

and Professor J. L. Myres, with Adrian Digby, of the British Museum, as assistant secretary. The presidents of the various sections will be Professor G. Elliot Smith (Anatomy and Physical Anthropology), F. C. Bartlett (Psychology), Professor C. B. Fawcett (Demography and Population Problems), Dr. A. C. Haddon (Ethnography), the Rev. Edwin Smith, president of the Royal Anthropological Institute (Subsection of African Ethnography), Henry Balfour (Technology or Arts and Crafts), Professor C. G. Seligman (Sociology), Professor E. O. James

(Religions) and Dr. Alan H. Gardiner (Language and Writing).

The vice-presidents of the congress include the Archbishop of Canterbury, the Lord Mayor of London, the director of the British Museum, the High Commissioners for India and the Union of South Africa, Sir James Frazer and the presidents of the Society of Antiquaries, the Folklore Society and the Royal Asiatic Society. Information may be obtained from the secretaries, care of Royal Anthropological Institute, 52, Upper Bedford Place, London, W.C.1.

SCIENTIFIC NOTES AND NEWS

DR. WILLIAM MORTON WHEELER, professor of entomology at Harvard University and dean of the Bussey Institution from 1915 to 1929, has been named an officer of the Legion of Honor by the French Government, in recognition of "his great achievements in the field of biology and in appreciation of his sympathetic understanding of the progress of science in France." Dr. Wheeler will become professor emeritus at the close of the current academic year.

DR. WERNER HEISENBERG, professor of theoretical physics at the University of Leipzig, now at Magdalen College, Oxford, has been appointed Rouse Ball lecturer at the University of Cambridge for the year 1933-34.

A BRONZE portrait bust of Frank J. Sprague, who played a large part in the development of electric transportation, was presented to the American Institute of Electrical Engineers at the opening of the recent annual convention at the Engineering Society's Building, in New York City. The bronze was the gift of the Frank J. Sprague Anniversary Committee. Frank Hedley, president of the Interborough Rapid Transit Company, made the presentation speech.

PRESENTATION of the William Lawrence Saunders gold medal for 1933 was made to Pope Yeatman, consulting mining engineer of New York City, at the annual dinner of the American Institute of Mining and Metallurgical Engineers on February 23. The medal was awarded in recognition of Mr. Yeatman's "distinguished achievements as a mining engineer; for his vision in recognizing the value of mineral deposits and his ability in successfully developing them, and for his outstanding executive ability in the management of extensive operations." Former recipients of the medal have been Herbert Hoover, John Hays Hammond, D. C. Jackling, F. W. Maclellan, D. W. Brunton and F. W. Bradley.

DR. CHARLES R. AUSTRIAN, associate professor of medicine at the Johns Hopkins University School of Medicine, was presented with the gold medal of the

Phi Lambda Kappa medical fraternity at its recent annual convention in Washington, D. C. The medal is awarded annually to the "Jewish physician considered as having contributed most to medical science in the preceding year."

SIR WILLIAM LARKE, director of the National Federation of Iron and Steel Manufacturers; Professor Edward Mellanby, secretary of the Medical Research Council, and Leonard Woolley, director of the Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia, have been elected members of the Athenæum Club under the provisions which empower the annual election by the committee of a certain number of persons of distinguished eminence in science, literature, the arts or for public service.

A DINNER was given in London on January 23 by the surgical staff of St. Mary's Hospital and the lecturers of the medical school to the dean, Dr. C. M. Wilson, and to Mrs. Wilson, in commemoration of the completion of the building of the new school and its opening in December by the King and Queen. Sir William Willecox presided, and presented to Dr. Wilson a silver cup, a copy of the famous Fire of London Cup, dated 1665, and a framed illuminated address with the names of all the subscribers. The raising of the necessary funds, £250,000, and the plans for the building of the new school were due to Dr. Wilson's efforts over a period of many years.

DR. JAMES R. WITHROW, professor of chemical engineering and head of the department at the Ohio State University, was recently elected a director and member of the Council of the American Institute of Chemical Engineers.

DR. WILLARD R. JILLSON, geologist of the Mid-continent and Appalachian oil fields, formerly for fourteen years state geologist of Kentucky, was elected on January 17 vice-president of the newly organized Kentucky Society of Professional Engineers.

DR. W. H. TWENHOFEL, professor of geology at

the University of Wisconsin, has been elected chairman for 1934 of the Tri-State Geological Field Conference of Wisconsin, Iowa and Illinois.

