

"Monge's Disease," characteristic of the inhabitants of high altitudes.

Linus C. Pauling, professor and chairman of the department of chemistry at the California Institute of Technology, authority on forces between atoms in molecules and crystals.

Thomas M. Rivers, director of the Hospital of the Rockefeller Institute, international authority on the viruses of human and animal diseases.

Henry N. Russell, director of the Princeton Astronomical Observatory, discoverer of giant and dwarf stars and pioneer in the study of the evolution of the universe.

Florence B. Seibert, associate professor of physiological chemistry at the Henry Phipps Institute, Philadelphia, authority on the chemistry of tuberculin.

Donald D. Van Slyke, member of the Rockefeller Institute, inventor of new methods of chemical analysis used in the treatment of disease.

Oswald Veblen, professor of mathematics at Princeton University, internationally known for his contributions to geometry.

Robert R. Williams, director of chemistry at the Bell Telephone Laboratories in New York, discoverer of vitamin B<sub>1</sub>.

## SCIENTIFIC NOTES AND NEWS

LEHIGH UNIVERSITY has conferred the honorary degree of doctor of laws on Dr. R. G. D. Richardson, professor of mathematics and dean of the Graduate School of Brown University.

At the fiftieth anniversary meeting of the Wisconsin Library Association, which was held at Madison on September 26, 27 and 28, Dr. Edward A. Birge, formerly professor of zoology, now president emeritus of the university, was the guest of honor. Dr. Birge is one of the founders of the association. Special tributes to librarians prominent in the history of the association were made during the convention.

DR. JOHN H. LAWRENCE, professor of medicine at the University of California, was presented on September 23 with the medal of the American Roentgen Ray Society at the recent meeting in Cincinnati.

THE Daniel Guggenheim Medal for notable achievements in the advancement of aeronautics has been awarded to Juan T. Trippe, president of the Pan American Airways System, "for the development and successful operation of oceanic air transport." The medal will be presented on January 27 at a dinner to be given by the Institute of Aeronautical Sciences.

THE Theobald Smith Award in the medical sciences of the American Association for the Advancement of Science was presented on September 22 at the Chicago meeting to Dr. Herald R. Cox, of the Rocky Mountain Laboratory at Hamilton, Mont., of the U. S. Health Service. The presentation was made by Dr. Irving Langmuir, president of the association. Dr. Cox spoke on the "Cultivation of Rickettsiae of the Rocky Mountain Spotted Fever, Typhus and Q Fever Groups in the Embryonic Tissues of Developing Chicks."

SAMUEL STACEY, head keeper at the New York Zoological Park, has retired after serving for thirty-seven years with the New York Zoological Society. The title of honorary head keeper of birds has been created for him.

DR. RALPH H. HEEREN has resigned as assistant professor of hygiene and preventive medicine at the State University of Iowa College of Medicine, Iowa City, to accept a similar position at the School of Medicine of Tulane University of Louisiana, at New Orleans.

PROFESSOR BENEDICTO MONTENEGRO, the Brazilian surgeon, has been appointed director of the faculty of medicine of the University of São Paulo.

JAMES RUSSELL OYLER has been appointed General Mills, Inc., research fellow in the department of agricultural and biological chemistry of the Pennsylvania State College. He will work with Dr. H. O. Tribold on the chemical and physical characteristics of certain food fats.

DR. CARL C. LINDEGREN, who has a year's leave of absence from the University of Southern California, is studying the genetics of yeast at Washington University, St. Louis. The work is supported by a grant from Anheuser Busch, Incorporated.

DR. AUSTIN M. PATTERSON, who retired from the professorship of chemistry at Antioch College last June, has joined the staff of Engineering, Science and Management Defense Training of the U. S. Office of Education, as senior specialist in chemical education.

DR. JEROME C. HUNSAKER, head of the department of mechanical engineering at the Massachusetts Institute of Technology, has been appointed a member of the United States Commission which will prepare proposals for the permanent American Aeronautical Commission, created by the Inter-American Technical Aviation Conference at Lima, Peru, in 1937. The permanent commission will attempt to unify and codify the international and national air laws of the American republics.

