

members of the advisory board could not be purchased. They serve the government without remuneration, efficiency being their sole object and Americanism their only motive.

#### SCIENTIFIC NOTES AND NEWS

THE University of Iowa at the last commencement bestowed the degree of doctor of laws upon Professor J. C. Arthur, emeritus professor of botany in Purdue University. In the presentation made by Mr. D. D. Murphy, president of the State Board of Education, the services of Dr. Arthur to pure and applied science were reviewed. Special emphasis was placed on his contributions to agriculture and horticulture in the study of plant diseases. This work began when, as the first botanist in an American experiment station, pear blight was investigated, and may be said to have culminated in the discovery of formaldehyde as a fungicide, especially for diseases of potatoes and grains. Studies on the relation of weeds to effective cultivation resulted in new methods for their control and extermination. His work in physiological botany, and his fundamental studies in mycology, have given occasion for the introduction of new technical terms, which have entered into general use. Other matters pertaining to the long and eminent services of Dr. Arthur were touched upon by President Macbride in conferring the degree.

ALUMNI of the department of geology and geography of the University of Chicago have presented to the university a portrait of Professor Rollin D. Salisbury, head of the department of geography and dean of the Ogden School of Science. The portrait, recently finished by Ralph Clarkson, the Chicago painter, is now at the Art Institute and will later have a permanent place in the new Julius Rosenwald Hall at the University of Chicago.

PROFESSOR M. PASCH, who holds the chair of mathematics at the University of Giessen, celebrated the fiftieth anniversary of his doctorate on August 21, 1915. On this occasion the University of Breslau renewed his diploma.

THE Bakhuis Roozeboom medal has been awarded to Professor Schreinemakers, pro-

fessor of inorganic and physical chemistry in the University of Leyden.

DR. M. O. FORSTER, who was elected as a prospective Unionist candidate for parliament, has resigned. He is engaged in assisting the state-aided organization for producing dyes, work which absorbs all his time, and in the letter of resignation he says that the energy and resources of those occupied in the British dye industry must, if possible, be increased on the advent of peace.

WE learn from *Nature* that the Chinese government has appointed as the head of a geological survey, Dr. J. G. Andersson, formerly chief of the Swedish Geological Survey, and with him already are Dr. Tegengren and Professor U. Nyström. Dr. T. G. Halle, assistant in the paleobotanical department of the Riksmuseum at Stockholm, is to travel in China for one year, mainly in the interests of his own department, for which he will collect paleozoic plants, but partly for the Chinese government, to which he will report on the age and character of the coal-seams inspected, and for which a duplicate series of fossils will be provided after their determination. A young Chinese geologist will accompany Dr. Halle, and will be trained by him as a paleobotanist.

MR. JULIUS LEMKOWITZ, during the past year computer in the Yerkes Observatory, has gone to Princeton as observatory assistant.

HARVARD UNIVERSITY has granted a leave of absence for the second half of the academic year, 1916-17, to Professor W. C. Sabine, Hollis professor of mathematics and natural philosophy.

MR. ROY CHAPMAN ANDREWS, in charge of the American Museum's Asiatic zoological expedition, reports that nearly two hundred mammals and four hundred birds have been collected in the vicinity of Foochow, in the province of Fu-kien. Mr. Edmund Heller has joined the expedition, which on August 10 was on the way to Yunnanfu, to make collections in Yunnan Province.

PROFESSOR W. B. SCOTT, of Princeton University, gave an illustrated lecture on "The Relations of South America to other Conti-

nents, especially North America," in the geological lecture room of Harvard University on November 15.

THE lecture course of the Washington University Association for 1916-17 opened this year with an illustrated lecture by Dr. H. M. Payne, of New York, formerly dean of the Missouri School of Mines and Metallurgy, on "The Gold Fields of Alaska and Siberia."

THE Worcester Polytechnic Institute held a memorial service for the late Dr. Levi L. Conant, professor of mathematics, in Central Church, on November 19. The faculty and students attended in a body. The speakers were Hon. Charles G. Washburn, president of the board of trustees; Professor Z. W. Coombs, representing the faculty; Mr. C. H. Dwinell, vice-president of the First National Bank of Boston, representing the alumni, and particularly the class of '94, with which Professor Conant began his work at the institute; and Dr. Homer P. Lewis, superintendent of the Worcester schools, representing the school board, of which Dr. Conant was a member for nine years.

