of Medicine and other scientific bodies, including chemical societies in Paris and Berlin.

Dr. Witthaus was a man of broad culture and had many interests outside of his profession. He was an ardent disciple of Izaak Walton. His love of books amounted to a passion. At several different periods of his life he collected libraries of first and other rare editions. During his last years his chief interest lay in the collection and cataloguing of books and original manuscripts.

His fortune and medical library were bequeathed to the New York Academy of Medicine.

The faculty of Cornell University Medical College records with sorrow the death of their colleague, Dr. Charles C. Barrows, assistant professor of gynecology, which occurred on January 2, 1916, after an illness of two months.

Dr. Barrows's association with the Cornell University Medical College dates from the foundation of the college in 1898, when he was appointed clinical instructor in gynecology. He occupied this position until his promotion to the assistant professorship of gynecology in 1912. At the time of his death he had been nominated for the professorship of gynecology and he had already assumed charge of the department. The greater portion of Dr. Barrows's teaching consisted of clinical demonstrations and operations in Bellevue Hospital. Following the recent trend in medical education he introduced the system of clinical clerkships into the teaching of gynecology. Dr. Barrows was a successful as well as a popular teacher. Through his ability he excited the admiration of his students and stimulated them to put forth their best efforts; through his kindliness he made them his friends.

Except for a brief period while serving in the army, Dr. Barrows has been connected with Bellevue Hospital since 1880, when he won his appointment as interne. After his return to New York he was appointed assistant visiting gynecologist, holding this position until he became visiting gynecologist in 1915. Many of the finest traits of his character appeared in his hospital relations. He was renowned not only for his skill as diagnostician and surgeon but for his patience and poise under the most difficult circumstances. He was considerate of his subordinates at all times. No patient was too poor to claim his attention. He carried hope and encouragement to every bedside and through his skill restored many a sufferer to health and usefulness. 'A recent graduate of the hospital, when asked to voice the strongest impression which Dr. Barrows had made upon him, replied, "his heart was as big as the man." The loyalty of the internes serving under him was especially notable. They never speak of him except in terms of affection, and friendships formed during their hospital days grew stronger as the years advanced.

Dr. Barrows was widely known as one of New York's most skillful surgeons, and for years he enjoyed a large and successful practise. He was a member of many medical societies, was a frequent contributor to medical literature on subjects pertaining to his specialty, and devised important new surgical procedures.

SCIENTIFIC NOTES AND NEWS

On the seventieth birthday of the distinguished Swedish mathematician, Professor M. G. Mittag-Leffler, he and his wife set aside their entire fortune for the foundation of an International Institute for pure mathematics.

The Willard Gibbs Medal, founded by William A. Converse, of Chicago, has been awarded to Dr. Willis R. Whitney, director of the research laboratories of the General Electric Company, Schenectady, N. Y. The presentation will be made on May 19, in connection with the meeting of the Chicago Section of the American Chemical Society, when Dr. Whitney will make an address on "Incidents of Applied Research."

STUDENTS of pharmacy in the University of Pittsburgh have given a dinner in honor of Dean J. A. Koch, who has been in his present position for twenty-five years.

Mr. Henry W. Fowler has been elected president of the Delaware Valley Ornithological Club.

SIR RICHARD A. S. REDMAYNE has been elected president of the British Institution of Mining and Metallurgy in succession to Sir Thomas K. Rose.

At the twenty-first annual meeting of the Michigan Academy of Science held in Ann Arbor on March 28, 29 and 30, officers were elected as follows: *President*, Wm. H. Hobbs; *Vice-presidents*, Zoology, R. W. Hegner, University of Michigan; Botany, G. H. Coons, Michigan Agricultural College; Geology, L. P.

Barrett, Michigan Geological and Natural History Survey; Economics, F. A. Carlton, Albion College; Sanitary and Medical Science, H. W. Emerson, Pasteur Institute; Secretary and Treasurer, Richard de Zeeuw, Michigan Agricultural College; Editor, R. A. Smith, Michigan Geological and Natural History Survey; Librarian, Crystal Thompson, Museum of Zoology, University of Michigan.

WE learn from Nature that Second Lieutenant G. I. Taylor has been appointed to the temporary rank of major in the British Royal Flying Corps, while performing the duties of professor of meteorology. Major Taylor is a fellow of Trinity College, Cambridge, to whom the Adams prize was recently awarded. Up to the outbreak of war he held the Schuster readership of the Meteorological Office at the University of Cambridge. The professorship of meteorology to which Major Taylor is appointed is a new establishment, for which the meteorological office is responsible, for instruction and special researches in the structure of the atmosphere in the interest of the Royal Flying Corps.

