

passes away one of the last representatives of the early pioneers in scientific work in old New York. To the labors of this group of men, among whom were Professors Wood and Torrey, we owe many of our privileges to-day in the scientific world. Dr. Hyatt averaged during the years between 1860 and 1870 twenty lectures a week in sixteen schools and colleges, besides holding the chair of chemistry and toxicology in the Woman's Medical College. He was the author of 'First Lessons in Chemistry,' published in 1839, and 'The Elements of Chemistry,' published in 1856. At the time of his death he was a volunteer observer of the Weather Bureau. It is well that we honor the memory of these pioneers. It was they who fostered the spirit of learning and the love for science when the humanities alone were thought worthy of the attention of those who sought education. To their labors and their foresight we owe our great scientific societies and associations which exercise so potent an influence on the thought and activities of the educational world of to-day.

JOHN J. SCHOONHOVEN.

HANS HERMANN BEHR.

THERE died in San Francisco, March 6, 1904, Dr. Hans Hermann Behr, in his eighty-sixth year. His work belonged to the preceding generation; for though the brightness of his intellect was undimmed to the last, yet the feebleness of his body prevented his doing scientific work during the last years of his life, when his position as curator of the Entomological Department of the California Academy of Sciences gave him leisure. His large and valuable collection of lepidoptera is in the possession of the California Academy of Sciences and contains, besides his own types of California insects, duplicates of the types of Xantus and Boisduval and others. The collection is cosmopolitan and is probably the most complete collection of Californian lepidoptera in existence. He attended the universities of Halle and Würzburg, but took his degree from the University of Berlin. He numbered among his friends some of the leading scientific men of the age, Alexander von Humboldt, Virchow, Schlechtendahl,

Naumann, Garman, Ferdinand von Mueller, Dr. Hillebrand, Louis Agassiz, Max Müller and others.

For many years he was professor of botany at the California College of Pharmacy and he wrote two little books on the 'Flora of San Francisco' to assist the students. The 'Introduction' to the earliest 'Local Flora' shows that he was abreast if not ahead of his time, and also gives an original outline of the system of classification showing a complete grasp of the orders of plants that is very rare. He kept no record or copies of his publications, and it would be a work taking some time to unearth them from the German and American periodicals where they appeared.

He was a many-sided man, wrote German poems of beauty and genuine feeling, wrote a story of life in the Philippine Islands which was published in the *Atlantic Monthly*, and a novel of life in California published in a German magazine. He understood every language of Europe. Greek and Latin were about as familiar to him as English and he could quote from the classics indefinitely. He was a purist in the formation of scientific terms, and such words as 'cotype' and a genitive like 'Salmonorum' aroused his contempt and wrath. During his early manhood he was a deep student of Sanscrit and he learned Hebrew when a boy. He was one of the early members of the now famous Bohemian Club of San Francisco. The papers which he wrote for the amusement of the club have been lately collected and published under the title of 'The Hoot of the Owl,' to amuse and charm every one with their quaint and original humor.

ALICE EASTWOOD.

CALIFORNIA ACADEMY OF SCIENCES.

SCIENTIFIC NOTES AND NEWS.

PRESIDENT CARROLL D. WRIGHT has decided not to call a spring meeting of the council of the American Association for the Advancement of Science, in view of the fact that there seems to be no business of sufficient urgency to warrant it.

DR. SIMON FLEXNER, director of the Rockefeller Institute, New York, has been elected

president of the American Association of Pathologists and Bacteriologists.

A COMMITTEE appointed in connection with the celebration of President Eliot's seventieth birthday has decided to invite Mr. John Sargent to paint a portrait of President Eliot.

A COMPLIMENTARY dinner is to be given this week to Rear Admiral George W. Melville, U.S.N., by the Institute of Naval Architects of Great Britain. The organizing committee includes the Earl of Glasgow, Lords Brassey and Inverclyde, Admiral the Right Hon. Lord John Hay, dean of the British Navy; Sir William White, chief constructor; Admiral Durston, engineer-in-chief, and Admiral Hopkins.

DR. L. O. HOWARD, chief of the division of entomology and permanent secretary of the American Association for the Advancement of Science, has been elected a foreign member of the Société Nationale d'Agriculture de France.

GENERAL BASSOT has been appointed director of the Observatory at Nice, in the place of the late M. Perrotin.

