

everywhere known as products of the "Lincoln Schools of Science."

It is the opinion of this academy that by so designating these schools, while an immaterial and uncostly honor would be conferred on the greatest American citizen, such honor would be likely to be more influential and more durable in the perpetuation of his memory than the expenditure of large sums of money in material monuments of any kind.

#### FIRST AWARD OF THE LANGLEY MEDAL

THE first award of the gold medal recently established by the Smithsonian Institution in memory of the late Secretary Samuel Pierpont Langley and his contributions to the science of aerodromics is made to Wilbur and Orville Wright. The board of regents of the institution has adopted the following resolution:

*Resolved*, That the Langley medal be awarded to Wilbur and Orville Wright for advancing the science of aerodromics in its application to aviation, by their successful investigations and demonstrations of the practicability of mechanical flight by man."

Following the establishment of the Langley medal, Secretary Walcott appointed the following-named gentlemen of known competence in the subject of aerodromics as a committee on award, announcement of which is hereby made: Mr. Octave Chanute, of Chicago, Chairman; Dr. Alexander Graham Bell; Major George O. Squier, U. S. A.; Mr. John A. Brashear, of Allegheny, Pa., and Mr. James Means, formerly editor of *The Aeronautical Annual*, Boston. The Langley Medal was founded "to be awarded for specially meritorious investigations in connection with the science of aerodromics and its application to aviation." The original design to be used for this medal was made by Mon. J. C. Chaplain, of Paris, a member of the French Academy. The medal bears on its obverse a female figure, seated on the globe, carrying a torch in her left hand and in her right a scroll emblematic of knowledge and the words "Per Orbem." The reverse is adapted from the seal of the institution as designed by Augustus St. Gaudens, the special inscription being inserted in the cen-

ter instead of the map of the world. It is about three inches in diameter.

#### SCIENTIFIC NOTES AND NEWS

THE Astronomical Society of the Pacific awarded its Bruce gold medal for the year 1909 to Dr. G. W. Hill for distinguished services to astronomy.

THE eminent mathematician, M. Henri Poincaré, was officially received on January 28 into the French Academy, taking the seat vacant by the death of the poet Sully Prudhomme. M. Frédéric Masson, the historian of Napoleon, made the address of welcome.

LORD RAYLEIGH, who left England with Lady Rayleigh for a six months' tour around the world, has been seriously ill in South Africa, but is now better. He has given up his plan of going to Australia, and will probably finish the winter in Egypt.

THE celebration of Haeckel's seventy-fifth birthday was held in Jena on February 16. As a gift from the American Museum of Natural History to the Phyletic Museum Professor Osborn has sent a series of the large reproductions of Charles R. Knight's restorations of the extinct vertebrates of North America.

DR. S. WEIR MITCHELL celebrated his eightieth birthday on February 15.

PROFESSOR RAMON Y CAJAL, the anatomist, has been created a senator of Spain.

M. LOUIS MANGIN has been elected a member of the Paris Academy of Sciences, in the section of botany, to succeed M. Van Tieghem, who has been elected permanent secretary.

PROFESSOR WILLIAM Z. RIPLEY, of Harvard University, has been elected an honorary fellow of the Royal Anthropological Institute of Great Britain and Ireland, in recognition of his researches in the field of European and American demography.

· PORTRAITS of Professor George J. Brush and of Professor William H. Brewer have been hung in the recently fitted-up faculty room of the Sheffield Scientific School, Yale University. Professor Brush and Professor

Brewer both graduated from the school in the class of 1852.

A NUMBER of physicians who have been operated on by Dr. John B. Deaver, of Philadelphia, gave a dinner in his honor at the University Club on February 14. More than 150 physicians are included in this category. A loving cup was presented to Dr. Deaver.

THE election of Professor S. Kitasato, director of the Infectious Diseases Institute, at Tokyo, to the honorary fellowship of the Royal Society has been made the occasion of a dinner given in his honor by a number of his pupils and friends. Congratulatory addresses were delivered by Professor Kitajima and Dr. T. Takaki, director of the Formosan Medical Institute.

THE title of honorary keeper of the Ashmolean Museum, Oxford, has been conferred upon Dr. Arthur Evans "in consideration of his eminent services to the university as keeper of the Ashmolean Museum, extending over twenty-five years." The thanks of the university were also given to Dr. Evans for his recent gift to the museum.

DR. KARL J. OECHSLIN, of Leipzig, for the past year associated with Professor Michael, of Tufts College, began his new work in the Division of Chemistry, Bureau of Science, Manila, P. I., on January 1.