SR THOMAS H. HOLLAND, F.R.S., professor of geology and mineralogy in the University of Manchester, has been appointed chairman of a commission which the British government is forming to survey the economic resources and industrial possibilities of India.

Dr. RAYMOND F. BACON, director of the Mellon Institute for Industrial Research of the University of Pittsburgh, has been appointed by the secretary of the navy as an associate member of the Naval Consulting Board and a director on the board of organization for industrial preparedness in Pennsylvania.

E. C. Bingham, Ph.D. (Johns Hopkins, '05), who for the past few years has been professor of chemistry in Richmond College, Richmond, Virginia, is spending the year 1915-16 in the Bureau of Standards, Washington, D. C.

CHESTER W. WASHBURNE, formerly with the United States Geological Survey, has returned to the United States after two years in the

Belgian Congo where he went to prospect for oil.

The scientific staff of the biological station of the University of Michigan, at Douglas Lake, Michigan, has been completed as follows: Director, O. C. Glaser; ornithology, R. M. Strong; vertebrate zoology and entomology, M. M. Ellis; parasitology, W. W. Cort; plant ecology, F. C. Gates; systematic botany, J. H. Ehlers; field and forest botany, R. M. Holman; assistants, R. M. Hall, M. Reynolds and C. B. Cotner.

The Mellon Institute of the University of Pittsburgh will exchange services between its department of research in pure chemistry and the graduate departments of chemistry in other universities. Professor M. A. Rosanoff will lecture for a week at each of the other universities while a representative from that institution lectures at the Mellon Institute. Professor Harkins, of the University of Chicago, and Professor Washburn, of the University of Illinois, have arranged to go to Mellon Institute, and Professor Bogert, of Columbia University, will probably lecture at the institute later in the year.

DR. WILLIAM H. WELCH, of the Johns Hopkins University, delivered a lecture before the Book and Journal Club of the Medical and Chirurgical Faculty of Medicine, March 22, on "The Development of Medicine in the Orient."

Professor Joseph Jastrow, of the University of Wisconsin, addressed the Sigma Xi Society of the University of Indiana on March 28 on "The Expression of the Emotions," and delivered the Convocation address at that university on March 29 on "Theory and Practise." On March 29, he gave the Sigma Xi address at Purdue University on "The Sources of Human Nature."

Professor A. W. Goodspeed, director of the Randal Morgan Laboratory of Physics, University of Pennsylvania, gave a series of three illustrated lectures at the Brooklyn Institute of Arts and Sciences on the X-rays on the evenings of February 25, March 3 and 10.

Dr. Harry Clary Jones, professor of chemistry in the Johns Hopkins University, died at his home in Baltimore on April 9, aged fiftyone years.

Professor Wells Woodbridge Cooke, assistant biologist of the biological survey of the Department of Agriculture, and one of the leading authorities of the United States on bird migration and distribution, died from pneumonia on March 29, aged fifty-eight years.

FREDERICK C. OHM, of the petrographic division of the United States Geological Survey, died in Washington, on March 14, aged fiftyeight years.

Dr. Nathan Oppenheim, the author of several books and numerous articles on the development, the hygiene, and the diseases of the growing child, died in New York City, on April 5, aged fifty-one years.

DR. THEODORE BERNARD SACHS, one of the leading workers in the antituberculosis campaign in the United States and until a few days ago superintendent of the Municipal Tuberculosis Sanatorium, Chicago, committed suicide on April 2, at the age of forty-eight years.

Mr. Geoffrey Meade-Waldo, of the entomological department of the British Museum, died on March 11, after a short illness. Mr. Meade-Waldo was the author of numerous important papers on Hymenoptera, and at the time of his death had just completed the arrangement of the bees in the museum.

SR ALEXANDER RUSSELL SIMPSON, formerly dean of the faculty of medicine of the University of Edinburgh, died on April 6, at the age of eighty-one years.

SR CHARLES BALL, regius professor of surgery in the University of Dublin, died on March 17, aged sixty-five years.

Lady Kelvin died on March 16, having survived by nine years Lord Kelvin, who died on December 17, 1907.