THE late Professor Clinton DeWitt Smith was the organizer and first director of the Agricultural College of Brazil, the first of its kind in that country. The present director writes that in token of grief for Professor Smith's death the college was closed for two days and the flag was draped in mourning and hoisted at half-mast.

WE learn from *Nature* that Lord Rayleigh presided at the meeting held at University College, London, on October 31, to take steps to establish a memorial to the late Sir William Ramsay. Mr. J. A. Pease, M.P., postmaster-general, in moving that a memorial fund should be raised, to be utilized in promoting chemical teaching and research, under a scheme to be approved hereafter, said he was glad on behalf of the government to pay a tribute to the memory of Sir William Ramsay and to take part in the great object of the meeting. The memorial should be not merely national, but international. Sir J. J. Thomson seconded the motion, which was supported by the Belgian Minister, who wished to convey

the respectful homage of Brussels University, and by Mr. W. H. Buckler, who testified to the interest of the American Ambassador and his countrymen in the movement. The resolution was carried. It was also agreed that the meeting should resolve itself into a general committee, with Lord Rayleigh as chairman, to raise the necessary fund, and an executive committee was appointed to circulate an appeal.

DR. PERCIVAL LOWELL, director of the Lowell Observatory at Flagstaff, Arizona, which he established in 1894, died of apoplexy on November 12, aged sixty-one years.

DR. WALTER S. SUTTON, professor of surgery at the University of Kansas, died at his home in Kansas City, Kansas, on November 10. He was known to biologists for his service in pointing out the mechanism in the germ cells for Mendelian inheritance.

CHARLES ELLERY AVERY, at one time instructor in the Massachusetts Institute of Technology and later professor in the Massachusetts College of Pharmacy, known for his invention of the process of manufacturing lactic acid, has died, aged sixty-eight years.

CHARLES FRANCIS ROPER, to whom was due important inventions on automatic screws and in other directions, died on November 14, at the age of sixty-seven years.

S. B. MACLAREN, professor of mathematics in University College, Reading, died on August 14, from wounds received in battle.

THE death is also announced, at the age of fifty-two years, of Dr. David Maron, a Russian research chemist who had been resident in England for many years, as the result of an explosion in a munition factory in London, where he was carrying on experiments in the manufacture of high explosive shells.

MR. M. W. DOMINICK has arranged to equip and endow the new medical library of the New York Medical College and Hospital for Women. Mr. Dominick offers this library as a memorial to his son, Dr. George Carleton Dominick, who recently died at sea. Dr. Dominick served the college for several years as lecturer and instructor.

A PLAN for the employment of the Sage Research Fund of the Medical College of Cornell University has been adopted. This fund of \$50,000 was bequeathed to the university by Mrs. Sarah Manning Sage, widow of Dean Sage, for research in medicine. The plan adopted provides that a yearly appropriation from the income of the fund shall be administered by a committee composed of the president of the university and the heads of the departments that will participate in the fund; that a minimum be assigned by this committee each year to each of the departments; that a reservation be made for a specific research, and that each participant make an annual report. By action of the board there is an appropriation of \$1,500 available for 1916-17.

THE Lee Museum of Biology at Bowdoin College has been given a collection of Hawaiian ferns by John A. Cone, Topsham; a gift of shells and mounted birds by Mrs. John S. Towne, Brunswick, and the Rev. H. W. Winkley, Danvers, Mass., has added to his previous gift of New England shells. Leland C. Wyman has been appointed custodian of the collections of fossils and fishes.

AT the invitation of the state geologist of Florida a conference of geologists and anthropologists was held at Vero, Florida, from October 23 to 30, the object of the meeting being to examine the locality near that place from which fossil human remains have been obtained. Those present at the conference were Dr. George Grant MacCurdy, Yale University; Dr. A. Hrdlička, U. S. National Museum; Dr. T. W. Vaughan, U. S. Geological Survey; Dr. O. P. Hay, Carnegie Institution; Dr. R. T. Chamberlin, University of Chicago; E. H. Sellards and H. Gunter, Florida Geological Survey; and I. M. Weills and Frank Ayers, of Vero.

