

the age of four. At a large epileptic hospital it was found that about half of the patients began their convulsions before the age of four. Just what the relationship may be between this acute condition and the chronic epilepsy of adults is apt to be elicited. Such are a few of the problems presented; their importance is obvious; they are the more challenging to medical science because they are so baffling.

During the last few years advances in treatment have been made. Chief among them is the discovery that acidosis tends to stop convulsions. Many children have been completely relieved by the practical application through diet of this chemical knowledge; in adults the diet is seldom of avail. It is obvious that the processes underlying these phenomena are not completely understood, and it is hoped that if a more complete understanding of them is obtained dietary treatment may be more universally successful. Another important problem is the relationship of the oxygen supply of the nerve cell to convulsive seizures. Recent work indicates that this may be the crux of the question. Studies concerning toxins absorbed from bacteria in the bowels are being carried out; such auto-intoxications may be the exciting cause of convulsions. Psychological factors are also important, and have been studied, but not extensively enough.

For more than five years work along these lines has been carried on at the Harvard Medical School, at the Massachusetts General Hospital, the Children's Hospital and at the Boston City Hospital. The appointment of the Harvard Epilepsy Commission makes possible a co-ordination and continuity of the work. No valuable results can be expected from research of this kind unless it be carried on for years, so the promotion of a permanent commission is a most important advance. Funds must be raised to carry on the investigations. At present about \$10,000 a year is needed, but if generous support is given the scope of the work can be enlarged greatly.

#### FOREIGN SCIENTIFIC MEN AT THE U. S. FOREST PRODUCTS LABORATORY

THE ranks of the foreign scientists working on American wood-utilization problems in the Forest Products Laboratory of the United States Department of Agriculture at Madison, Wisconsin, were augmented recently by the arrival of five men sent by government and private agencies in Australia, Finland, Poland and Sweden.

H. B. Somerset, Melbourne, Australia, will work as a member of the pulp and paper staff of the Forest Products Laboratory for a period of one year before returning to Australia to take a position in a paper mill operating on eucalyptus.

C. Ellis, forest economist to the Queensland Forest Service, Brisbane, Australia, will make his headquarters at the laboratory for the next twelve to eighteen months, studying its organization and methods, and using it as a point of departure for trips

to various wood-using industries of the United States and Canada.

K. Kuoppamaki, mechanical engineer from Finland, has spent some time at the laboratory studying the manufacture of plywood.

Dr. J. Wiertelak, assistant in the institute of chemistry in the University of Poznan, Poland, is beginning a year of study at the Forest Products Laboratory on a scholarship of the Polish Ministry of Education. Dr. Wiertelak's studies will be principally on the chemistry of wood.

Carl Gustaf Strokirk, Harnosand, Sweden, is at the laboratory on a grant from the University of Commerce, Stockholm. Mr. Strokirk will remain at the Madison Laboratory until May studying the manufacture of plywood and other wood-utilization problems. During the summer of 1929 he will obtain employment in American woodworking plants to observe American methods. He will return to the laboratory next fall.

J. E. Cummins and H. E. Dadswell, Commonwealth (Australian) Council for Scientific and Industrial Research, are nearing the end of a two-years' study at the Forest Products Laboratory.

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#### SCIENTIFIC NOTES AND NEWS

OFFICERS of the Royal Society elected at the anniversary meeting on November 30 are: *President*, Sir Ernest Rutherford; *Treasurer*, Sir David Prain; *Secretaries*, Sir James Jeans and Dr. H. H. Dale; *Foreign Secretary*, Sir Henry Lyons; *Other Members of Council*, Dr. F. A. Bather, Dr. C. Bolton, Dr. C. G. Douglas, Mr. R. H. Fowler, Professor E. W. Hobson, Sir Frederiek Hopkins, Professor A. Lapworth, Professor J. C. G. Ledingham, Professor F. A. Lindemann, Dr. P. C. Mitchell, Professor J. C. Philip, Professor A. C. Seward, Professor G. Elliot Smith, Sir Thomas Stanton, Mr. A. A. C. Swinton and Professor C. T. R. Wilson.

BRITISH scientific societies have elected presidents as follows: The London Mathematical Society, Dr. Edmund T. Whittaker, F.R.S., professor of mathematics in the University of Edinburgh; the Mineralogical Society, Dr. G. T. Prior, F.R.S., keeper of the department of minerals of the British Museum; the Cambridge Philosophical Society, Mr. G. Udny Yule, F.R.S., lecturer in statistics in the University of Cambridge, and the Philosophical Society of the University of Durham, Sir Charles A. Parsons, F.R.S., chairman of the engineering works of C. A. Parsons and Company.

