

This is one of the chief attractions of the Marine Biological Laboratory.

The committee consequently voted unanimously that the Marine Biological Laboratory is performing valuable services in biological research.

RECENT DEATHS AND MEMORIALS

PROFESSOR WILLIAM H. ECHOLS, professor of mathematics at the University of Virginia since 1891, died at his home in his seventy-fifth year on September 25. Professor Echols was engaged in teaching until the time of his death.

DR. THOMAS EDWARD SATTERTHWAITE, one of the founders and a former president of the American Therapeutic Society, a founder of the American College of Physicians, author of several medical treatises, died on September 19. He was ninety-one years old.

DR. FREDA DETMERS, curator of the herbarium of the University of Southern California, formerly of the Ohio State University and its Experiment Station, died on September 5 at the age of sixty-eight years.

THE eighty-sixth anniversary of the birth of Edward Livingston Trudeau will be observed at Saranac Lake, N. Y., on October 5, when officials of the State Committee on Tuberculosis and Public Health present to Trudeau Sanatorium a likeness of the little red cottage which he built in pioneering the outdoor type of sanatorium in America. The presentation will serve as a preview of the picture of the cottage which has

been reproduced as the design of this year's health seals of the National Tuberculosis Association. The ceremony will take place in front of the cottage on Mount Pisgah where fifty years ago its building was begun. Those who are expected to be present include George J. Melbach, executive secretary of the committee, and members of his staff; Dr. Edward R. Baldwin, director of the Edward L. Trudeau Foundation; Dr. Fred H. Heise, medical director of Trudeau Sanatorium; Dr. John Steidl, Dr. Francis B. Trudeau, son of the founder of the sanatorium, and Ernest H. Wood, secretary of the Saranac Lake Society for the Control of Tuberculosis.

THE Paris correspondent of the *Journal* of the American Medical Association writes that the monument erected to the memory of Dr. Roux in the gardens of the Hôpital des Enfants-malades was dedicated recently in connection with the holding of the international congress of French-speaking pediatricians in Paris. The monument consists of a large low relief, the work of the sculptor Rouche, which represents Roux in his laboratory examining a microscopic specimen. At the dedicatory ceremonies Dr. Martin, who was the collaborator of Roux at the Institut Pasteur in his discoveries of antidiaphtheritic serotherapy, gave a biographic sketch interspersed with personal reminiscences, while Professor Marfan emphasized the importance of this discovery. The ceremonies were attended by many official delegates.

SCIENTIFIC NOTES AND NEWS

IN honor of the eighty-fifth birthday of Dr. Ivan P. Pavlov, the Soviet Government has awarded to him an annual pension of 20,000 rubles and a fund of a million rubles has been made available for the enlargement of the physiological laboratories in Leningrad. In addition, five Pavlov scholarships of the value of 6,000 rubles each, to be awarded annually for physiological research, have been established. A complete edition of Dr. Pavlov's works will be published by the Soviet Academy of Sciences.

SIR RICHARD GLAZEBROOK, director of the British National Physical Laboratory from 1897 to 1919, celebrated his eightieth birthday on September 18.

YESHIVA COLLEGE will confer the degree of doctor of humane letters on Professor Albert Einstein, of the Institute for Advanced Studies at Princeton, N. J., at the opening exercises on October 8. Dr. Einstein will make an address. Other speakers will include Governor Lehman, Herman Bernstein, formerly United States Minister to Albania; Dr. David Eugene Smith, professor emeritus of mathematics, Columbia University, and member of the Yeshiva Col-

lege Council, and Dr. B. Revel, president of the college.

DR. J. R. KATZ, of the University of Amsterdam, and Professor Farrington Daniels, of the University of Wisconsin, will be non-resident lecturers in chemistry during the coming year at Cornell University.

DR. WILLIAM SALANT, director of the section on pharmacological research at the Biological Laboratory at Cold Spring Harbor, N. Y., has been elected guest professor of pharmacology at the New York Homeopathic Medical College and Flower Hospital.

Two hundred and seventy-five former students of Dr. R. C. Schiedt, professor emeritus of biology at Franklin and Marshall College, gave a dinner at Lancaster, Pa., in honor of his seventy-fifth birthday on September 21. The sum of five thousand dollars was raised toward the endowment of a fellowship, to be awarded to a graduate of the college for study in an American or foreign university. An edition of thirty etchings of Dr. Schiedt, by Walter Tittle, and a larger edition of photogravure reproductions were made for

distribution to the contributors to the fund. Professor W. A. Kepner, of the University of Virginia, was one of the speakers, and Professor A. A. Schaeffer, of Temple University, was chairman of the committee.