MR. CHARLES S. BANKS has resumed his duties as entomologist in the Bureau of Science, Manila, P. I., after five months spent in America and Europe in the identification of Philippine material. He worked largely on Philippine Culicidæ, Hemiptera and Orthoptera in the British Museum, and with Dr. Bouvier, in Paris, on Mallophaga, and Dr. Leonardi, in Portici, on Coccidæ and Termitidæ.

PROFESSOR J. B. WOODWORTH, of the geological department, of Harvard University, has returned to Cambridge from his extended trip in South America. He left Cambridge last June and has spent the intervening time in scientific investigation in Brazil and on the western coast of the continent. The trip was made possible by the Shaler Memorial Fund

and is the first of a series of similar expeditions to be made under the same provision.

MR. GEORGE H. SHULL, of the Cold Spring Harbor Station for Experimental Evolution, has returned from a three-months' trip to Europe undertaken for the purpose of studying scientific and economic plant breeding. He has now gone to California to resume his work on Mr. Burbank's methods and results.

MR. and MRS. C. WILLIAM BEEBE sailed for Georgetown, British Guiana, on February 15, on the Royal Dutch mail steamer *Copenname*. A month or more will be spent in the interior for the purpose of studying the more generalized types of birds inhabiting this country. Mr. Lee S. Crandall will accompany Mr. Beebe as assistant, and the attempt will be made to bring back alive for the New York Zoological Park some of the more interesting birds and other animals.

MR. ELLSWORTH HUNTINGTON, of the geological department of Yale University, sailed on February 10 on the *Majestic* for Southampton. He is going to Jerusalem by the way of Constantinople, taking with him Mr. C. F. Graham, a Yale senior, as assistant. They will study the former shorelines around the Dead Sea. Their plan is to use a folding boat and visit various points on its shores. The special problem to be solved by this expedition is as to whether any of the shorelines record expansions of this sea within historic times. After leaving the Dead Sea some two months will be spent in the study of the geography of Palestine and the Syrian Desert, with special reference to changes of climate and the effect which the geographic environment has had upon the people and their history. The third objective point will be in the lake region of Asia Minor, where some three months will be spent in the study of the same problems of shorelines, climate and man. This expedition is made under the auspices of Yale University, which defrays a portion of the expenses.

PROFESSOR JULIUS STIEGLITZ, of the University of Chicago, will deliver shortly at the University of California a series of eight or ten lectures, on some aspect of chemistry. This will be the first series of lectures on the

Hitchcock foundation, provided for by the bequest of C. M. Hitchcock in 1885.

SIR JAGADIS CHUNDER BOSE, M.A., Sc.D., professor of physics and biology at the Presidency College, Calcutta, India, recently lectured at the University of Illinois on the subjects of the polarization of electric waves, the mechanical responses of plants, and the electric responses of plants.

PROFESSOR WILLIAM T. SEDGWICK, of the Massachusetts Institute of Technology, will give a series of lectures at the University of Illinois, from April 19 to 24, under the general head of "Science in the Service of Public Health."

A SERIES of public lectures is to be given at Columbia University on March 8, 15 and 22 at 5:10 P.M. by Alexander S. Chessin, professor of mathematics in Washington University, on the gyrostat. The first lecture will be devoted to a brief history of the gyrostat showing its development from a mere toy into a scientific instrument and a mechanism of great value. The second lecture will be on the influence of the world's rotation on the motion of gyrostats, Foucault's top and the applications of the gyrostat to astronomy and to surveying. The third lecture will be upon the gyrostat in modern industries, and will be devoted to the devices for torpedoes, the steadying of ships at sea, the Schlick marine gyrostat, the mono-rail car, and the experiments of the German navy, all fully illustrated.

At the last meeting of the Middletown Scientific Association, held on February 9, Professor William North Rice spoke on the life of Darwin.

In accordance with the plan which we have already announced, a heroic bronze bust of Darwin, by the sculptor Mr. William Couper, was presented by the New York Academy of Sciences to the American Museum of Natural History on February 12. The address of presentation was made by Mr. C. F. Cox, president of the academy, and the bust was accepted on behalf of the trustees of the museum by Dr. H. F. Osborn, president. Addresses were then made on "Darwin and Geology," by Professor J. J. Stevenson; "Darwin and

Botany," by Dr. N. L. Britton, and "Darwin and Zoology," by Dr. Hermon C. Bumpus. In connection with the celebration a special exhibition has been installed in the museum, consisting of Darwiniana and series of specimens and groups of specimens bearing upon the Darwinian theory of evolution through natural selection. The exhibition will continue for one month.

PROFESSOR AUGUST WEISMANN finds himself unable, in consequence of his advanced age, to accept the invitation of the University of Cambridge to attend the Darwin Centenary celebrations and to deliver an address.

