

endeared him more than another to all in contact with him, it was his instinctive consideration for others and his warm sympathy. No matter how busy he was, he always welcomed one with a warm clasp of the hand and that charming, tender smile; no matter how long one stayed, it was always too soon to go; no matter how often one came, here was a friend who wished you to come more often. Those in trouble came to him. Every tie of affection, gratitude and respect bound us to him. Every meeting with him was a reinspiration in those splendid ideals of which his whole life was the expression.

We have lost a most loyal and affectionate friend, a great scientist and scholar, a truly noble and simple man.

ALBERT P. MATHEWS

#### SCIENTIFIC NOTES AND NEWS

At the Pittsburgh meeting, December 27-29, 1910, of the Geological Society of America the following officers were elected for the year 1911:

*President*—W. M. Davis, Cambridge, Mass.

*First Vice-president*—W. N. Rice, Middletown, Conn.

*Second Vice-president*—W. B. Scott, Princeton, N. J.

*Secretary*—Edmund Otis Hovey, New York City.

*Treasurer*—William Bullock Clark, Baltimore, Md.

*Editor*—Joseph Stanley-Brown, Cold Spring Harbor, N. Y.

*Librarian*—H. P. Cushing, Cleveland, Ohio.

*Councilors* (1911-13)—Heinrich Ries, Ithaca, N. Y., and A. H. Purdue, Fayetteville, Ark.

At the recent Pittsburgh meeting of the American Paleontological Society, Professor William B. Scott, of Princeton University, was elected president. The statement in regard to the presidency, taken from the daily papers and printed in the last issue of *SCIENCE*, was incorrect. Other officers of the society are as follows: *First Vice-president*, Arthur Hollick, New York City; *Second Vice-president*, W. D. Matthew, New York City; *Third Vice-president*, Stuart Weller, Chicago, Ill.; *Secretary*, R. S. Bassler, Wash-

ington, D. C.; *Treasurer*, Richard S. Lull, New Haven, Conn.; *Editor*, Charles R. Eastman, Cambridge, Mass. Correspondents were elected as follows: Professor G. Alfred Nathorst, Stockholm; Professor E. Koken, Tübingen; S. S. Buckman, England, and Professor Charles Déperet, France.

PROFESSOR RALPH S. TARR, of Cornell University, was chosen president of the Association of American Geographers at its recent meeting in Pittsburgh.

PROFESSOR L. B. MENDEL, of Yale University, was elected president of the Society of Biological Chemists at the New Haven meeting.

At the annual election of the American Philosophical Society held on January 6 the following officers were chosen for the ensuing year: *President*, William W. Keen; *Vice-presidents*, William B. Scott, Albert A. Michelson, Edward C. Pickering; *Secretaries*, I. Minis Hays, Arthur W. Goodspeed, James W. Holland, Amos P. Brown; *Curators*, Charles L. Doolittle, William P. Wilson, Leslie W. Miller; *Treasurer*, Henry La Barre Jayne; *Councilors* (to serve for three years), Henry F. Osborn, Joseph G. Rosengarten, Edward W. Morley, Henry H. Donaldson.

A MARBLE bust of President Emeritus Eliot, the work of Mr. Louis Parker, of New York, has been placed in the faculty room of Harvard University.

DR. S. WEIR MITCHELL, who has been a trustee of the University of Pennsylvania since 1875, has resigned.

THE Zoological Society of London has elected as corresponding members Mr. Theodore Roosevelt and Mr. W. H. Osgood; Mr. S. H. Scudder as foreign member.

DR. H. C. BUMPUS, director of the American Museum of Natural History, has been decorated by King Charles, of Roumania, with the grand cross of the commander of the order of the crown.

SIR T. CARLAW MARTIN, LL.D., editor of the *Dundee Advertiser*, has been appointed director of the Royal Scottish Museum, Edinburgh.

PROFESSOR ARTHUR H. BLANCHARD, of the department of civil engineering, Brown University, has recently been appointed expert and consulting engineer to the United States Office of Public Roads.

PROFESSOR M. V. O'SHEA, professor of education at the University of Wisconsin, has been appointed chairman of the American committee of the International Congress on Childhood and Youth. The next session of the congress will be held in the United States, probably at Washington in 1912.

ARTHUR R. CUSHNY, M.D., F.R.C.S., professor of pharmacology in the University of London, will deliver the first of the "Weir Mitchell Lectures" at the Weir Mitchell Hall in the College of Physicians, Philadelphia, on January 17. His subject will be "Heart Irregularity from Auricular Fibrillation."