DR. J. N. LANGLEY, F.R.S., professor of physiology at Cambridge University, has been given the degree of doctor of laws by St. Andrew's University.

THE council of the Royal College of Surgeons in Ireland has adopted the following resolutions: "That the president, vice-president and council express their gratification at the appointment for the first time of a medical man to the office of provost of Trinity College, and congratulate Dr. Anthony Traill on his appointment to that distinguished position."

PROFESSOR E. B. WILSON, of Columbia University, will spend the summer at the Naples Zoological Station.

PROFESSOR C. S. SHERRINGTON, of Liverpool University, will open his course of Silliman lectures at Yale University on April 22.

THE subjects of the Herter lectures being given this week at the Johns Hopkins University by Professor Paul Ehrlich are: (1) 'The mutual relations between toxine and anti-toxine'; (2) 'Physical chemistry versus biology in the doctrines of immunity'; (3) 'Cytotoxines and cytotoxic immunity.'

UNITED STATES AMBASSADOR TOWER, on April 7, presented the New York Geographical Society's Cullom medal to Dr. George von Neumayer, director of the Hamburg Nautical Observatory, for distinguished services to science and especially for the discoveries which he made in his expeditions to Australia.

THE Council of the Royal Geographical Society has decided to award the two Royal Medals for this year to Sir Harry Johnston, well-known for his discoveries in Africa, and to Commander R. F. Scott, R.N., who is returning from the Antarctic regions. Two of the other honors at the disposal of the council have been awarded for Antarctic work. One of these, the Murchison grant, has been awarded to Lieutenant Colbeck for his services while in command of the relief expedition. It will probably take the form of a silver globe, designed by the president, showing the route of the expedition. It has been decided to present the Gill memorial to Captain Irizar, of the Argentine navy, for his rescue of the Nordenskjöld Antarctic expedition. The Cuthbert Peek grant will be presented to Don Juan Villalta for geographical discoveries to the east of the Andes while in command of a Peruvian exploring expedition; and the Back grant to Dr. M. A. Stein for his geographical work in Central Asia, and especially for his mapping in the Mustaghata and Kuen Lun ranges.

THE Carnegie Institution has made a grant of \$500 to Professor Henry S. Carhart, of the University of Michigan, to be used for the determination in absolute measure of the electromotive force of Clark and Weston standard cells, and for the determination of the electrochemical equivalent of silver. Professor Geo. W. Patterson, Jr., is engaged with Professor Carhart in this work.

MR. WILLIAM CAMPBELL, of the department of metallurgy of Columbia University, has been granted \$1,500 by the Carnegie Institution for a study of the effect of heat treatment on the microstructure and on the physical properties of iron and steel.

THE legislature of Porto Rico has appropriated the sum of \$5,000 to defray the expenses of an investigation into the prevalence

of ankylostomiasis in the island. The investigation is to be conducted by Captain Ashford, of the Military Hospital.

COMMANDER THOMAS ARTHUR HULL, a recognized authority on nautical surveying and navigation, at one time superintendent of charts in the British hydrographic department, died on March 25 in his seventy-fifth year. The death is also announced of Professor Emile Laurent, the Belgian botanist.

GROUND has been broken at Cold Spring Harbor, Long Island, for the new building to be erected for the station of experimental evolution of the Carnegie Institution, of which Professor Chas. B. Davenport is the director. The structure will be 65 x 35 feet, of brick covered with stucco, two and one half stories high. It will take about two months to complete the building. It will be located in a field a short distance north of the state fish hatchery buildings, and about an equal distance south of the laboratory of the Brooklyn Institute of Arts and Sciences.

THE decision of the American Society of Civil Engineers not to join the other engineering organizations in accepting Mr. Andrew Carnegie's offer of a new building on Thirty-ninth and Fortieth Streets, New York, has been followed by the announcement that the society had completed a real estate purchase which will make possible the enlarging of its clubhouse on Fifty-seventh Street to twice its present size. The society has bought the lot on the south side of Fifty-seventh Street, 140 feet east of Broadway, immediately adjoining its building on the west. Plans will be prepared immediately for extending the structure over this lot, which has a frontage of 25 feet and a depth of 114 feet. The exterior of the new addition will be made to conform with the present building.