WE learn from the *Journal* of the American Medical Association that a South American Society for Microbiology, Pathology and Hygiene was organized at the National Medical Congress held at Buenos Aires in September. The new society is to publish a review at Rio de Janeiro and at Buenos Aires, in Spanish, Portuguese, French, English and German.

The editorial staff consists of R. Krauss, director of the Bacteriologic Institute of Buenos Aires, and O. Cruz, director of the similar institution in southern Brazil and formerly chief health officer of Rio de Janeiro.

THE magnetic survey vessel, *Carnegie*, left San Francisco, on November 1, on her homeward cruise of about 31,000 miles. She will make stops at Easter Island, Buenos Aires, Bahia, Porto Rico and return to Brooklyn in the fall of 1917. She has been gone on her long circumnavigation cruise since March, 1915, during which she has been in command of J. P. Ault of the Department of Terrestrial Magnetism.

THE German Ophthalmologische Gesellschaft has divided between Lindner of Vienna and Ohm of Bottrop the von Graefe-von Welz prize for the best article published in 1911-1913 in the *Archiv für Ophthalmologie*. Their articles were on trachoma and inclusion blennorrhoea, and on miner's nystagmus.

THE *Observatory* remarks: "The sending of most kinds of printed matter from Britain to neutral countries (except by duly licensed publishers and booksellers) is now prohibited, and many astronomers must have wondered whether reprints of astronomical papers, reports of observatories, etc., which are usually posted privately, come under the ban. We have ascertained that these *may possibly* arrive at their destination, provided the full name and address of the sender is on the envelope; but they are liable (and quite likely) to be stopped. We may add that slip proofs sent for correction can be sent as usual. Also (for our foreign readers) that we duly receive scientific papers sent to this country from abroad."

REPLYING to a question raised in the British House of Commons, Mr. Forster stated that up to August 25, 1916, 1,501 cases were finally diagnosed as typhoid fever amongst the British troops in France, 903 amongst inoculated men and 508 amongst uninoculated men. There were 166 deaths, 47 of which were amongst the inoculated and 119 among uninoculated. To the same date there were 2,118 cases of paratyphoid fever, 1,968 amongst in-

oculated men, and 150 amongst men who had not been inoculated. There were 29 deaths—22 of which were amongst the inoculated and seven amongst the uninoculated.

THE Jesup lectures of the American Museum of Natural History are being given this year by Dr. R. S. Woodworth, of Columbia University, who has taken as his subject "Dynamic Psychology." The separate subjects and the dates of the lectures, which are on Friday evenings at 8:15, are as follows: November 10, The Modern Movement in Psychology; November 17, The Problems and Methods of Psychology; November 24, The Native Equipment of Man; December 1, Acquired or Learned Equipment; December 8, The Factor of Selection and Control; December 15, The Factor of Originality; December 22, Drive and Mechanism in Abnormal Behavior; December 29, Drive and Mechanism in Social Behavior.

DR. HERMAN M. ADLER, assistant professor of psychiatry, Harvard University, has commenced a study of the facilities for dealing with mental diseases and mental deficiency in Cook County, Illinois. The survey is under the general direction of the National Committee for Mental Hygiene and the expenses will be met by a special appropriation made by the Rockefeller Foundation. At the request of governors of the states, state boards of control, state boards of charities and social or civic organizations, the National Committee for Mental Hygiene has conducted or is at present undertaking such studies in Tennessee, Wisconsin, South Carolina, Louisiana, California, Connecticut, Georgia and Texas. The mayor and the board of estimate of New York City have seen growing up in their community a number of unorganized attempts to deal with what are apparently different phases of the same problem and within a few weeks a special committee has been appointed by the mayor consisting of the commissioner of accounts, the commissioner of public charities, the commissioner of corrections, the chairman of the parole board and the presiding justice of the children's court, to present a constructive plan for the examination, classi-

fication and proper treatment of mental defectives. The mayor's committee has requested the National Committee for Mental Hygiene to make for it such a survey as the study about to be commenced in Chicago. Thus studies of the same subject will be carried on simultaneously under the same general direction in the two largest cities of the country.

THE annual meeting of the American Social Hygiene Association and joint conference with the St. Louis Social Hygiene Society and Committee of One Hundred of St. Louis was held in St. Louis, November 19 to 21. The chief subjects for discussion were "The New Public Conscience," "Health Aspects of Social Hygiene," "Ways and Means of Public Education regarding Social Hygiene" and "Repression of Commercialized Vice."