Dr. Eric Gerard, the director of the Montefiore Electrotechnical Institute at Liège, Belgium, and professor in the University of Liège, died in Paris, on March 27, at the age of sixty years.

THE American Society of Naturalists has decided to hold its annual meeting of Convocation Week, 1916, in New York City.

THE next stated meeting of the American Ornithologists' Union will be held at the Academy of Natural Sciences, at Philadelphia, from November 14 to 16.

At the invitation of the technical committee of the Affiliated Engineering Societies of Atlanta, Ga., the Bureau of Standards will hold a conference in that city on May 2, 3 and 4, for the purpose of discussing the work of the bureau in connection with the national electrical safety code and the prevention of electrolysis of gas and water pipes, cable sheaths and other metallic underground structures.

THE Puget Sound Marine Station will open its session at Friday Harbor, Wash., on June 26, 1916, and continue for six weeks. teaching staff will consist of the following: Dr. T. C. Frye, University of Washington; Dr. H. S. Brode, Whitman College: Dr. Nathan Fasten, University of Washington; Dr. H. J. Van Cleave, University of Illinois; Mr. W. L. C. Muenscher, Sioux Falls, South Dakota; Mr. A. C. Jensen, Mt. Pleasant, Utah; Miss Edna M. Perry, Bellingham, Washington; Miss Annie May Hurd, Seattle, Washington; Mr. G. C. Woods, Walla Walla, Washington. The total expense for the six weeks is about \$50. Those east of the Missouri River may add to the pleasure of the trip by joining Professor H. J. Van Cleave's party from the University of Illinois.

THE United States Biological Laboratory, Fairport, Iowa, will be open to temporary investigators on June 15. While the laboratory is open the entire year, the mess and other special accommodations for summer workers will not be available until this date. The equipment and facilities of the station provide excellent opportunities for biological investigations of a general and specific nature, with particular reference to freshwater forms, and also for chemical and physical studies

relating to biological problems. Opportunities are especially good for studies relating to fish and mussels. Investigators desiring to occupy tables for the whole or part of the season should communicate with the commissioner of fisheries, Washington, D. C., or the director of the station.

The Experimental Station Record states that four new Canadian entomological laboratories were completed during the summer of 1915, located respectively at Annapolis Royal, Nova Scotia; Frederickton, New Brunswick; Treesbank, Manitoba; and Lethbridge, Alberta. The laboratory at Frederickton is the most elaborate of these structures and is a two-story and basement brick building 24 by 30 feet, located on the campus of the University of New Brunswick. Its work has been especially directed toward the natural control of insects, notably the brown-tail moth, tent caterpillar, spruce budworm and fall webworm. The laboratory at Annapolis Royal is a wooden onestory and basement building, 26 feet square. It is located on the county school grounds and is equipped with special reference to combating the brown-tail moth and for studies of the bud moth, fruit worm and other fruit pests. replaces a former temporary laboratory at Bridgetown, which is to be used as a substation wherever most needed. The laboratories at Treesbank and Lethbridge are of the bungalow type, the former being 12 by 16, and the latter, located on the Dominion substation farm, 23 by 20 feet.

At the University of Chicago a contract has been made with the United States Department of Agriculture for the establishment in Julius Rosenwald Hall of a meteorological observatory of the United States Weather Bureau. Instruments for observation are to be placed upon the roof of the tower, and instruments for registering seismic disturbances and for other purposes of the bureau are to be installed in the building. Rain gauges and a thermometer shelter are to be placed on the campus. By the terms of the contract the faculty and students of the university may have free access, within reasonable limits, to the records of observations made and of data gathered;

and printed matter containing the results of investigations based upon observations made in this observatory will show the cooperation of the university with the department.

WE learn from the Auk that Mr. W. Leon Dawson, of Santa Barbara, Cal., has made over his valuable collection of birds' eggs and nests to a board of trustees who are incorporating an institution to be known as the Museum of Comparative Oology, in which it is hoped to accumulate a representative collection of the nests and eggs of the birds of the world. Mr. Dawson is to have responsible control of the collection during his life in order to insure its proper care during the early years of the enterprise. At the expiration of three years, during which he will be engaged in field work in connection with the forthcoming "Birds of California," a campaign will be inaugurated for an endowment and a group of buildings suitable for housing the collection. number of prominent oologists and ornithologists have been invited to form a board of visitors to cooperate with the museum management.