THE Society of Sigma Xi has announced a grant to Dr. H. R. DeSilva, professor of psychology at the Massachusetts State College, for work on the correlation of body voltage changes with basal metabolism by gasometric methods.

DR. HERBERT U. WILLIAMS, professor of pathology and bacteriology in the School of Medicine of the University of Buffalo, has retired after more than forty years of teaching.

S. C. HOLLISTER, professor of structural engineering at Purdue University, has been appointed director of the School of Civil Engineering at Cornell University.

DR. ARTHUR CHARLES BACHMEYER, since 1925 dean of the College of Medicine of the University of Cincinnati, has been appointed director of the University Clinics of the University of Chicago to succeed Dr. Henry S. Houghton, who has resigned to return to China as advisory representative of the China Medical Board, which owns and supports the Peiping Union Medical College. Dr. Houghton's resignation and the appointment of Dr. Bachmeyer become effective on January 1, 1935. Dr. Houghton, who was formerly dean of the Medical College of the University of Iowa, has been director of the clinics and associate dean of the Division of Biological Sciences since 1933.

PROFESSOR E. R. MCKEE, formerly associate professor of electrical engineering at the Iowa State College, will succeed the late Professor L. P. Dickinson as head of the department of electrical engineering of the University of Vermont.

DR. PAUL HEMKE has been appointed professor and head of the department of aeronautical engineering at the Rensselaer Polytechnic Institute, the appointment to take effect in September, 1935. Dr. Hemke has been professor of aeronautics and mathematics at the U. S. Naval Academy and at the Case School of Applied Science.

At the Ohio State University, Dr. Carl L. Spohr has been made acting chairman of the department of pathology, succeeding the late Dr. Ernest Scott.

ERNEST P. GOODRICH, formerly Commissioner of Sanitation of New York City, has been appointed director of the new public works and construction courses in the New York University College of Engineering. Mr. Goodrich will supervise a group of five courses planned and arranged by Professor Thorndike Saville, who has been granted leave of absence

to direct a national survey of water resources for the U. S. Department of the Interior.

DR. FRANK M. SCHERTZ, formerly of the Fixed Nitrogen Research Laboratory of the U. S. Department of Agriculture, known for his investigations on the chloroplast pigments and particularly chlorophyll, has been appointed director of research of The American Chlorophyll Company, of Washington, D. C.

DR. B. E. DAHLGREN has been appointed curator of the department of botany, and Henry W. Nichols curator of the department of geology at the Field Museum of Natural History. Dr. Dahlgren has been a member of the botanical staff of the museum since 1909. Mr. Nichols joined the staff in 1894, and was associate curator of geology for many years. Since the death in November, 1933, of Dr. Oliver C. Farrington Mr. Nichols has been acting curator of the department.

DR. PAUL F. RUSSELL, of the International Health Division of the Rockefeller Foundation, has been detailed for malaria research at the All-India Institute of Hygiene and Public Health, Calcutta. For nearly five years Dr. Russell has been in charge of malaria investigations, at the Bureau of Science, Manila, P. I.

JOHN B. WHITNEY, who spent two years in the Soviet Union in a consulting capacity, has been invited by the Soviet Government to return, and sailed early in September to make his headquarters in Moscow.

FRANK ADAMS, professor of irrigation investigations and practise at the College of Agriculture of the University of California, who has been given leave of absence from August 1, 1934, to January 31, 1935, is in Washington, to work out for the Reclamation Service a policy for irrigation development. He will prepare a report for Dr. Elwood Mead, Commissioner of Reclamation, U. S. Department of the Interior.

DR. ALEXIS CARREL, of the Rockefeller Institute for Medical Research, returned from France on September 25.

DR. FRANK D. KERN, head of the department of botany at the Pennsylvania State College and dean of the Graduate School, has returned after a year's leave of absence during which he served as acting dean of the College of Agriculture of the University of Puerto Rico. He is succeeded by Professor Harry G. Parkinson, head of the department of agricultural education at the State College.

DR. TRACY I. STORER, professor of zoology at the Davis Branch of the College of Agriculture of the University of California, has returned from a trip to Europe where he went to study methods used in eco-

onomic vertebrate zoology. Dr. Storer was absent during the spring semester on Sabbatical leave.

DR. REXFORD G. TUGWELL, Under Secretary of Agriculture, will speak on October 22 at the opening in Rome of the International Institute of Agriculture, to which he is a delegate.