THE orthopedic department of the Children's Hospital, Boston, will offer a course, beginning on December 1, 1916, in muscle training and in the principles of the nursing after-care of infantile paralysis. This course will be open to a limited number of properly qualified women and will be an all-day course covering a period of about six weeks, most of the work being in the clinics and practical in character. The course will be under the general supervision but not under the actual instruction of Dr. R. W. Lovett, surgeon to the hospital to whom application for admission should be made.

THE Peabody Museum of Harvard University has received from Arthur Bowditch, Jr., '03, a large collection of spears, household articles and wearing apparel of the Bagoba, Manoba, Moro and other tribes of the Philippine Islands. The collection was made by him in 1914.

THE botanical collections of Mr. S. B. Parish, comprising over 50,000 herbarium sheets, have been purchased by Stanford University. Mr. Parish has devoted about forty years to the flora of southern California, and his herbarium contains the most complete collection of plants from that region that has been brought together.

STANFORD UNIVERSITY, with the cooperation of Dr. N. L. Britton, director of the New York Botanical Garden, has arranged to finance the publication of an Illustrated Flora of the Pacific Coast. Dr. LeRoy Abrams will edit the work, with the assistance of a number of the leading American botanists as collaborators. The flora will comprise four volumes containing illustrations and descriptions of every species of ferns and flowering plants on the Pacific coast.

At a meeting of the council of the National Museum of Wales, held at Cardiff, on October 28, it was announced, according to *Nature*, that a sum of £10,000 had been received from Capt. W. R. Smith, senior partner of the firm of W. R. Smith and Son, Cardiff, and Mrs. Smith, towards the building fund of the new museum. The donors had made this gift in the belief that the National Museum would be one of the first educational influences in the principality. There were other donors, who wished to remain anonymous for the present, and it is expected that when the present contract has been paid there will be a balance of about £16,000 towards the £50,000 which is needed to complete the furnishing and equipment of the portion of the building at present in course of erection.

THE Embar formation of Wyoming is known chiefly for its extensive phosphate beds, which are supposed to have been derived in some manner from animal remains. The rocks contain abundant fossils, many of which are phosphatic, and all of which prove that the Embar beds of western Wyoming were deposited in the sea. Recent study of the eastward extension of the Embar formation in Wyoming shows that along the east margin of this ancient sea, or throughout the Bighorn Mountain region, the climate was probably more arid than that of any part of Wyoming to-day. By long evaporation beds of gypsum were deposited at some places in arms of this sea to a thickness as great as 100 feet. It is a question of practical importance whether beds of salt, and perhaps of potash salt, may also have been deposited in this formation and whether they may now be found below the

surface. The United States Geological Survey, Department of the Interior, urges that oil men, in drilling through the Chugwater and Embar red beds in Wyoming collect samples of drillings and of brines and submit them to the survey for examination as to their possible potash content.

#### UNIVERSITY AND EDUCATIONAL NEWS

At the meeting of the trustees of the Carnegie Foundation for the Advancement of Teaching, held in New York on November 15, the proposal to make the pension system contributory was considered and action was postponed. This was the recommendation of the committee of the American Association of University Professors which was represented at the meeting of the trustees by Professor Edwin R. A. Seligman, vice-president of the association, and Dean Harlan F. Stone, chairman of the committee that drew up the report on the subject. The proposed plan of contributory pensions was referred to a committee composed of Dr. Henry S. Pritchett, president of the foundation; Dr. W. F. Slocum, president of Colorado College, chairman of the board; Sir William Peterson, president of McGill University; President Charles R. Van Hise, of the University of Wisconsin; President A. Lawrence Lowell, of Harvard University, and Chancellor T. B. McCormick, of the University of Pittsburgh, representing the foundation, and five representatives from the American Association of University Professors, the Association of American Universities, the National Association of State Universities and the Association of American Colleges.

THE chemistry building at the State College of Agriculture and Mechanic Arts of the University of Montana, Bozeman, was completely destroyed by fire on October 20. This building furnished quarters for the college and experiment station departments of chemistry, the state food and water laboratory and the departments of physics and geology. The fire occurred in the day time and all department's records, the chemical library and the materials in the chemical and geological museums were