DR. GÜNTHER JACOBY, privatdocent at the University of Griefswald, and research fellow in philosophy at Harvard University, is giving a course of seven lectures on "Schopenhauer," beginning January 6. The lectures are open to members of Harvard University.

THE municipality of Dôle, Jura, has just voted to buy and preserve the house where Pasteur, on December 27, 1822, was born.

THE *Journal* of the American Medical Association states that as a permanent honor to its founder, who was also for many years its honorary president, the Verein für innere Medizin und Kinderheilkunde of Berlin has resolved, on motion of Professor Schwalbe, to establish a Leyden lectureship, the lecture to be given annually at the first session of the winter semester, by a speaker selected by the board of directors. This arrangement, which follows the English custom, is the first of the kind made in Germany. A large fee will be paid the lecturer, derived from the interest of the fund of \$14,000, established on the seventieth birthday of von Leyden. The rest of the interest on the fund is to be devoted to scientific research under the influence of the society for internal medicine.

THE death is announced at Cincinnati at the age of eighty-eight years of Mr. Benn

Pittman, who with his brother, Sir Isaac Pittman, developed the system of stenography which bears their name, and is also known for his inventions in connection with electro-typing.

THE Sarah Berliner research fellowship for women will be awarded for the second time this year. This fellowship, of the value of twelve hundred dollars, is available for study and research in this country and in Europe. It is open to women holding the degree of doctor of philosophy, or to those similarly equipped for the work of further research; it will be awarded only to those who give promise of distinction in the subject to which they are devoting themselves. Applications must be in the hands of the chairman of the committee, Mrs. Christine Ladd Franklin, 527 Cathedral Parkway, New York, by February 1. This fellowship was awarded two years ago (it is given only every two years) to Miss Caroline McGill, Ph.D., who was a member of the teaching staff of the University of Missouri. Miss McGill has spent a year in Europe, chiefly at the Naples Zoological Station.

DR. A. D. GABAY, of New York City, has presented to the American Museum of Natural History a collection of ground and polished shells from California and Japan. These specimens with their convolutions and superb nacre make objects of great beauty. They will be installed in certain sections of the hall of mollusca, illustrating the economic and ornamental uses of shells. The museum has also received, as a gift from Mr. D. C. Staples, a collection of archeological and ethnological material which comes from the provinces of Esmeraldas and Manabi in the extreme northern part of Colombia, South America.

ACCORDING to *Nature* a new zoological garden in course of construction by Mr. Carl Hagenbeck in the grounds of the Villa Borghese, Rome, was expected to be opened on January 1. The grounds, which comprise twenty-eight acres, lie outside the old walls to the northward of the city, and it is stated

that more than \$200,000 has been already spent on them, while the animals, some 1,400 in number, represent \$50,000. As at Stellingen, cages have been to a great extent dispensed with, deep ditches and scarped cliffs serving to confine the animals, which thus appear to be at liberty.

CONSTRUCTION has begun upon the new Boston Psychopathic Hospital, which has been planned by the Board of Insanity, in accordance with an act of legislature, to receive, observe and treat the acute mental patients of the metropolitan district in Massachusetts. The hospital will be operated by the Boston State Hospital trustees, who have appointed Dr. E. E. Southard director. The institution is planned to contain one hundred beds and embodies the main features of the modern general hospital as well as special therapeutic features appropriate to mental disease. A wide scope is expected for the out-patient and social-service departments. Other districts in the state may in time develop similar psychopathic hospital units, which will take their place alongside the hospitals, asylums and colonies as special clearing-houses and therapeutic establishments for the acute cases of mental disease in each district. In the psychopathic hospitals emphasis will naturally be laid on investigations, both psychic and somatic, into the nature and causes of mental disease.

A BILL to make Paris official time coincide with Greenwich time was presented, as we learn from *Nature*, to the French senate on December 21. The bill was passed by the chamber of deputies several years ago, and has been approved by the senate committee and by the cabinet, so that in all probability it will become law. Paris time is 9m. 21s. ahead of Greenwich time; and upon the day prescribed by the law, the clocks indicating official time in France will be put back by that amount. By the adoption of the change, France will be brought into the international system of standard time reckoning which is now followed in the United States and in most civilized countries. On this system, the hour of each successive fifteen degrees of

longitude, reckoning from the Greenwich meridian, is used for the standard time; hence the difference in time in passing from one zone to another is always an exact number of hours.