DR. A. R. MOORE, professor of general physiology at the University of Oregon, who has recently returned from Sendai, Japan, where he was Rockefeller visiting professor of physiology, will deliver a series of lectures from October 15 to 20 at the College of Medicine of the University of Illinois, under the auspices of the Graduate School. The lectures will be on "The Physiological Basis of Individuality in the Early Embryo and in Elementary Forms."

LAST year the Rensselaer Chapter of Sigma Xi sponsored a series of six lectures, open to the public, and given by authorities in various fields, the average attendance at which was approximately four hundred, including members and their guests. The chapter has arranged a similar series of lectures for the coming year, and the following have expressed their willingness to speak: Dr. Wilder D. Bancroft, Cornell University; Dr. Harold C. Urey, Columbia University; Dr. Matthew Luckiesh, director of the Nela Laboratories, Cleveland; Dr. Edgar Allen, Yale University; Dr. Harold Larrabee, Union College, N. Y., and Dr. Benjamin Boss, director of the Dudley Observatory, Albany, N. Y. Others have accepted tentatively if satisfactory dates can be arranged. The first lecture of the series will be given on Friday evening, October 19, by Dr. Bancroft. His subject will be "Alcoholism, Morphinism and Insomnia."

THE Electrochemical Society held its annual meeting in New York City on September 28 under the presidency of Professor Hiram S. Lukens, head of the department of chemistry of the University of Pennsylvania. The speakers at the dinner included S. G. Hibben, of the Westinghouse Lamp Company; Dr. Colin G. Fink, of Columbia University, and James H. Critchett, of the Union Carbide and Carbon Corporation.

A NATIONAL Association of Science Writers has been founded, the active membership of which is limited to staff members of newspapers and press associations that devote their major efforts to the field of science. Charter members are Howard Blakeslee, science editor of the Associated Press; Ferry B. Colton, assistant science editor of the Associated Press; Watson Davis, director of Science Service; David Dietz, science editor of the Scripps-Howard newspapers; Victor Henderson, of the *Philadelphia Inquirer*; Thomas R. Henry, of the *Washington Star*; Waldemar Kaempffert, science editor of *The New*

York Times; Gobind Behari Lal, science editor of the Hearst Newspapers; William L. Laurence, science news editor of *The New York Times*; John J. O'Neill, science editor of *The New York Herald-Tribune*; Robert D. Potter, staff writer in physics and chemistry, Science Service. Mr. Dietz has been elected president of the association. One honorary member has been elected, Austin H. Clark, of the Smithsonian Institution. Mr. Clark is press director of the American Association for the Advancement of Science. The purpose of the National Association of Science Writers, as set forth in its constitution, is "to foster the dissemination of accurate scientific knowledge by the press of the nation in cooperation with scientific organizations and individual scientists."

MEMBERS of the Northeastern Section of the American Society of Agricultural Engineers will hold a joint meeting with the New England Rural Electrification Institute at Massachusetts State College, on October 17, 18 and 19. The program will cover a wide field of subject matter including a report of government surveys on the housing need on farms, drainage with dynamite, and the use of light traps in the orchards for controlling pests. A new type of sterilizer for the farm dairy will be demonstrated and new developments in electric brooding will be reported. On Thursday afternoon Dr. Hugh P. Baker, president of the college, will extend a welcome to the visitors. E. H. Thompson, president of the Federal Land Bank of Springfield, will discuss "Agricultural Credit," and Frederick M. Feiker, secretary of the American Engineering Council, will speak of "The Responsibility of the Engineer in the Present National Emergency."

THE *Journal* of the American Medical Association reports that plans for the second International Neurologic Congress, to be held in London from July 29 to August 2, 1935, have been announced by the committee for the United States, of which Dr. Bernard Sachs, New York, is chairman and Dr. Henry Alsop Riley, New York, secretary. Four topics have been chosen for consideration: the epilepsies, physiology and pathology of the cerebrospinal fluid, functions of the frontal lobe, and the hypothalamus and the cerebral representation of the autonomic system. These subjects will be presented at morning sessions, and afternoon sessions will be devoted to discussion of miscellaneous topics. Any recognized neurologist or psychiatrist may submit titles for presentation at the miscellaneous sessions. Such titles, accompanied by brief abstracts, must be submitted to the United States committee before January 15, 1935, in English, French or German. Those accepted will be forwarded to the secretary general in London for final consideration. The maximum time for presenta-

tion will be ten minutes. Candidates for membership may apply either through the national committee or through the secretary general of the congress, Dr. S. A. Kinnier Wilson, 14 Harley Street, London. Thomas Cook and Son are official travel agents for the congress, and arrangements for traveling and hotel accommodations may be made through them. Requests for application blanks and the submission of titles should be made as soon as practicable. In addition to Dr. Sachs and Dr. Riley, members of the committee are Drs. Harvey Cushing, Yale University Medical School; Charles L. Dana, Woodstock, Vt.; Adolf Meyer, Baltimore, and Frederick Tilney, New York. Dr. Riley's address is 117 East Seventy-Second Street, New York.