DR. GEORGE E. HALE, of the Solar Observatory on Mount Wilson, has been appointed a delegate to represent the National Academy of Sciences at the Darwin Celebration at Cambridge.

THE Cambridge University Press will present to each invited guest at the approaching Darwin centenary celebration a copy of the first draft of "The Origin of Species," which is being prepared for press and edited by Mr. Francis Darwin. This is the draft of which Mr. Darwin speaks in his autobiography: "In June, 1843, I first allowed myself the satisfaction of writing a very brief abstract of my theory in pencil in 35 pages."

MR. WALTER MORRISON ALLEN, known as a designer of telescopes, died in Cleveland on February 8, at the age of forty-two years.

MR. WILFRED HUDDLESTON, F.R.S., the eminent British geologist, died at his home at Dorset on January 29, in his eighty-first year. The death is also announced of M. A. Legoux, who for many years occupied the chair of mechanics at Toulouse.

THE general secretaries of the British Association have issued a preliminary circular in regard to the meeting at Winnipeg beginning on August 25. No reduction in rates is made by the steamship companies, but special accommodation will be reserved on the Canadian Pacific steamship *Empress of Ireland*, sailing from Liverpool to Montreal on August 13. It is expected that a single fare will be granted on the Canadian railways for the return trip from Montreal to Winnipeg and from Winni-

peg to Victoria. The official party will leave Winnipeg at midnight on September 2 for the trip to the Pacific coast, and will return to Winnipeg on September 13.

THE fiftieth anniversary of the founding of the Paris Society of Anthropology will be celebrated July 7-9, 1909. Anthropological societies and institutions are invited to send delegates. The program includes a discourse by the minister of public instruction and fine arts, an address by the president of the society, a report by the general secretary on the scientific activities of the society since its foundation, and messages from delegates who are to be the guests of the society at a luncheon and a dinner.

THE Royal Institution, London, has received from a lady who wishes to remain anonymous a gift of £10,000.

THE trustees of the Elizabeth Thompson Science Fund are prepared to receive applications for appropriations in aid of scientific work. All applications should reach, before March 15, 1909, the secretary of the board, Dr. C. S. Minot, Harvard Medical School, Boston, Mass.

ACCORDING to the Berlin correspondent of the London *Times* the latest available details of the new German airship Zeppelin II., which will be launched in March, state that the total length of the vessel is 446 feet, the diameter 42 feet 8 inches, and the cubic contents about 530,000 feet of hydrogen. There are 17 ballonets, of which 16 are of india-rubber-treated cotton, and the seventeenth is of gold-beaters' skin, and is supplied by a well-known firm of English aeronauts. The two Daimler motors weigh 798.8 pounds, and produce together about 200 horse power. The two aluminium cars form cabins for the captain, hammocks being provided for the men. The cars are furnished underneath with soft fenders in order to lessen the shock of landing on the hard ground. An immense shed is being built to accommodate Zeppelin II. as soon as it is launched.

THE production of petroleum in the United States in 1908, according to a preliminary

estimate made by David T. Day, of the United States Geological Survey, amounted to between 175 and 180 million barrels, an increase between 5 and 9 per cent. as compared with the production of 166 million barrels in 1907. The total value of the product showed an even greater proportionate gain, for the price of oil increased in California and remained steady in other fields except the Gulf. The increases are attributed to steady growth in Illinois and California, though neither field showed phenomenal development.

MR. D. O. MILLS has given to the department of mammalogy of the American Museum of Natural History eight specimens of the fur seal, to be utilized in the preparation of a group illustrating a seal rookery. The specimens were collected at the Pribilof Islands, Alaska, expressly for the museum, by order of Mr. Mills, who had special permission from the Department of Commerce and Labor for their capture. The series consists of male seals two, three, five and seven years old, female seals three and four years old and two pups six weeks old.

BARON DE LENVAL, on the occasion of the Third International Otological Congress, founded a prize of 3,000 francs to be awarded to such person as should invent and produce a small portable instrument materially assisting the hearing of the deaf. As no such instrument has yet been forthcoming to the satisfaction of the international jury appointed to adjudicate upon the matter, the accumulated interest of four years, amounting to about 400 francs, will be awarded as a prize for the best work that has been published during the last four years in the departments of the anatomy, physiology, or pathology of the organ of hearing. Competing works should be sent to the president of the jury, Professor Dr. A. Politzer, I. Gonzagasse 19, Vienna, before the end of February.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE two hundred thousand dollars required to secure the gift of \$600,000 from Mr. John D. Rockefeller for the Harper memorial library at the University of Chicago has now