, and who are likely to profit by a period of work at a chosen center in America or, in special cases, in Europe, before taking up positions for higher teaching or research in the British Isles: Mr. C. P. Beattie, Bacteriology Department, University of Edinburgh; Mr. W. D. W. Brooks, St. Mary's Hospital, London; Dr. Eleanor M. Creak, Maudsley Hospital, London; Mr. I. G. W. Hill, Royal Infirmary, Edinburgh; Mr. W. A. Mackey, Department of Surgery, University of Glasgow; Mr. D. J. Macmyn, King's College Hospital, London; Dr. J. C. Moir, University College Hospital, London.

THE new legislature of Mississippi has enacted legislation creating a board of trustees in charge of higher education in the state. These trustees are now undertaking to repair the disaster caused two years ago by the then governor of the state by which more than 150 teachers in these institutions were dismissed.

Chancellor Alfred Hume has been reinstated in the chancellorship. Professor D. H. Bishop has returned to the professorship of English and has been made vice-chancellor. Dr. A. L. Bondurant has returned as dean of the graduate school and Dr. J. N. Swan as head of the department of chemistry.

ATTORNEY GENERAL SCHRADER of Pennsylvania has ruled recently that there shall be a 24.16 per cent. reduction in appropriations to non-preferred institutions on account of reduced state income. He included the Pennsylvania State College on this list. The ruling applies to the total appropriation in the present biennium amounting to \$4,000,000. Since the college has used approximately \$2,000,000 or half the total appropriation, during the past year, it has only \$1,000,000 coming from the state this year under the decision.

THE Shenandoah National Forest, lying approximately 100 miles southwest of the nation's capital in a region frequently traversed by the first president, has been renamed the George Washington National Forest. The Secretary of Agriculture, upon recommendation of Major R. Y. Stuart, chief of the forestry service, chose the forest as the most fitting to be named as a perpetual memorial to George Washington. It lies in Virginia and West Virginia and was in part surveyed by Washington. The George Washington National Forest stretches for nearly 100 miles along the summit and slopes of the Shenandoah Mountains and for a shorter distance along the Massanutten Range. Other existing national forests named for presidents are the Lincoln in New Mexico, the Cleveland in California and the Roosevelt in Colorado.

ACCORDING to the *Journal* of the American Medical Association, at the Victor Emanuel Library in Rome, a national bureau of bibliographical information has been established, the object of which is to furnish to Italian and foreign students such information as will aid in their research and to point out the libraries in which they can find the publications and manuscripts that interest them. The organization will also function as an intermediary organization for the exchange of information of a bibliographic nature. The Italian libraries are under obligation to comply with the requests for information submitted to them by the newly established center.

DISCUSSION

PRATT AND AIRY AND ISOSTASY

SCIENCE NEWS LETTER has done a real favor in reprinting the clear statements by Pratt and Airy of their respective theories as to the density and thickness of the earth's crust. Both of them were well worth considering at the time.

It may be well to call attention to some of their arguments in view of our present light. It will be noticed that Airy in discussing the fluid earth says, it may be "little more than that degree of yielding which (as is well known to miners) shows itself by changes in the floors of subterranean chambers."