DR. H. E. C. WILSON, of the Institute of Physiology of the University of Glasgow, has, with the approval of the Government of India, been appointed professor of biochemistry and nutrition at the All-India Institute of Hygiene and Public Health, Calcutta, and will leave to take up his appointment in March.

PROFESSOR VICTOR JOLLOS, lately at the Kaiser-Wilhelm Institut für Biologie, has been appointed visiting professor of zoology and genetics at the University of Wisconsin for a term of three semesters. The appointment has been made possible by grants from the Emergency Committee in Aid of Displaced German Scholars and the Rockefeller Foundation. Professor Jollos, who reached New York on February 16, was accompanied by his family.

DR. WALTER C. LOWDERMILK, of the California Forest Experiment Station at Berkeley, California, has been appointed vice-director of the Soil Erosion Service of the Department of the Interior.

DR. ROY E. WHITEHEAD, the governor for Indiana of the National Aeronautics Association, has been appointed chief of the medical section of the aeronautics branch of the U. S. Department of Commerce, to succeed Dr. Eldridge S. Adams, resigned.

DR. CARL O. SAUER, professor of geography in the University of California, left on February 13 for Washington, D. C., to take charge of a study of land utilization for the administration. Dr. Sauer has leave of absence from February 1 to May 1.

CHARLES J. TILDEN, professor of engineering mechanics at the Sheffield Scientific School, Yale University, was recently appointed administrator of the Coast and Geodetic Survey project of the Civil Works Administration for the state of Connecticut. Some 320 men, of whom a large majority are said to be experienced civil engineers, are under his direction.

LLEWELYN WILLIAMS, assistant in wood technology in the department of botany of the Field Museum, Chicago, has been promoted to the position of assistant curator of economic botany, effective from January 1.

DR. A. RICHARD BLISS, JR., director of The Research Laboratories of the William A. Webster Company, pharmaceutical manufacturers, has been appointed vice-president of the company. He is succeeded by Dr. Robert W. Morrison, assistant to the director of research, who was formerly associate professor of pharmacology in the University of South Carolina.

DR. H. E. BARNARD, organizer and director of the

Corn Industries Research Foundation, has resigned to join H. E. Barnard, Incorporated, which furnishes a consulting and technical service to the food industries at Indianapolis.

DR. HOWARD S. LIDDELL, professor of physiology at Cornell University, Ithaca, New York, left on February 17 for Leningrad, where he plans to work in Professor Pavlov's laboratory.

PROFESSOR ARTHUR E. HILL, chairman of the department of chemistry of New York University, has leave of absence during the second semester. He sailed for England on February 9 and will return in the fall. Professor John P. Simmons will serve as acting head of the department in the absence of Dr. Hill.

DR. J. EDWARD HOFFMEISTER, professor of geology at the University of Rochester, and Dr. Harry S. Ladd sailed from San Francisco on January 17 for geological work in the Lau Islands (eastern Fiji). The expedition is sponsored by the University of Rochester and is under the auspices of the Bernice P. Bishop Museum of Honolulu. The latter institution will publish the findings. As many of the Lau Islands consist of elevated coralliferous limestones and are encircled by well-developed modern reefs, they offer excellent opportunities for the study of the coral reef problem. In 1926 and again in 1928 Dr. Ladd worked on the geology of the islands of western Fiji while, at the same time, Dr. Hoffmeister studied the Tongan Islands. The islands of Lau lie between these groups. The work is expected to occupy eight months.

DR. JOHN C. MERRIAM, president of the Carnegie Institution of Washington, will read a paper on "Conservation and Evolution in a Changing Social Program" before a stated meeting of the American Philosophical Society on March 2.

DR. JOHN F. FULTON, Sterling professor of physiology at the Yale University School of Medicine, delivered the Beaumont lectures, sponsored by the Beaumont Foundation of the Wayne County Medical Society, on February 19 and 20, at the Institute of Arts, Detroit. Three lectures instead of two comprised the series this year. The subject was "Studies of the Function of the Cerebral Cortex of Primates."

A. E. MARSHALL, president of the American Institute of Chemical Engineers, will speak at the Carnegie Institute of Technology on the occasion of the opening of a new chemical research laboratory on March 3 on "Glass—An Engineering Material." Following the lecture, the new laboratories of the department of chemical engineering will be open for inspection, and the new equipment will be demonstrated by students.