The trustees of the National Dental Association have purchased a large private residence in Cleveland, O., as temporary quarters for a new Research Institute until adequate buildings can be erected. The Research Institute is supported entirely by the association, and the plan of organization is a corporation with a membership of sixty, twenty-seven of whom are elected by the trustees of the National Dental Association and known as commission members, and thirty-three are permanent members and are selected by the corporation. The board of nine trustees has chief responsibility for the conducting of the work in the institution and carried on under grants. They are assisted by an advisory board of eighteen. It is said to be the first institution of its kind in the world. Various problems contemplated for study are: Pyorrhea, dental caries, mouth infections, relation of baby foods to tooth structure, relation of glands of internal secretion to defective tooth structure, staining of teeth, etc. Part of the work will

be the collecting and distribution of information for educational work, particularly for the medical and dental professions. The present officers are: Dr. W. A. Price, Cleveland, president and managing director: Dr. Thos. P. Hinman, Atlanta, vice-president; Dr. Clarence J. Grives, Baltimore, secretary: Lefa A. Beman, Cleveland, assistant secretary; Edward A. Petreguin, Cleveland, treasurer. The trustees are: Dr. Weston A. Price, Cleveland, Harry J. Crawford, Cleveland, Dr. John V. Petreguin, Esq., Cleveland, Dr. Geo. W. Crile, Cleveland, Dr. Clarence J. Grives, Baltimore, Dr. Eugene R. Warner, Denver, Dr. Thos. P. Hinman, Atlanta, Edward A. Couzett, Dubuque, Iowa, and Dr. Homer C. Brown, Columbus, O.

THE Anglers Association of Onondaga, of Syracuse, N. Y., one of the largest associations of the kind in New York State, and the New York State College of Forestry at Syracuse, have decided upon a cooperative plan for the utilization of the fine springs at the college nursery as a trout nursery and for fish ponds. The college furnishes the site and the anglers pay for the man to care for the fish, etc. The general plan is to care for the young trout fingerlings, received from the Conservation Commission in the spring, and to carry them over the summer in this nursery and then plant them in the fall, at a more favorable season and in better condition. This is the practise now so successfully followed at Rome, N. Y., under the leadership of Mr. Harry Ackley, president of the Rome Fish and Game Association. The fish nursery and ponds will be available to the college for the instruction of its students in the course on fish and game taught to forestry students by Dr. C. C. Adams.

UNIVERSITY AND EDUCATIONAL NEWS

THE University of California has received the following gifts and subscriptions toward the equipment of the new 216-bed University Hospital (now being built in San Francisco from gifts of over \$600,000): Mrs. James Moffitt, \$5,000; an alumnus, \$5,000; Mr. Alexander F. Morrison, \$5,000; Mr. William H. Crocker, \$2,616.50; Mr. Wallace M. Alexander, \$2,000; a friend of the university, \$2,000; Mr. N. Ohlandt, \$1,500; Mr. Charles W. Merrill, \$1,000; Mr. D. C. Jackling, \$1,000; and the children of the late F. W. Dohrmann, \$500.

The bill of the ways and means committee in the House of Representatives of the Maryland Legislature makes the appropriation of the state to Johns Hopkins University \$50,000, a decrease of \$25,000 from the grant of last year.

Professor Wilbur L. Cross, graduate of the English department of the Sheffield Scientific School, has been elected by the faculty of Yale University to be dean of the graduate school. He succeeds Professor Hans Oertel, who is now in Germany.

IVEY F. LEWIS, Ph.D. (Johns Hopkins, '08), fromerly professor of botany in the University of Missouri, has gone to the University of Virginia as professor and head of the Miller School of Biology.

Mr. A. W. Dupler, of the University of Chicago, has been elected professor of botany at Lawrence College, Appleton, Wisconsin. Dr. R. C. Mullinix, who has been head of the department of biology, will continue as professor of zoology.

Mr. George F. Moznette has been appointed as assistant professor in entomology at the Oregon Agricultural College and Station to begin his duties on March 1.

Professor Ettore Marchiafava, a senator of the kingdom of Italy, known for his work on malaria and in other directions, has been appointed to the chair of clinical medicine at Rome left vacant by the death of Professor Guido Baccelli.

DISCUSSION AND CORRESPONDENCE HORIZON OF THE SHARK RIVER (N. J.) EOCENE DEPOSITS

Some twenty-five years ago, while working over the Eocene molluscan material in the