THE Peary Arctic Club has been incorporated. The incorporators state they desire to associate themselves together to promote and maintain explorations in the Polar Sea, headed by Lieutenant Peary, and to provide funds for the same.

THE subject for the Sedgwick prize essay, at Cambridge University, for the year 1906 is 'The characters, geographical distribution,

sources and mode of transport of the boulders of the Cambridge district.' The essays must be sent in to the Registry on or before October 1, 1905. The prize is open to all graduates of the University of Cambridge who shall have resided sixty days during the twelve months preceding the day on or before which the essays must be sent in.

To inaugurate the opening of the Simplon Tunnel an exposition will be held at Milan from April to November, 1905. Special prizes will be given for air navigation. It is to be international, except for the fine arts, which will be exclusively national.

It is announced that an association of English manufacturers has chartered the steamer *Lake Megantic*, belonging to the Canadian Pacific Railway Line, for a trip around the world with an exhibition of British goods and manufactures. She will leave London April 27 and be fitted out with samples of goods manufactured by the best British industrial firms. She will make her first call at Halifax, and from here go to St. John's, Newfoundland, and afterwards to Canadian ports. From Canada the exhibition will sail to the West India Islands, thence to South Africa, and thence to Bombay via Mauritius. From Bombay, Colombo, Madras, Calcutta and Rangoon will be visited; then, sailing by Penang through the Straits of Malacca, touching Singapore, the exhibition will visit Hongkong, Shanghai, Nagasaki and Yokohama, sailing thence to Australia and New Zealand. Homeward, the vessel will call at Buenos Ayres, Montevideo, Rio de Janeiro and West Africa.

WE learn from the London *Times* that the International Marine Association, of which the president is M. Charles Roux, has issued the program of its fourth congress, which is to be held in Lisbon from May 22 to May 28. Among the topics which are to be discussed under the general head of oceanography and hydrography are bathymetric charts and the latest cruise of the Prince of Monaco's yacht. The question of North Atlantic weather forecasts will be considered, as also the various conventions for the unification of all matters connected with navigation on the high seas and the treatment of vessels in foreign ports.

The question of the improvement of ports by the installation of practical appliances is deemed so important that it has been given in the program under a separate heading. The Panama Canal, sailors' charitable associations, territorial seas, international marine statistics, yachting, sardine fisheries and wireless telegraphy also figure in the list of matters to be dealt with.

THE London *Times* states that Sir Alfred Jones entertained at lunch, in Liverpool, on February 22, a company of merchants and scientists to meet Professor Boyce on his return from Egypt, and to hear his statement as to the success of the anti-malarial fever expedition to Ismailia. Sir Alfred Jones presided and welcomed Professor Boyce. Professor Boyce said that when Major Ross visited Ismailia in September, 1902, there were 2,000 cases of malaria annually in a population of 9,000 people, of whom 2,000 were Europeans. The authorities at Ismailia loyally carried out Major Ross's suggestions as to filling up marsh land close to the town and cleaning out small irrigating channels and stagnant waters. That involved an expense of £4,400, and at the same time they organized a drains brigade and petroleum brigade, as a result of whose work people could now sleep in any of the houses in the European quarter without mosquito nets. From something like 2,000 cases of malaria a year the number had been reduced, according to the latest statistics drawn up by an independent medical officer, to 200. As a matter of fact, there were no fresh cases of malarial infection in Ismailia; there had been no deaths among Europeans during the year, and only four among natives, against something like 30 deaths the year before. Such had been the improvement that Prince D'Arenberg, president of the Suez Canal Company, informed him that he hoped before two years were out to see Ismailia regarded as the sanatorium and watering place for Cairo. Tropical medicine was bringing us to think that after all this little country of ours had been for centuries teaching medicine applicable to our own country and domestic life without thinking of our great empire all over the world. The time had come when

they must teach students a medicine applicable to the whole world. Major Ronald Ross, C.B., remarked that the success of the anti-malarial campaign at Ismailia had taught two things—that it was possible to rid a large town entirely of mosquitoes, and that it was equally possible to eradicate malaria. He had been asked by Mr. Brodrick to draw up a report as to malaria cases in India, which numbered 300,000 admissions to hospitals among the troops and the gaol prisoners. With the Ismailia figures before him he would do that with complete confidence, for he was sure that very shortly they would reduce that immense admission rate to one third of its former number.