At a meeting of the Paris Academy of Medicine held on December 13 the list of the prizes awarded during 1910 was read out by the secretary, M. Weiss. According to the *British Medical Journal* they include the following: The François-Joseph Audiffred prize (\$4,800) was not awarded, but sums of \$200 were granted to MM. Xavier Delore and André Chalié, of Lyons, for their work on tuberculosis of bone, by way of encouragement; in the same way a sum of \$100 was given to M. Jules Lemaire, of Paris, for his researches on the skin reaction to tuberculin, especially in children. The Baillarger prize (\$400) was awarded to Dr. Gabriel Doutrebente, of Tours, for his work on the medical organization of lunatic asylums. The Prix Barbier (\$400) was divided between Dr. Maire, of Villejuif, for a memoir on the colonization of the epileptics of the Seine Department, and Dr. E. Sacquépès, of the Val-de-Grâce Military Hospital, for his notes on paratyphoid infection. The Boggio prize (\$875) was awarded to Dr. Rappin, of Nantes, for his researches on a method of vaccination and immunization against tuberculosis. The Adrien Buisson prize (\$2,000) was awarded to Drs. de Beurmann and Gougerot, of Paris, for their work on sporotrichosis; the Campbell-Dupieris prize (\$450), to Dr. M. Jungano, of Naples, for a memoir on the flora of the urinary apparatus, normal and pathological; the Théodore Herpin prize (\$600), to Dr. Félix Rose, of Paris, for a work on apraxia; the Huguier prize (\$600), to Dr. Salva Mercadé, of Paris, for an essay on cysts and abscesses of the uterus; the Laborie prize (\$1,000), to Dr. H. Dominici, of Paris, for his work on the treatment of malignant tumors with radium; the Louis prize (\$600), to MM. P. Emile Weil, F. Lévy, and G. Boyé, for a paper on internal hæmostatic methods; the Meynot prize (\$500), to Dr. Louis Balden-

week, of Paris, for an anatomical and clinical study of the relations between the internal ear and the point of the petrous bone, the Gasserian ganglion, and the sixth pair of cranial nerves. The Orfila prize (\$1,200), for the best essay on the purification of town water after use, and of polluted factory waters, was divided between MM. Edmond Rolants, E. Boullanger, Léon Massol and Félix Constant. The Perron prize (\$750) was divided between M. Albert Frouin, of Paris (on the possibility of keeping alive animals after complete removal of the thyroid apparatus, by the addition of calcium salts or magnesium to their food); M. Gernaro Sisto, of Buenos Aires (the cry of sucklings and hereditary syphilis); and MM. Noël Fiessinger and Pierre Louis Marie, of Paris (notes relating to the protease and lipase of leucocytes). The Saintour prize (\$875) was awarded to M. Gabriel Petit, of Alfort, for a contribution to pathological anatomy and pathogeny of tumors of the breast; the Tarnier prize (\$875) to M. André Delmer, for a contribution to the study of auto-intoxications of pregnant women and female bovine animals.

THE statistics of coal production as collected jointly by the United States Geological Survey and the Bureau of the Census show that in 1909 the output amounted to 459,209,073 short tons. Compared with the record for 1908, when the production amounted to 415,842,698 short tons, the record for 1909 shows an increase of 44,039,650 short tons, or 10 per cent. All of the gain was in the production of bituminous coal, which increased from 332,573,944 short tons in 1908 to 378,551,024 short tons in 1909—a gain of 45,977,080 short tons. The production of anthracite in Pennsylvania decreased from 74,347,102 long tons (equivalent to 83,268,754 short tons) in 1908 to 72,015,222 long tons (equivalent to 80,658,049 short tons) in 1909. Pennsylvania made the largest increase in the production of bituminous coal, showing a gain of 20,666,288 short tons, from 117,179,527 short tons in 1908 to 137,845,815 tons in 1909. West Virginia for the second time in its his-

tory exceeded Illinois, and became the second state in the production of coal, the former having an output in 1909 of 51,446,010 short tons, and the latter an output of 50,970,364 short tons. West Virginia's production increased 9,548,167 short tons over 1908. The output in Illinois, which stood third in rank, increased only 3,310,674. Ohio retained its position as fourth in rank with a production in 1909 of 27,919,891 short tons, against 26,270,639 in 1908. Indiana, which in 1908 supplanted Alabama as fifth in rank, strengthened its position in 1909 by an increase of 2,566,809 tons, from 12,314,890 tons in 1908 to 14,881,699 tons in 1909, while Alabama gained 2,099,317 tons, from 11,604,593 tons to 13,703,910 tons. Other significant increases were in Colorado, 1,087,773 tons; Wyoming, 890,995 tons; Kansas, 734,270 tons; Montana, 640,082 tons; Iowa, 594,052 tons, and Washington, 551,463 tons. Georgia, Idaho, Maryland, Michigan, Missouri and Texas showed a smaller production in 1909 than in 1908, the total decreases amounting to about 750,000 tons.