DR. KARL L. BOWMAN, director of the division of psychiatry at Bellevue Hospital and professor of psychiatry at New York University College of Medicine, has been appointed director of the new Langley

Porter Clinic, a neuropsychiatric unit of the State Department of Institutions, under the direction of the Medical School of the University of California, San Francisco. He will begin his new work at the clinic about November 1. The building, erected at a cost of \$500,000, is nearing completion, the cornerstone having been laid on April 5.

DR. RAYMOND L. DITMARS, curator of reptiles and insects at the New York Zoological Park, arrived in New York on September 20 after a visit to Trinidad, bringing with him 1,500 specimens.

SIR HAROLD DELF GILLIES, consultant adviser to the British Ministry of Health, now in charge of special units for the repair of facial injuries in the London area, will be a guest of the American Academy of Ophthalmology and Otolaryngology at the meeting in Chicago, which will be held from October 19 to 23. Sir Harold will make an address at a special defense program presented by the academy on the evening of October 20. The other speakers will be Dr. Irvin Abell, Louisville, Ky., past president of the American Medical Association and now chairman of the committee of the association on medical preparedness as well as chairman of the health and medical committee of the Federal Security Agency; Colonel Louis H. Bauer, Hempstead, N. Y., an authority on aviation medicine and now a member of the committee of the New York State Medical Society on medical preparedness, and Dr. Burt R. Shurly, Detroit, past president of the academy and chairman of its special committee on national defense.

DR. R. D. GILLESPIE, who is now chief psychiatrist for the British Royal Air Force, will visit the United States at the request of the Salmon Committee on Psychiatry and Mental Hygiene of the New York Academy of Medicine. He will deliver the Salmon Memorial Lectures at the New York Academy building on November 17, 18 and 19. He is expected to speak on "Psychoneuroses from the Standpoint of War Experience." The New York lectures will be followed by addresses to be given before the Chicago Neurological Society, the Chicago Institute of Medicine and the Illinois Psychiatric Society in Chicago. Dates for these lectures as well as for lectures in Toronto, Ontario, and San Francisco, Calif., will be announced later.

PROFESSOR WILLIAM LLOYD EVANS, of the Ohio State University, president of the American Chemical Society, spoke before the Ames Section at the Iowa State College on September 24. His topic was "The Chemical Behavior of Reducing Sugars in Alkaline Solution."

DR. ERNEST O. LAWRENCE, professor of physics and director of the Radiation Laboratory of the Uni-

versity of California at Berkeley, will deliver on October 5 the Lower Lecture of the Academy of Medicine at Cleveland. His subject will be "The Newer Physics in Medicine."

PRESIDENT NICHOLAS MURRAY BUTLER spoke at the opening exercises of Columbia University on September 24. He was followed by Dr. Douglas Johnson, professor of physiography and head of the department of geology, who gave the chief address. It was entitled "A Geographer Looks at the World." Dr. Harry S. Mustard, director of the DeLamar Institute of Public Health, was the principal speaker at the opening ceremonies at the College of Physicians and Surgeons.

THE first scientific lecture for 1941-42 of the College of Physicians of Philadelphia was the Alvarenga Prize Lecture, II. It was given on October 1 by Dr. John J. Bittner, assistant director of the Jackson Memorial Laboratory at Bar Harbor, who spoke on "The Influence of Foster Nursing on Experimental Breast Cancer."

IN the special article by E. B. Schoenbach, J. F. Enders and J. H. Mueller on "The Apparent Effect of Tyrothrycin on *Streptococcus Hemolyticus* in the Rhinopharynx of Carriers," *SCIENCE*, 1941, 94, 217, the word "tyrothricin" appearing in the title and in the text was misspelled as "tyrothrycin."

THE South West District meeting of the American Institute of Electrical Engineers will be held at St. Louis on October 8, 9 and 10.

THE one hundred and twenty-first annual meeting of the Swiss Society for the Investigation of Nature was held at Basle from September 6 to 8.

IT is planned to hold an Inter-American Chemical Congress at Santiago, Chile, in January, 1942.

THE Société de Biologie de Montréal has announced the publication of a review which will be its official organ and which will contain the proceedings of the society as well as other reports of research. The membership of the society includes physicians, physiologists, biochemists, pharmacologists, bacteriologists, zoologists and others. The *Revue canadienne de Biologie*, which will be published in French, will appear under the auspices of the Université de Montréal. The society held its first meeting of the year on September 17 in the laboratory of physiology at the university.