WE learn from *Nature* that a bill for rendering compulsory the use of the metric system of weights and measures in the United Kingdom was read a second time in the House of Lords and referred to a select committee. The bill provides that the metric system shall become compulsory on April 5, 1906, or at such later date as may be directed by His Majesty by order in council. It is, therefore, left to the discretion of the government to fix the date for inaugurating the compulsory adoption of the system. In moving the second reading of the bill, Lord Belhaven referred to the recommendations of the select committee of the House of Commons in 1895, and pointed out the educational and commercial advantages which would follow the adoption of the metric system in the place of our present irrational standards. Lord Kelvin, speaking in support of the bill, remarked that in Germany, France and Italy, no inconvenience had resulted from the introduction of the metric system. He said it was of interest to know that the decimal system originated in England. In a letter dated November 14, 1783, James Watt laid down a plan which was in all respects the system adopted by the French philosophers seven years later, which they suggested to the King of England as a system that might be adopted by international agreement. James Watt's objects were to secure uniformity and to establish a mode of division which should be convenient as long as decimal arithmetic

lasted. Speeches in favor of the bill were made by Lord Wolverton, the Marquis of Lansdowne and the Earl of Rosebery.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. JOHN D. ROCKEFELLER has given \$500,000 to the Johns Hopkins Hospital, in order that the work of the institution may not be curtailed owing to the losses from the recent Baltimore fire. The Maryland legislature has voted \$25,000 annually for two years to the Johns Hopkins University.

By the will of Mrs. Farnham, widow of the late Professor Henry Farnham, Yale University receives \$52,500 for the endowment fund of the medical school and \$39,000 for the endowment fund for the library.

THE Goldsmiths' Company has transferred to the University of London the technical institute in South London which it has maintained for the last twelve years. The value of the buildings and land is estimated at about \$500,000. As work of the kind that the company had been doing will henceforward be paid for by public funds, the institute has been made over to the University of London for higher education.

THE London *Times* states that the physiological laboratory committee of London University has presented a report upon the work done in the laboratory during the past two years. This institution was established in February, 1902, to provide facilities for original work in physiology and experimental psychology, and to publish by means of lectures to advanced students the results of recent work in this branch of study. For the establishment and maintenance of the laboratory the senate are chiefly indebted to Mr. Walter Palmer, M.P., Mr. Alfred Palmer, and Mr. G. W. Palmer, M.P. During the past two years eleven courses of eight lectures each have been delivered in the laboratory, and arrangements have been made by the senate with Mr. John Murray for the publication, under the authority of the university, of such of these courses as may be from time to time approved. The first volume published in this

series has been Dr. A. D. Waller's 'On the Signs of Life.' The laboratory has been used for various researches by 20 qualified students, and 23 communications from persons working in it have been published in the *Proceedings of the Royal Society* and other scientific journals.

THE Messrs. Mallinckrodt, of St. Louis, have agreed to pay \$500 to a chosen student of chemistry in the graduate school of Harvard University during the year 1904-1905, on condition that this student contract to serve in the Mallinckrodt Chemical Works during the year 1905-1906 at a suitable salary.

BOSTON UNIVERSITY is about to establish a scientific department in the College of Liberal Arts, and has appointed in this department A. W. Weyssse, A.B., Ph.D. (Harvard), now of the Massachusetts Institute of Technology, to be assistant professor of biology, and L. G. Newell, A.M. (Brown), Ph.D. (Johns Hopkins), now of the State Normal School at Lowell, to be assistant professor of chemistry.

GEORGE M. STRATTON, A.B. (California), Ph.D. (Leipzig), associate professor of psychology in the University of California, has been appointed professor of experimental psychology in the Johns Hopkins University.

DR. R. G. VAN NAME has been appointed to an instructorship in chemistry at Yale University.

PROFESSOR WILLIAM O. EMERY has been appointed head of the chemical department and director of the chemical laboratory in the New Mexico State School of Mines. Dr. Emery was for ten years instructor and docent in the Universities of Berlin and Bonn. He was later connected with the University of Chicago, and professor in Wabash College.

PROFESSOR H. E. CRAMPTON, of Columbia University, will take charge of the work in embryology at the biological laboratory at Cold Spring Harbor.

DR. ROTHPLETZ has been made professor of geology and paleontology at the university of Munich, in the room of the late Professor von Zittel.