SCIENCE.

SCIENTIFIC NOTES AND NEWS.

At the meeting of the Senate of London University on July 11, Professor A. W. Rücker, professor of physics in the Royal College of Science and secretary of the Royal Society, was elected principal of the University.

AT the first congregation of the University of Birmingham, on July 6, the degree of Master of Science was presented to the following officers of the University: Dr. Oliver Lodge, principal; Robert S. Heath, vice-principal and professor of mathematics; Bertram C. A. Windle, dean of the faculty of medicine and professor of anatomy; John H. Poynting, dean of the faculty of science and professor of physics; Thomas Bridge (zoology), Charles Lapworth (geology), William Hillhouse (botany), Percy F. Frankland (chemistry), Frederick W. Burstall (engineering), Adrian J. Brown (brewing), Bostock Hill (public health), Gilbert Barling (surgery), Bennett May (surgery), Alfred H. Carter (medicine), Robert Saundby (medicine), Edward Malins (midwifery), Priestly Smith (ophthalmology), Arthur Foxwell (therapeutics), Robert F. C. Leith (pathology), James T. J. Morrison (forensic medicine), Edmond W. W. Carlier (physiology), John W. Taylor (gynæcology).

SECRETARY of Agriculture Wilson, Mr. E. Henry Stevens, of the House Committee on Agriculture, and Professor Milton T. Whitney, chief of the division of soils of the Department of Agriculture, made last week a trip through Connecticut and western Massachusetts, seeking facts and information relative to the growing of tobacco under cloth in those sections.

UNDER the auspices of the New York Botanical Garden, Professor Lucien M. Underwood, of Columbia University, has visited Porto Rico, and Dr. M. A. Howe, assistant curator of the museum, has explored the coasts of Nova Scotia, Newfoundland and New Brunswick.

SURGEON KINYOUN, recently of San Francisco, and now in charge of the Marine Hospital at Detroit, has been detailed to visit Japan and China to inspect the work of the marine hospital service with special reference to the plague.

DR. FESHENKO, of the University of St.

Petersburg, has been sent by the Imperial Geographical Society to the Pamir, and is at present at Tashkent making geological, botanical and zoological researches.

DR. E. J. LEDERLE, chief chemist of the Health Department of New York City, sailed on July 18 for Europe, where he will inspect the municipal laboratories of Europe, including Paris, Brussels, Cologne, Berlin, London, Glasgow, Edinburgh and Dublin.

MESSRS. DARTON, Hatcher and Fraas have completed the special study of the Titanotherium Beds in South Dakota for the U. S. Geological Survey. The work was greatly impeded by exceptionally rainy weather. Mr. Darton will report upon the results which will subsequently be used in the monograph on 'The Titanotheres' by Professor Osborn.

PROFESSOR LESTER F. WARD, of the U.S. Geological Survey, has recently made a two months' trip in the Triassic of Arizona, studying the geology and collecting fossil plants. A small but valuable collection of fossil vertebrates was made at the same time for the U.S. National Museum.

PROFESSOR STEWART CULIN, curator of the Pennsylvania University Museum, has returned to Philadelphia, after a visit to Cuba in search of traces and relics of the aboriginal Indian tribes.

THE American astronomers who went to Sumatra to observe the eclipse of the sun in May arrived at San Francisco on the *Indiana* on July 16. The members of the party include Professor E. E. Barnard, Professor A. N. Skinner, Commander U. S. N.; Professor W. S. Eichelberger, U. S. N.; F. B. Littell and H. D. Curtis.

REUTER'S AGENCY telegraphs from St. Petersburg that Baron Toll, the leader of the Russian Arctic expedition, has sent to the Academy of Sciences the following despatch from Yeniseisk, dated April 16: "Safely arrived in the Gulf of Taimyr, where I am wintering. We have erected a station for meteorological observations in the neighborhood of Archer Harbor. Matthiessen has explored the Nordenskiöld Islands, traveling in sledges. Kolomeizeff has been sent to the mouth of the Yenisei with orders to establish a coaling station. I myself shall traverse the Cheliuskin Peninsula with Koltschak. Matthiessen has been appointed commander of the *Sarja*. All are well.''

PROFESSOR ERNST HAECKEL has consented to give a course of lectures on paleontology in London.

DR. TRACY F. HAZEN, recently fellow in botany at Columbia University, has been appointed director of the Fairbanks Museum of Natural Science at St. Johnsbury, Vt.

MR. E. G. HASTINGS, who has held the position of assistant bacteriologist at the University of Wisconsin Experiment Station, has been granted leave of absence for a year's study in Europe. His position will be filled in the interim by Mr. John F. Nicholson.

A STATUE of Chevreul was unveiled on July 11 in the Paris Museum of Natural History.