DR. EDWARD FRANCIS, surgeon of the U. S. Public Health Service, who isolated the tularemia germ and

has been devoting intensive study to Malta or undulant fever, has been stricken with the latter disease, contracted in his studies at the Hygienic Laboratory.

A TESTIMONIAL dinner was given on November 20, at the University Club, Baltimore, in honor of Dr. William H. Welch, professor of the history of medicine and director emeritus of the Johns Hopkins University School of Hygiene and Public Health.

DR. WALTER BRADFORD CANNON, George Higginson professor of physiology in the Harvard Medical School, has been appointed exchange professor to France for 1929-30. His term will fall in the second half-year.

DR. JOHN STEWART, dean of the faculty of medicine, Dalhousie University, Nova Scotia, has celebrated his eightieth birthday.

THE George Robert White gold medal was awarded at the meeting of the Massachusetts Horticultural Society on November 8 to Colonel William Boyce Thompson, of Yonkers, founder of the Boyce Thompson Institute for Plant Research.

THE Paris Academy of Sciences has awarded the Albert de Monaco prize of 100,000 francs to Professor Cotton for the electro-magnet that he has devised and installed in his laboratory.

PROFESSOR G. VITALI, of the University of Padua, has been awarded the prize for mathematics for the year 1927 by the Italian Society of Sciences.

THE Gedge prize for original observations in physiology has been awarded to Dr. W. A. H. Rushton, of Pembroke College, Cambridge, where he holds a Stokes studentship for research in physics and cognate subjects.

THE officers of the division of biological chemistry of the American Chemical Society for the year 1929 are: *Chairman*, M. X. Sullivan; *Secretary*, D. B. Jones; *Executive Committee*, Paul E. Howe, G. H. A. Clowes, H. B. Lewis, L. S. Palmer and L. K. Riggs. The secretary of the division may be reached at the Bureau of Chemistry and Soils, U. S. Department of Agriculture, Washington, D. C.

THE Washington Section of the American Chemical Society has elected the following officers for the coming year: *Chairman*, R. Gilchrist; *Secretary*, Ruth O'Brien; *Treasurer*, E. G. Zies; *Councilors*, L. H. Adams, W. D. Collins, R. S. McBride, G. W. Morey and E. W. Washburn.

A. BRAZIER HOWELL, of the department of anatomy of the Johns Hopkins Medical School, has recently been appointed assistant news manager for the New

York meeting of the American Association for the Advancement of Science. As in recent years, the association's news service is in charge of Mr. Austin H. Clark, of the U. S. National Museum.

DR. FRANK BALDWIN JEWETT, vice-president of the American Telephone and Telegraph Company, in charge of development and research; Dr. Gano Dunn, of New York City; Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research; Dr. Vernon L. Kellogg, secretary of the National Research Council; Dr. Michael I. Pupin, professor of electro-mechanics in Columbia University; Dr. Max Mason, of the Rockefeller Foundation, and Dr. William Allen Pusey, of Chicago, former president of the American Medical Association, have been appointed a committee by the National Research Council, with Dr. Jewett as chairman, to advise concerning scientific matters and to cooperate in general with the officials of the Chicago World's Fair Centennial Celebration.

DR. T. WAYLAND VAUGHAN, director of the Scripps Institution of Oceanography of the University of California, has been appointed to represent the university, the Carnegie Institution of Washington and the American Association for the Advancement of Science as official delegate to the Fourth Pacific Science Congress to be held in Java from May 16 to May 23. He expects to leave in the latter part of March and to return in July.

DR. C. H. T. TOWNSEND, of Lima, Peru, formerly on the staff of the Bureau of Entomology in the National Museum as a specialist in muscoid flies, is visiting Washington and will spend about a month examining material in his specialty. Dr. Townsend has been visiting European museums for the purpose of studying types of genera in the muscoid flies.

COLONEL J. D. GRAHAM, representative of India on the health committee of the League of Nations and Office Internationale, Paris, public health commissioner with the government of India and secretary of the governing body of the Indian Research Fund Association, is visiting the United States as the guest of the Rockefeller Foundation to observe public-health activities.

DR. ELISABETH GUREWITSCH, of the University of Vienna, a pupil of Dr. M. Kohn, is spending this year at the Iowa State College with Dr. Henry Gilman on studies involving the use of the Grignard reagent. Dr. Balassa and Mr. Pfeiffer, also of the University of Vienna, have completed their studies with Dr. Gilman. Dr. Balassa is entering industrial work and Mr. Pfeiffer is returning to Austria.