THE Civil Service Commission announces an examination for radio mechanic-technicians at salaries ranging from \$1,440 to \$2,300 a year. Applications must be received by November 6. Applicants must show that they have had appropriate training or ex-

perience in one or more of the following: Paid experience in technical radio work such as radio repairman, operator or electrician; technical study in residence at a radio school; resident study including courses in radio in a school of engineering or technology; completion of an approved defense training course in any branch of radio work. An announcement by the commission states that the constantly increasing activities of the Navy Department call for many inspectors of aeronautical engineering materials. For many months the commission has had open an examination for inspectors covering several branches of aeronautical engineering materials. Provisions for using national defense training courses to meet the experience requirements have been liberalized. The positions pay from \$1,620 to \$2,600 a year, and the maximum age is 65 years.

THE New York Academy of Medicine announces the availability of the Louis Livingston Seamon Fund for the furtherance of research in bacteriology and sanitary science. Two thousand dollars is available for assignment in 1941. The fund will be expended only in grants in aid for investigation or for scholarships for research in bacteriology or sanitary science. Grants may be used for technical help, for aid in publishing original work or for the purchase of necessary books or apparatus. The fund is administered by a Committee of the academy under the following conditions and regulations: Communications should be received before November 1 by Dr. Wilson G. Smillie, chairman of the Louis Livingston Seaman Fund, 1300 York Avenue, New York City.

THE Louise A. Boyd Arctic Expedition of the National Bureau of Standards, which sailed from Washington on June 11, is expected to return about November 1. Both Miss Boyd and Captain Bob Bartlett, who commands the expedition schooner *Effie M. Morrissey*, are Arctic explorers of wide experience. They planned to observe the ionosphere characteristics as

determined by special radio measurements, geomagnetism, auroral manifestations and also to measure ultraviolet light intensities. The expedition, under the leadership of Dr. Louise A. Boyd, was undertaken at the request of the Government, Dr. Boyd having been appointed a consulting expert of the National Bureau of Standards. The U. S. Coast Guard and the Department of Terrestrial Magnetism of the Carnegie Institution cooperated in the arrangements for the expedition.

At a dinner of the citizens of Chicago on September 26 at which the attendance was 800, it was reported that \$9,200,000 had been subscribed to the fiftieth anniversary fund of \$12,000,000 of the University of Chicago. It is planned to raise the balance of the money over a period of five years.

THE Congress of the United States on September 15, as reported in the *Journal* of the American Medical Association, completed legislative action on a bill authorizing the War Department to purchase for \$1,000,000 a site near the Folger Shakespearean Library for the new Army Medical Library and Museum to cost \$3,750,000.

THE School of Medicine and Dentistry of the University of Rochester received more than \$900,000 last year through the will of Dr. Henry C. Buswell. It will now receive the same amount under the will of his wife, Mrs. Bertha H. Buswell. Mrs. Buswell died on July 30. Her will makes available ultimately to the Medical School a trust fund of \$925,164.

A LARGE collection of cactus plants, a gift of Mexico to the United States, was taken to the New York Botanical Garden on September 1 after a two months' display at Rockefeller Center, to be made a permanent part of the cactus collection. The gift was officially accepted last July by Dr. William J. Robbins, director of the garden.

## DISCUSSION

### THE EFFECTIVENESS OF EQUIMOLAR QUANTITIES OF VARIOUS CARDIAC GLYCOSIDES

It has recently been re-emphasized<sup>1</sup> that the human therapeutic doses of the several pure cardiac glycosides are not predictable from animal toxicity assays. It has, apparently, not been pointed out that in the cases of certain comparable glycosides for which the single dose, or short-time interval multiple intravenous dose, for "full digitalization" in auricular fibrillation is known, there is remarkably small difference in the

molar quantities of the drugs necessary to produce comparable effects. Furthermore, in at least one glycoside differing from others in the chemical configuration at the C<sub>3</sub> position the molar quantities of drug necessary to produce comparable therapeutic effects are widely different.

In the accompanying Table I are shown the intravenous "full digitalizing doses" for auricular fibrillation, together with cat lethal assay figures and certain chemical data for five pure glycosides and one mixture. It will be noted that, for the first four sub-

<sup>1</sup> H. Gold and McK. Cattell, *SCIENCE*, 93: 197, 1941.