THE New York Homeopathic Medical College and Flower Hospital is entering upon its seventy-fifth year since the charter was granted in 1860. The Board of Trustees has designated June, 1935, as the time for formal celebration of the anniversary. Professor Lindsley F. Cocheu has been appointed chairman of the Committee on Arrangements.

THE School of Medicine, George Washington University, of which Dr. E. B. McKinley is dean, celebrated the opening of the one hundred and tenth academic year on September 19 in Washington, D. C. Addresses were delivered by President Cloyd Heck Marvin, of the university, and Dr. William J. Mallory, professor of medicine. Among the visitors and guests present were Professor John Reenstierna, of the department of bacteriology of the University of Upsala, Sweden; Captain Harold Smith, commandant, U. S. Navy Medical School, and Colonel P. W. Huntington, commandant, U. S. Army Medical School.

AN affiliation has been effected between the New York Post-Graduate Medical School and Hospital of Columbia University and the Stuyvesant Square Hospital, formerly known as the New York Skin and Cancer Hospital. According to the terms of the agreement, which went into effect on September 1, the Stuyvesant Square Hospital maintains its identity. Both the Stuyvesant Square and the Post-Graduate Hospitals were founded in the same year—1882—and are pioneers in their respective fields.

Nature states that the report of the Council of the British Association, adopted by the General Committee at Aberdeen on September 5, records that the local committee for the Leicester meeting has presented the sum of £1,000 to the association, being the unexpended balance of the fund raised locally for the purposes of the meeting. This gift has been accepted, and the sum will be invested to form a Leicester and Leicestershire Fund, the interest of which will be used "to assist by scholarship or otherwise a student or students working for the advancement of science."

THE Alpha Chi Sigma banquet was held in conjunction with the national meeting of the American Chemical Society at Cleveland on September 11. Two hundred and forty men were present, representing 39 chapters. Mr. John E. Schunck, of the Ohio Carbon Company, Cleveland, Ohio, served as toastmaster. Other speakers were: Dr. L. V. Redman, past president of the American Chemical Society and president of the Bakelite Corporation; Dr. Charles A. Mann (a past president of the fraternity), head of the department of chemical engineering, University of Minnesota; Dr. Wm. R. Veazey, director, department of chemistry, Case School of Applied Science; Dr. H. E. Howe, editor of *Industrial and Engineering Chemistry*, and H. E. Wiedemann, executive head of the fraternity and consulting chemist of St. Louis. A guest of honor was Dr. L. F. Work, president of the Phi Lambda Upsilon Fraternity. Souvenirs furnished by the Ohio Carbon Company were given in the form of a "Cleanaire," a device for keeping air in refrigerators pure and wholesome. Dr. W. A. Noyes, Sr., professor emeritus, University of Illinois, held the lucky number and was awarded a set of gold-plated analytical weights donated by the J. T. Baker Company. Thirty-five other prizes were furnished by the Aluminum Company of America, The Chemical Rubber Company, The Central Scientific Supply Company, Handbook Publishers, Inc., and the Bakelite Corporation. The banquet was arranged by the Cleveland professional group of the fraternity under direction of Dr. I. W. Brandel, of the Ohio Carbon Company, and W. K. Lonsdale, of the James Herron Company, Cleveland. Cooperation on the part of committeemen of the American Chemical Society convention contributed to the success of the evening.

DISCUSSION

THE STRUCTURE OF THE CHROMOSOMES IN THE SALIVARY GLANDS OF DROSOPHILA

THE recent discovery of Professor T. S. Painter¹ has attracted the attention of geneticists throughout the world. In all genetical laboratories the structure

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of the chromosomes in the salivary glands of *Drosophila* of different genotypes, having inversions, deficiencies, translocations, etc., is being studied, and the cytological picture is being compared with the genetical chromosome-map. I have seen hundreds of preparations of salivary glands of different Diptera,