WITH the consent of the Greek government an Italian scientific commission has gone to Greece to study dengue. Its members are: Professor Gabbi, director of the medical clinic of Parma University; Professor P. Neir, director of the Institute of Hygiene of Bari University, and Professor P. Pontano, lecturer in clinical medicine at Rome.

DR. C. LEVADITI, professor of microbiology, Institut Pasteur, Paris, will deliver the third Harvey Society Lecture at the New York Academy of Medicine, on Thursday evening, December 13. His subject will be "Metallotherapy of the Spirochaetoses."

SIR CHARLES A. BALLANCE, London, recently gave a Mayo Foundation lecture at Rochester on reminiscences of some great surgeons and neurologists of the past, with lantern slides illustrating the work of the great pathologists of the first half of the last century.

DR. JEROME ALEXANDER addressed the Chemistry Colloquium at the University of Michigan on November 27, his subject being "Some Principles Underlying Colloidal Dispersions, and their Bearing on a Physico-Chemical Explanation of Life and Life Processes."

PROFESSOR ARTHUR H. COMPTON, of the University of Chicago, addressed a joint meeting of the Chicago Medical Society and the Radiological Society of North America on December 5 on "Some Physical Effects of the X-Ray." Professor William T. Bovie, of Northwestern University, made an address on "The Stuff We are Made of," illustrated with lantern slides. The meeting was under the auspices of the Chicago Röntgen Society.

THE Christmas week lectures on the James Mapes Dodge Foundation of The Franklin Institute, Philadelphia, will be given at three P. M. on Wednesday, Thursday and Friday, December 26, 27 and 28, in the hall of the institute. The lecturer this year will be Professor A. S. Eve, head of the department of physics of McGill University. His subject will be "Things that Spin, Things that Swing, Things that Wave."

A SERIES of eight Lowell lectures will be given in Huntington Hall, Boston, by Vilhjalmur Stefansson on Monday and Thursday evenings, beginning on January 7 and ending on January 31. The subject is "The Northward Course of Discovery" and the aim is to show how knowledge of the Far North gradually penetrated to the lands which inherited Greek and Roman civilization. He will also give twelve lectures on "The History of Geographic Discovery" (with special reference to the Far North) at Rumford Hall, New York

City, on successive evenings beginning on January 2. These are under the auspices of the New School for Social Research. A similar course, named "The Geographical History of the Arctic," will be given at Cambridge University, England, during April and May. Dr. Stefansson is also giving courses of five popular lectures each at Dartmouth, Tufts and Vassar Colleges.

ON November 17, Dr. Chas. N. Gould, director of the Oklahoma Geological Survey, addressed the North Texas Geological Society at Fort Worth on "The Pennsylvanian and Permian of Oklahoma and Texas." The occasion of the meeting was for the presentation of reports by various geologists on work being done on the Pennsylvanian problem of northern Texas, this being part of the larger problem on the Pennsylvanian formations of the western interior coal fields, including the states of Iowa, Nebraska, Missouri, Kansas, Arkansas, Oklahoma and Texas, now being carried forward by the geologists of the seven states interested.

A FUND to support the Priestley Lectures at the Pennsylvania State College, obtained by contributions from the alumni of the school of chemistry and physics, will be named in honor of Professor Madison M. Garver, who has been teaching at the college for thirty-five years. Professor Garver is now librarian of the chemistry library and recently celebrated his eightieth birthday. He shares the distinction of being the oldest member of the teaching staff in point of service with Professor Runkle, college historian. The Priestley Lectures deal each year with the borderline between physical chemistry and some other branch of science. The first lectures, two years ago, were given by Victor Coffman, of the Du Pont de Nemours Company. Last year Dr. S. L. Hoyt, of the research laboratory of the General Electric Company, discussed physical chemistry and metallography. In November Dr. H. B. Williams, of the department of physiology at the College of Physicians and Surgeons of Columbia University, delivered the third annual series, discussing "Method of Scientific Investigations."

AT the University of Cincinnati the department of geology and geography is giving a series of illustrated popular lectures dealing with the earth sciences, as follows: December 4, Professor W. H. Bucher, "Below the Deepest Shaft—What?"; December 18, Professor O. C. von Schlichten, "Volcanoes"; January 8, Mr. C. V. Theis, "The Growth of the Ohio"; January 22, Mr. D. R. Bergsmark, "India, the Varied Land"; February 5, Professor C. H. Behre, "Our Mineral Fuels"; February 19, Professor Earl C. Case, "Some

Problems in the Development of China"; March 5, Dr. C. L. Fenton, "Trails of a Fossil Hunter"; March 19, Professor H. H. Martin, "Are Mountains an Asset?"; April 2, Professor N. M. Fenneman, "The Geology of Cincinnati." The object of these lectures is primarily to acquaint the layman with the materials of geology and geography and to raise and answer questions of popular interest in each field.