DR. JAMES MARVIN died at his home at Lawrence, Kansas, July 10 last, aged 81 years. Dr. Marvin was educated at Alfred Academy (now Alfred University) and Allegheny College, in both of which institutions he was subsequently a teacher. For a number of years he was superintendent of schools at Warren, Ohio, from which place he went to Allegheny College as professor of mathematics and astronomy. In 1874 he was called to the chancellorship of the University of Kansas, doing much during his ten years' service to build up that institution. Later he became the first principal of Haskell Institute, one of the leading government schools for Indians, and laid the foundations for what has since become a great school. His public service closed with a six years' term as pastor of a Methodist church at Lawrence. For several years he had been an invalid, slowly declining under the action of paralysis.

THE death of H. W. Harkness, which we announced last week, will be a serious loss to science in San Francisco. Born eighty years ago in Massachusetts, he went to California in 1849, and, having amassed a considerable fortune by the practise of medicine, retired in 1869 and devoted himself chiefly to scientific interests. He was from 1887–1896 president of the California Academy of Sciences. He was the author of numerous contributions to botany, chiefly on the cryptogams. He presented his collections, containing 10,000 specimens, to the Academy of Sciences.

MISS EVA M. REED, indexer in the library of the Missouri Botanical Garden at St. Louis, was instantly killed by a train while walking on the tracks near Louisiana, Missouri, on July 7. The body was interred at St. Louis. Miss Reed had been connected with the Botanical Garden for about seven years, going to that institution from the University of Wisconsin. She was deeply interested in botanical pursuits, giving attention to the mosses, as well as to the winter characters of trees, a subject on which she had written for publication. Not long ago she began working on plant ecology, under the direction of the botanical department of the University of Chicago, and it was in the prosecution of investigation in the field that she met her death.

SIR CUTHBERT EDGAR PEEK, who main tained at Rowsdon an astronomical and meteorological observatory, died on July 5, at the age of forty-six years. He went to Queensland on the last transit-of-Venus expedition, and made numerous contributions to astronomy and meteorology. He was an active supporter of scientific work, being a member of the council of the Royal Geographical Society and of the Royal Meteorological Society and honorary secretary of the Anthropological Society.

THE death is announced of Miss Eleanor A. Ormerod, known for her contributions to economic entomology, on which subject she had published a number of works. She was recently given the LL. D. degree by the University of Edinburgh, where she had been examiner in agricultural entomology.

THE death is also announced of Dr. Gino Ciaccio, professor of comparative anatomy at the University of Bologna, and of James Hamblin Smith, of Gonville and Caius College, Cambridge, a famous coach of the University and the author of several works on elementary mathematics.

THE New York City Municipal Civil Service Commission will hold on July 31 an examination for the position of assistant bacteriologist with a salary of \$1,200. It is stated in *Nature* that the London Institution of Mining and Metallurgy will award twenty-five guineas each for the best papers on the comparative merits of circular and rectangular shafts for mines of great depth.

THE Association of Military Surgeons proposes as a subject of its Enno Sander prize for 1901-1902 'The Most Practicable Organization for the Medical Department of the United States Army in Active Service.' The prize is a gold medal and \$100. The essays must be submitted before the end of February, 1902. Further particulars may be obtained from the secretary, James Evelyn Pilcher, Carlisle, Pa.

THE physiological laboratory given to the University of Edinburgh by Mrs. Cox in memory of her father, the late Professor John Hughes Bennett, was dedicated on July 20, an address being made by Sir J. Burdon Sanderson.

THE Board of Supervisors of San Francisco adopted a resolution on July 15 accepting the offer of Mr. Carnegie to give to this city \$750,000 for the establishment of a central and branch libraries. The concluding sections of the resolutions read as follows:

Be it resolved, That the gift of Andrew Carnegie be and the same is hereby accepted, and that the thanks of the Board of Supervisors of the city and county of San Francisco be and are hereby extended to him. And be it further

Resolved, That the example set by Mr. Carnegie in distributing his vast private fortune to great public purposes, and at the same time inducing municipal cooperation in channels which might otherwise be neglected, should serve as an example to other citizens and meet the approval and encouragement of all.

BARON IWASAKI has purchased the library of the late Professor Max Müller, containing 13,-000 volumes, for presentation to the University of Tokyo.

AIDED by a special fund presented by a friend of the American Museum, Professor Osborn has sent out two expeditions especially in search of fossil horses—one to Texas and one to eastern Colorado. Word has just been received at the museum that the very first discovery made by the Texas party included a deposit of skulls of the three-toed horse, *Protohippus*, associated with parts of the limbs, feet and backbone. This is one of the stages especially desired in the long series leading up to the modern horse. The skulls are reported to be the best that have thus far been found, and this discovery is an auspicious opening to this special series of explorations. *Protohippus* belongs to the Pliocene, and is believed to be the immediate ancestor of the true horse.