DR. IRA E. CUTLER, professor of zoology at the University of Denver, addressed a joint meeting of Sigma Xi and Phi Sigma at the Buchtel Club on "Birds of Colorado." He illustrated his lecture by specimens from his own collection.

DR. WAYNE DENNIS, of the School of Psychology of the University of Virginia, spoke on "Instincts in Man: an Experimental Approach," before the Virginia Chapter of Sigma Xi on February 8.

ROBERT RIDGWAY, formerly president of the American Society of Civil Engineers and at one time chief engineer of the Board of Transportation of New York City, gave an illustrated lecture on "Boulder Dam" on February 19 at the Harvard Engineering School. Mr. Ridgway is a member of the Colorado River Board.

LIEUTENANT-COMMANDER T. G. W. SETTLE, U. S. N., spoke on February 8 before the Physics Club of Chicago on "The Physics of Free Ballooning." With Commander Settle on the platform were Dempster MacMurphy, representing Colonel Frank Knox, of *The Chicago Daily News*; Major Chester L. Fordney, Marine Corps, who accompanied Commander Settle on the stratosphere flight as scientific observer; Dr. Arthur H. Compton, who introduced the speaker, and Dr. Paul E. Klopsteg, president of the Physics Club, who presided. Representatives were also present from the Union Carbide Company, the Goodyear Tire and Rubber Company and the National Broadcasting Company, who participated in various aspects of the flight.

THE new building of the Indiana University School of Dentistry, Indianapolis, was dedicated recently in a ceremony marking the fifty-fifth anniversary of the school. Speakers were Governor Paul V. McNutt; Dr. William Lowe Bryan, president of the university; Dr. James B. Carr, president, state board of dental examiners; Dr. Ezra E. Voyles, president, Indiana State Dental Association; James W. Fesler, president, board of trustees; Dr. Willis D. Gatch, dean of Indiana University School of Medicine, and Dr. Frederic R. Henshaw, dean of the dental school. The dedicatory address was given by Dr. Charles N. Johnson, Chicago. Dr. Frank A. Hamilton, president of the Alumni Association of the university, presided.

THE American Association of Cereal Chemists will meet in Toronto during the week of June 4, with headquarters at the Royal York Hotel. This is the first time that the association has met in Canada.

THE Fourth International Congress of Radiology will meet at Zurich from July 24 to 31, under the presidency of Professor H. R. Schinz. Dr. H. E. Walther, Gloriatrasse 14, Zurich, is general secretary.

Industrial and Engineering Chemistry points out that the international congresses of chemistry in

Paris and Madrid offer the first general opportunity in twenty-two years for chemists of all nations to form personal acquaintances, as well as to hear and discuss reports upon the outstanding achievements in the science. In order that American chemists may take advantage of both congresses under the most agreeable conditions, it has been suggested that as many as desire go together on the same ship. The steamship *George Washington* of the United States Lines, sailing from New York on Wednesday, March 14, is said to be perhaps most convenient as to time. According to a recent public announcement, North Atlantic steamship rates were increased on January 1. Dr. Atherton Seidell, of the National Institute of Health, Washington, D. C., has offered to co-ordinate plans of those who intend to go and to help with the necessary arrangements. Those who are interested may obtain copies of the printed program by addressing either Dr. Seidell or the Division of Chemistry and Chemical Technology, National Research Council, Washington, D. C.

THE Committee on Grants-in-Aid of the National Research Council announces that it has received a new grant for the year 1934. Applications for support of research projects from this fund to be considered this spring must be in the hands of the committee before March 15. Formal blanks for use in applying for a grant will be furnished upon request. Announcement of awards will be made about June 1.

THE Department of Physics of Harvard University announces that for the academic year 1934-35 it has available two new research fellowships paying \$1,700 each. The department will be glad to receive applications for these fellowships from men with the degree of Ph.D. or with a training substantially equivalent thereto. The holder of the fellowship will have an opportunity to gain teaching experience to the extent of about three hours a week in addition to carrying on research. A statement of the research program of the candidate should accompany the application, together with recommendations from the men under whom the candidate has done his research. Applications will be received until April 1, 1934, and may be addressed to Professor Frederick A. Saunders, chairman, Department of Physics, Jefferson Physical Laboratory, Cambridge, Massachusetts.