ESTABLISHMENT of an Amundsen Memorial Fellowship for furthering exploration is announced by the American-Scandinavian Foundation as a tribute to the late Captain Amundsen, the Norwegian polar explorer. The fund will remain in trust until donations have increased it to a size where the income will be sufficient to permit contributions to exploration or geographical study. It will also be used to permit deserving young men who could not otherwise pay their own expenses to join important expeditions.

FRANCIS P. LEAVENWORTH, professor emeritus of astronomy at the University of Minnesota, died on November 12, at the age of sixty-nine years.

THE death of Professor George I. Kemmerer, of the department of chemistry of the University of Wisconsin, is announced. Dr. Kemmerer's death at the age of forty-nine years was sudden and unexpected.

STRICKLAND LANDIS KNEASS, vice-president of the engineering firm of William Sellers and Company, died on November 25 at the age of sixty-seven years. Mr. Kneass was known for an injector which he devised for locomotive boilers and for his work on the discharge of elastic fluids and the flow of steam.

SYDNEY ROYSTON PIKE, research fellow of the International Education Board at the Mount Wilson Observatory, died on November 22 at the age of twenty-five years. Before going to Pasadena Mr. Pike had been for three years assistant lecturer at the University of Leeds, where he had carried on research work on the solar atmosphere, which was published in the *Notices* of the Royal Astronomical Society.

A CORRESPONDENT writes: "Announcement is made of the death of William Theodore Gauss on November 14, at his home in Colorado Springs, Colorado, at the age of seventy-seven years. He had been ill for two weeks. Mr. Gauss was a grandson of the illustrious German mathematician, Carl Friedrich Gauss, and through his mother was a nephew of the noted German astronomer, Friedrich Wilhelm Bessel. For many years he spent much time and money in assembling a large and valuable collection of Gauss memorabilia, which is being now used by G. Waldo Dunnington, of Washington and Lee University, in

a biography of C. F. Gauss. This death reduces the number of Gauss's grandchildren to four, one of whom resides in California, and the remainder in Missouri. His brother, the Reverend Dr. Joseph H. Gauss, is superintendent of the Brookes Bible Institute in St. Louis, Missouri. He was born in Chariton County, Missouri, on July 1, 1851, and engaged in the wholesale shoe manufacturing business in Boston and St. Louis. He later moved to Colorado Springs where he was a broker and mining stock promoter. Mr. Gauss was conspicuous for his devotion to his family and home. His qualities of character and his profound sense of honor, with his unselfish nature, made him many friends throughout his life."

MISS EVELYN M. GRAY, editorial assistant of *Genetics* at the Connecticut Agricultural Experiment Station, died on November 14.

THE *Journal* of the American Mathematical Society states that by the will of Lieutenant-Colonel A. J. C. Cunningham, who died February 8, 1928, the London Mathematical Society will receive his library and also £1,000 for the improvement of methods of factorization of large numbers, and £2,000 for the publication of Colonel Cunningham's works. One twelfth of the residuary estate also will go to the London Mathematical Society, and one twelfth to the mathematical subsection of the British Association, for preparing new mathematical tables in the theory of numbers.

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## UNIVERSITY AND EDUCATIONAL NOTES

THE University of the City of Toledo was successful in its recent campaign for a \$2,850,000 bond issue for new buildings. Of this amount, \$300,000 will be expended for land and \$2,550,000 for buildings and equipment. In addition the university possesses land and buildings valued at more than \$1,000,000 and this property will ultimately be sold and the proceeds used for further construction. A committee of the board is now investigating proposed sites, and the erection of buildings will probably begin in January.

DARTMOUTH COLLEGE has received a gift of \$100,000 from Mrs. William P. Johnson in fulfillment of a promise made before his death by Mr. Johnson.

THE new library of the Philadelphia College of Pharmacy and Science was dedicated on November 26 with addresses by Mr. John B. Raser, of the class of 1871; Dr. Wilmer Krusen, president, and Dr. Charles H. La Wall, dean of pharmacy. The library equipment was a gift to the college by Mr. Raser and his brother, Mr. William H. Raser, of New York, a grad-