THE New York Zoological Park has just received from the Galapagos Islands via San Francisco, five very large giant tortoises, representing three species, *Testudo microphyes, vicina* and *elephantopus*. The largest is a very old specimen measuring, in straight lines, 42 inches in length, $30\frac{1}{2}$ in width, and in height 20 inches. Its weight is 310 pounds. Three other specimens weigh respectively 156, 129 and 118 pounds. These five specimens represent the pick of a lot of 13 collected in the Galapagos group last winter by Capt. William Johnson, of San Francisco.

THE Bulletin of the New York Botanical Garden states that the first instalment of the Vigener Herbarium, the purchase of which was arranged by Dr. Britton while in Europe last fall, has lately been received. This portion of Mr. Vigener's herbarium contains the Schaffner Mexican collection numbering about 4,500 specimens, many of them duplicated, and thus valuable for future exchanges, and that part of a general collection consisting of cryptogams, and the flowering plants from the Ranunculaceæ to the Leguminosæ, according to the DeCandollean system, numbering 10,877 specimens. This important accession was made by means of funds provided by Mr. Andrew Carnegie.

THE Paris correspondent of the London Times writes under date July 2: I went yesterday to Vesinet, a pretty little village between Paris and St. Germain, where I witnessed some most interesting experiments in wireless telegraphy by Colonel Eugene de Pilsoudski, an engineer of the Russian army. His system depends in no way upon the air for transmission of the current. The earth itself is his conductor. He established his apparatus in two villas about one kilometer apart. The messages were transmitted clearly, rapidly,

and without the slightest hitch. The current passes from the transmitter to an underground plate, and then to a box containing the isolating elements of pitch and petroleum, whence it is carried to the receiver at a distance and read off by a Morse apparatus, which in turn reproduces the communications transmitted back to the starting-point. The realization within a limited space of the theory of wireless tellurian telegraphy is therefore complete. A demonstration of the feasibility of the system is shortly to be made between Paris and Compiègne, and immediately afterwards between Paris and Brussels. Of course the radius of action depends upon the power of the electrodes, but Colonel de Pilsoudski declares that messages can traverse not only mountains and streams, but more easily still the sea.

An exposition will be held at Osaka in Japan from March 1 to July 31, 1903. The articles to be exhibited include agricultural, horticultural, forestry and water products; mining, industrial, and mechanical exhibits; and those pertaining to education, science, sanitation, economy and the fine arts. The articles shall be those collected, produced or manufactured by the subjects of the Empire, or by foreigners residing in Japan. The cost of the exposition is to be paid by the imperial treasury, except the expense of exhibiting, which will be borne by the exhibitors.

UNIVERSITY AND EDUCATIONAL NEWS.

THE New York *Evening Post* states that Mrs. Mary Austin Carroll, of Boston, has just made a gift to the University of Virginia, by which the institution will receive during the remainder of her life an annual income of about \$11,000. Mrs. Carroll's father, the late Arthur W. Austin, at his death twenty years ago left his estate of \$400,000 in trust for the benefit of his daughter during her life, and at her death to go to the institution founded by Thomas Jefferson. Mrs. Carroll, sharing her father's love for the University, has just arranged to give for the rest of her life all her income except \$5,000 a year, which she reserves for her own support.

THE first meeting of the Trustees of the Carnegie Educational Fund was held in Edinburgh

on July 15. Lord Elgin, who presided, read a letter from Mr. Carnegie announcing that he had signed a deed placing \$10,000,000 at the disposal of the trustees.

THE last general Assembly of Connecticut passed a bill giving an appropriation of \$3,000 per annum to the Agricultural Experiment Station at New Haven for insect work and requiring that the station appoint a State entomologist and pay his salary. Mr. W. E. Britton was appointed to that office by the Board of Control at jits meeting, June 10. The law also requires that all nurseries in the State be inspected once each year and that all nursery stock shipped into the State shall bear on each bale or package a certificate of inspection.

THE position of Austin teaching fellow in histology and embryology at the Harvard Medical School is vacant. The value of the fellowship is \$500, the appointment being annual. The holder is expected to give about one-third of his time to teaching in the laboratory and the remainder wholly to an original research, which must be approved by the professor in charge. In the prosecution of the research the large resources of the laboratory may be utilized. Applications should be accompanied by a statement of previous experience and work, and should be addressed to Dr. Charles S. Minot, Harvard Medical School, Boston, Mass.

DR. F. L. STEVENS, who has just returned from a year of study at Bonn, Halle and Naples in the capacity of travelling fellow of the University of Chicago, has been elected instructor in biology, in full charge of the department, in the College of Agriculture and Mechanic Arts, Raleigh, N. C.

N. E. GILBERT, A.B. (Wesleyan, 1895), Ph.D. (Johns Hopkins, 1901), has been appointed instructor in physics at Lehigh University.

FREDERICK H. SAFFORD, Ph.D. (Harvard), has resigned from the mathematical staff of the University of Cincinnati.

AT Birmingham University, Dr. A. H. R. Buller has been appointed lecturer in botany and Dr. R. C. Farmer demonstrator in chemistry.