*Nature* quotes from the *Aeronautical Journal* for October the announcement that the council of the Aeronautical Society had conferred the gold medal of the society on Mr. Octave Chanute, consulting engineer, of Chicago, shortly before his death. Born in Paris in 1832, Chanute trained as an engineer in America, where his professional duties involved the construction of numerous railways and bridges, including consultative duties connected with the New York elevated railway; wood preservation was also his specialty. From 1874 onwards Chanute became interested in the problem of aviation, and not only did he make numerous experiments with models, but shortly after, or perhaps simultaneously with, Lilienthal and Pilcher's experiments in Europe Chanute took up the practical realization of gliding flight in America in collaboration with Mr. Herring and Mr. Avery. A large number of glides were made with different types of glider, commencing with a model based on the descriptions of Le Bris's historic "Albatross," and including

gliders with a large number of superposed planes, but the type finally adopted was a bi-plane glider furnished with a smallish balancing tail. Although balance was, as a rule, maintained by moving the body, Chanute embodied in his apparatus the principle of a flexible framework, which thus paved the way for the Wright Brothers' "warping" devices and similar arrangements for the recovery of balance and counteraction of instability, which form such a noteworthy feature of modern aeroplanes. The glides made with his machines were remarkably successful, and, the practising grounds being among sand dunes, no fatalities ensued. Chanute was the author of a number of papers and reviews dealing with the flight problem, and the Wright Brothers, the late Captain Ferber, and numerous other aviators were indebted to him for much valuable assistance.

THE following statement, concerning the University of Wisconsin, appeared in the republican party platform of that state:

We are proud of the high eminence attained by our state university. We attribute its advancement both to the able and courageous guidance of its president and faculty and to the progressive and enlightened character of the citizenship that sustains it. We commend its work, illustrated by what has been accomplished in agricultural and dairy affairs, conserving our natural resources which have effected a saving of millions of dollars annually to the people of our state. We also commend its investigations for the improvement of the relations of men to one another. We regard the university as the people's servant, carrying knowledge and assistance to the homes and farms and workshops, and inspiring the youth toward individual achievement and good citizenship. We recognize that its service to the state, through investigations in agriculture, industrial and social institutions, depends upon its freedom to find the truth and make it known, and we pledge the republican party to the policy of academic freedom so well expressed by the board of regents in 1894, when they declared: "Whatever may be the limitations which trammel inquiry elsewhere, we believe that the great State University of Wisconsin should ever encourage that continual and fearless sifting and winnowing by which alone the truth can be found."

#### UNIVERSITY AND EDUCATIONAL NEWS

AN alumnus, who does not wish his name disclosed, has given \$100,000 to the University of Pennsylvania for the endowment of a chair of physiological chemistry. It will be known as the "Benjamin Rush chair of physiological chemistry." Dr. Alonzo E. Taylor, formerly of the University of California, will be the first occupant of the chair.

THE University of Vermont has received \$87,965 from the Rockefeller Foundation, representing the first instalment of a gift of \$100,000 made to the university on condition that an additional \$400,000 be raised. The \$400,000 has now been subscribed and the amount \$271,000 has been collected. The half million dollars is to be added to the endowment fund for the general uses of the university.

MR. WILLIAM BLODGETT has given to Columbia University two farms near Fishkill, N. Y., to be used in connection with the work in agriculture.

THE mining engineering building of the University of North Dakota is being enlarged and the interior remodeled in response to an imperative demand for more room. The roof has been raised, materially adding to the light, floor space and utility of the technical museum. Adjoining the museum, which is in the center of the building, there is to be at one end a large preparation room for the curator and at the other a mineral stock room. The laboratories on the first and second floors have been readjusted to provide better facilities for the classes in analytical chemistry and metallurgy as well as for research work in ore treatment, coals and clays. The newly-established ceramic department is being equipped with general clay working and pottery machinery.

COLUMBIA UNIVERSITY, according to the official catalogue which has just been published, has this year a registration of 7,429 students. The vast majority of these are in the graduate and professional faculties, the undergraduate and scientific departments having a total registration of 1,456. Nearly every department of the university shows an increase of