THE committee formed in Leicester in connection with the meeting of the British Association for the Advancement of Science there last year, had a surplus of £1,000 in hand after meeting all local expenses of the meeting. This sum has been handed over to the association, to form the "Leicester and Leicestershire Fund 1933," for the assistance of a

student or students working for the advancement of science. The fund will be administered by the council of the association, and when possible assistance will be given, preferably to a Leicester or Leicestershire student or worker. The council, in accepting the gift, has conveyed to the committee its appreciation of the action of the committee "as thus confirming, in a manner without precedent in the history of the association, their interest in the advancement of science."

It is announced at St. John's College, University of Cambridge, that a Stratheona research scholarship (value £150 a year) and two Stratheona research exhibitions (value £40 a year) are offered for competition in July among research students who are graduates of any university other than Cambridge. Particulars can be obtained on application to the Senior Tutor, St. John's College, Cambridge.

MISS NINA SYMINGTON, daughter of the late Professor Symington, of Belfast, has bequeathed the residue of her estate, amounting to some £9,000, and to be known as the Johnson Symington Memorial Bequest, to the Anatomical Society of Great Britain and Ireland for anatomical research.

THE gradual closing up of the operation of the Civil Works Administration, which involves the dismissal of 400,000 employees at the rate of ten per cent. a week until May 21, immediately affects the scientific departments of the government as follows: The Department of Agriculture is reduced from 91,147 employees to 48,000; the Fisheries Commission from 2,349 to 650; the Bureau of Mines from 446 to 225. In addition, the Coast and Geodetic Survey must discontinue its supplementary control survey, employing about 15,030 men; the Smithsonian Institution its archeological excavations, employing 1,104, in Florida, North Carolina and other places, the one exception being the undertaking in Shiloh National Park; the Tennessee Valley Authority a large number of the 16,588 men at work on improvement projects; the Interior Department 1,762 men on soil erosion work, and the Public Health Bureau 29,779 men on malaria control work, 32,010 on rural sanitation, and 6,572 sealing mines to stop water acidity in the Ohio Valley. Projects under the Department of Agriculture which must be stopped in-

clude cattle tick eradication, involving 6,000 men; typhus-fever control operated cooperatively with the Public Health Service, 17,033 men; citrus canker control in Texas, 88; Dutch elm disease control in several New England states, 1,057; wild peach eradication, 1,112; potato weevil eradication, 211; spotted fever control, 369; mosquito pest control, 25,646, and brown-tail moth control, 5,000.

THE number of visitors received at the Field Museum, Chicago, during 1933, with the numbers reached by the extra-mural activities of the institution, such as those conducted by the N. W. Harris Public School Extension Department and the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures, was approximately 4,000,000 persons. The total number of visitors received during the year was 3,269,390. In addition to these, approximately 661,000 children received natural history instruction outside the museum building through the activities of the Harris Extension and the Raymond Foundation. The Harris Extension circulates some 1,300 traveling exhibits throughout the Chicago school system which are seen daily by about 500,000 children, and the Raymond Foundation sends out lecturers who were heard in 1933 by about 161,000 children in their classrooms and assemblies. The foundation also presents series of free motion pictures for children in the James Simpson Theater, which were attended by 25,950 children, and provides lecture tours of the exhibits for groups of children visiting the museum, in which 11,470 participated. The lectures for adults given in the Simpson Theater were attended by 22,787 persons and 13,312 participated in the guide-lecture tours provided for adults.

THE Department of the Interior of the Canadian Government has informed the fish and game department of the Canadian National Railways that a federal bird sanctuary has been established at Aero Lake, a few miles from Moncton. This lake has an area of approximately 200 acres and is visited annually by thousands of water fowl during the migratory periods. The establishment of game sanctuaries of this kind is being carried forward in accordance with the Migratory Birds Convention Act.

DISCUSSION

SCARPS IN TULAROSA VALLEY, NEW MEXICO

IN a recent number of *SCIENCE* the suggestion is made that two scarps lying a few miles east of the San Andres (not San Andreas) mountains are due to faulting in the floor of the bolson known as Tularosa Valley.¹ This suggestion seemed so at variance with

the opinions held by some of us who had worked in that region as to justify some further field examination. I revisited the region, with the results outlined below, and at my request Professor Evan Just, with a

¹ C. L. Dake and L. A. Nelson, "Post-Bolson Faulting in New Mexico," *SCIENCE*, 78: 2017, p. 168, August 25, 1933.